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A photograph of a modern airport terminal building with a large glass facade. A skybridge connects the terminal to another part of the airport. In the foreground, there is a road with a 'BUS' lane and a 'SLOW' lane. The sky is clear and blue.

Superior Image Quality
Scalability & Expandability
Remote Accessibility
Future-proof Integration
PoE [Power over Ethernet]
Plug & Play



IP Cameras

IP cameras provide superior image quality, remote accessibility, and distributed intelligent video capabilities. Easy installation and integration over standard CAT5 network cabling offers scalability, flexibility and cost-effectiveness.

3MP C-Series IP Cameras

3MP-MVRD-28-CS

3MP-MB-IR-36-CS

3MP-MVRD-IR-28-CS

3MP-MVRD-PT-36-CS

3MP-B-IR-3312-CS

3MP-B-IR-2712-MZ-CS

3MP-MVRD-IR-2712-MZ-CS

5MP J-Series IP Cameras

5MP-MVRD-4-JS

5MP-MB-IR-4-JS

5MP-EB-4-JS

5MP-B-IR-3310-MR-MZ-JS

5MP-B-IR-3310-LR-MZ-JS

4K C-Series IP Cameras

4K-MB-IR-4-CS

4K-MVRD-IR-4-CS

12MP-VRD-IR-360FE-CS

12MP-BX-CS

12MP C-Series IP Cameras

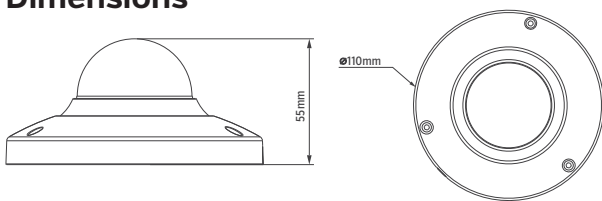


3 Megapixel Mini Vandal Resistant Dome IP Camera

Features

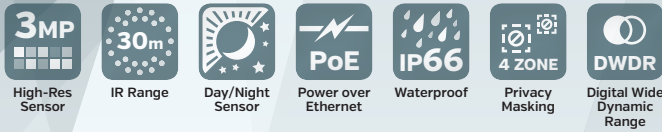
- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048x1536] & 25/30fps@1080p [1920x1080]
- Day/Night [Electronic], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- 2.8mm Fixed Lens offering a 90° Field of View
- Edge Recording via SD Card
- Rugged IK10 & IP66 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 × 1536 [3,145,728 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.01 Lux/f1.8 [Color]	
S/N Ratio	> 50dB	
Camera Features		
Day/Night	Auto [Electronic] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	2.8mm	
Max Aperture	f2.0	
Focus Control	Manual	
Angle of View	H: 90°	
Video		
Compression	H.264 / MJPEG	
Resolution	3M [2048x1536] / 1080p [1920x1080] / 720p [1280x720] / D1 [704x576] / CIF [352x288]	
Frame Rate	Main Stream	3M [1-20fps] / 1080p/720p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	H.264: 32K ~ 8192Kbps	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V, PoE [802.3af], < 3W Power Consumption	
Working Environment	-30°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Vandal Resistance	IK10	
Dimensions	∅110mm × 55mm	
Weight	0.25kg	

Accessories (optional)

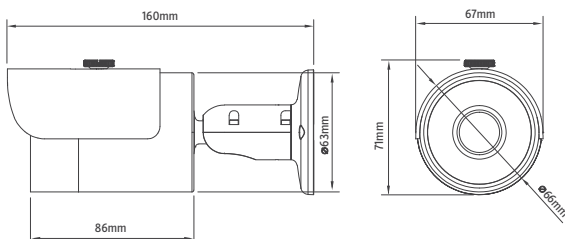


3 Megapixel IR Mini Bullet IP Camera

Features

- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048×1536] & 25/30fps@1080p [1920×1080]
- DWDR, Day/Night (ICR), 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- 3.6mm Fixed Lens offering a 72.5° Field of View
- 30m/100ft IR LED Distance
- Edge Recording via SD Card
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 × 1536 [3,145,728 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.01 Lux/f1.6 [Color], 0.005 Lux/f1.6 [B&W], 0 Lux/f1.6 [IR on]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	30m / 100ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / WDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	3.6mm	
Max Aperture	f1.8	
Focus Control	Manual	
Angle of View	H: 72.5°	
Video		
Compression	H.264 / MJPEG	
Resolution	3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	3M [1-20fps] / 1080p/720p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	H.264: 32K ~ 8192Kbps	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)	
General		
Power Supply	DC12V, PoE (802.3af), < 5.5W Power Consumption	
Working Environment	-35°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	71mm × 67mm × 160mm	
Mount	Integrated 3-Axis Mount	
Weight	0.42kg	

Accessories (optional)

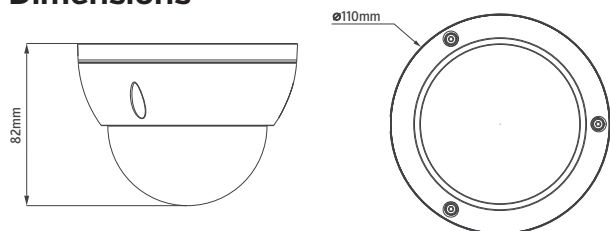


3 Megapixel IR Mini Vandal Resistant Dome IP Camera

Features

- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048×1536] & 25/30fps@1080p [1920×1080]
- DWDR, Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- 2.8mm Fixed Lens offering a 81° Field of View
- 30m/100ft IR LED Distance
- Rugged IK10 & IP66 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 × 1536 [3,145,728 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.01 Lux/f1.8 [Color], 0.01 Lux/f1.8 [B&W]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	30m / 100ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	2.8mm	
Max Aperture	f2.0	
Focus Control	Manual	
Angle of View	H: 81.2°	
Video		
Compression	H.264 / MJPEG	
Resolution	3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	3M [1-20fps] / 1080p/720p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	H.264: 32K ~ 8192Kbps	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V, PoE [802.3af], < 4W Power Consumption	
Working Environment	-35°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Vandal Resistance	IK10	
Dimensions	∅110mm × 82mm	
Weight	0.39kg	

Accessories (optional)

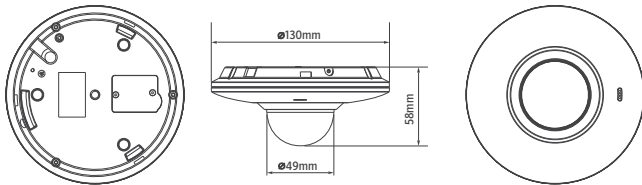


3 Megapixel Mini Vandal Resistant Pan/Tilt Dome IP Camera

Features

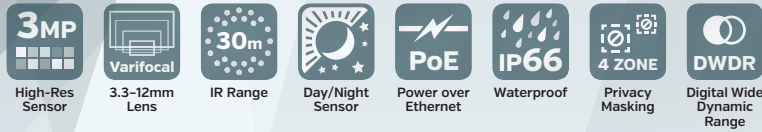
- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048×1536] & 25/30fps@1080p [1920×1080]
- Day/Night [Electronic], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- Max 100°/s Preset Speed, ±180° Pan, 90° Tilt
- 3.6mm Fixed Lens offering a 72.5° Field of View
- Edge Recording via SD Card
- Rugged IK10 & IP66 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera	
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS
Effective Pixels	2048 × 1536 [3,145,728 Pixels]
Scanning System	Progressive
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s
Min. Illumination	0.01 Lux/f1.2 (Color)
S/N Ratio	> 50dB
Camera Features	
Day/Night	Auto [Electronic] / Color / B&W
Backlight Compensation	BLC / HLC / DWDR
White Balance	Auto/Manual
Gain Control	Auto/Manual
Noise Reduction	3D
Privacy Masking	Up to 4 zones
Digital Zoom	3X
Lens	
Focal Length	3.6mm
Max Aperture	f1.8
Focus Control	Manual
Angle of View	H: 72.5°
Pan/Tilt	
Pan/ Tilt Range	Pan: 0°~±180°; Tilt: 0°~90°
Preset Speed	100°/s
Presets	25
Video	
Compression	H.264 / MJPEG
Resolution	3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]
Frame Rate	Main Stream 3M [1-20fps] / 1080p/720p [1-25/30fps] Sub Stream D1/CIF [1-25/30fps]
Bit Rate	H.264: 32K ~ 8192Kbps
Audio	
Compression	G.711a / G.711µ / PCM
Interface	Built-in Mic
Network	
Ethernet	RJ-45
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter
Compatibility	ONVIF, PSIA, CGI
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]
General	
Power Supply	DC12V, PoE [802.3af], < 4.5W Power Consumption
Working Environment	-30° C ~ +60° C, < 95% RH
Ingress Protection	IP66
Vandal Resistance	IK10
Dimensions	ø130mm × 58mm
Weight	0.25kg

Accessories (optional)

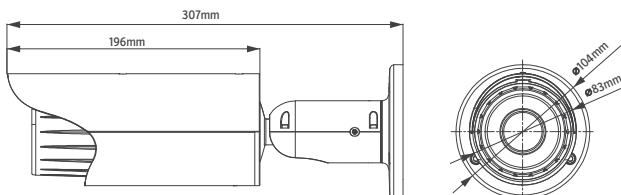


3 Megapixel IR Bullet IP Camera

Features

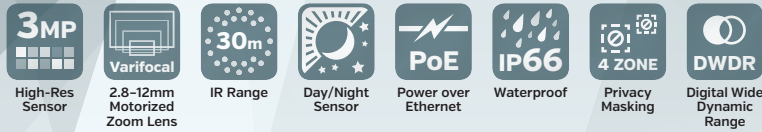
- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048×1536] & 25/30fps@1080p [1920×1080]
- DWDR, Day/Night (ICR), 3D-DNR, Auto Iris, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- 2.7mm–12mm Varifocal Lens offering a 83–23° Field of View
- Built-in 2/1 Alarm In/Out
- 30m/100ft IR LED Distance
- Edge Recording via SD Card
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera					
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS				
Effective Pixels	2048 × 1536 [3,145,728 Pixels]				
Shutter Speed	Auto/Manual, 1/3–1/10000s				
Min. Illumination	0.01 Lux/f1.4 [Color], 0 Lux/f1.4 [IR on]				
S/N Ratio	> 50dB				
Video Output	1 channel, BNC [1.0Vp-p/75Ω]				
Camera Features					
Max IR Distance	30m / 100ft				
Day/Night	Auto (ICR) / Color / B&W				
Backlight Compensation	BLC / HLC / DWDR				
White Balance	Auto/Manual				
Gain Control	Auto/Manual				
Noise Reduction	3D				
Privacy Masking	Up to 4 zones				
Lens					
Focal Length	2.8–12mm				
Max Aperture	f1.4				
Focus Control	Manual				
Angle of View	H: 81.2° ~ 22.6 °				
Video					
Compression	H.264 / MJPEG				
Resolution	3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]				
Frame Rate	<table border="1"> <tr> <th>Main Stream</th> <td>3M [1–20fps] / 1080p/720p [1–25/30fps]</td> </tr> <tr> <th>Sub Stream</th> <td>D1/CIF [1–25/30fps]</td> </tr> </table>	Main Stream	3M [1–20fps] / 1080p/720p [1–25/30fps]	Sub Stream	D1/CIF [1–25/30fps]
Main Stream	3M [1–20fps] / 1080p/720p [1–25/30fps]				
Sub Stream	D1/CIF [1–25/30fps]				
Bit Rate	H.264: 32K ~ 8192Kbps				
Audio					
Compression	G.711a / G.711μ / PCM				
Interface	1/1 Channel In/Out				
Network					
Ethernet	RJ-45				
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter				
Compatibility	ONVIF, PSIA, CGI				
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]				
General					
Power Supply	DC12V, PoE [802.3af], < 7W Power Consumption				
Working Environment	-35°C ~ +60°C, < 90% RH				
Ingress Protection	IP66				
Dimensions	104mm × 104mm × 307mm				
Mount	Integrated 3-Axis Mount				
Weight	1.25kg				

Accessories (optional)

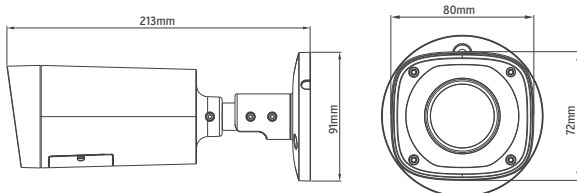


3 Megapixel Mini IR Bullet IP Camera w/Motorized Lens

Features

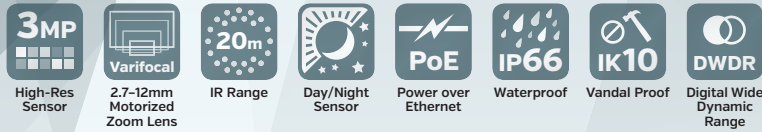
- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048x1536]
- DWDR, Day/Night (ICR), 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- 2.8-12mm Varifocal Motorized Lens offering a 92-28° Field of View
- 30m/100ft IR LED Distance
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 x 1536 [3,145,728 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.01 Lux/f1.4 (Color), 0Lux/f1.4 (IR on)	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	30m / 100ft	
Day/Night	Auto (ICR) / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	2.8mm-12mm Motorized Lens	
Max Aperture	f1.4	
Focus Control	Auto	
Angle of View	H: 92° - 28°	
Lens Type	Motorized, Fixed Iris	
Video		
Compression	H.264 / H.264H / MJPEG	
Resolution	3M [2048x1536] / 1080p [1920x1080] / 720p [1280x720] / D1 [704x576] / CIF [352x288]	
Frame Rate	Main Stream	3M [1-20fps] / 1080p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	H.264H: 40K - 8192Kbps; MJPEG: 40 - 16384Kbps	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)	
General		
Power Supply	DC12V, PoE [802.3af], < 8.5W Power Consumption	
Working Environment	-35°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	72mm x 80mm x 213mm	
Mount	Integrated 3-Axis Mount	
Weight	0.65kg	

Accessories (optional)

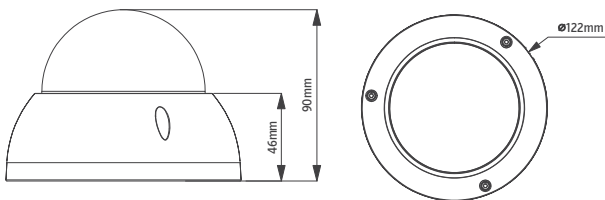


3 Megapixel Mini Vandal Resistant IR Dome IP Camera w/Motorized Lens

Features

- 1/3" 3 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- Max 20fps@3M [2048×1536] & 25/30fps@1080p [1920×1080]
- DWDR, Day/Night (ICR), 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- 2.7–12mm Varifocal Lens offering a 92–28° Field of View
- 20m/65ft IR LED Distance
- Rugged IK10 & IP66 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 × 1536 [3,145,728 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.01 Lux/f1.4 [Color], 0.01 Lux/f1.4 [B&W], 0Lux/f1.4 [IR on]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	20m / 65ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	2.7mm-12mm	
Max Aperture	f1.4	
Focus Control	Auto	
Angle of View	H: 92° - 28°	
Lens Type	Motorized, Fixed Iris	
Video		
Compression	H.264 / H.264H / H.264B / MJPEG	
Resolution	3M [2048×1536] / 1080p [1920×1080] / 1.3M [1280×960] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	3M (1-20fps) / 1080p (1 - 25/30fps)
	Sub Stream	D1/CIF (1-25/30fps)
Bit Rate	H.264: 56K - 6144Kbps	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V, PoE [802.3af], < 7.5W Power Consumption	
Working Environment	-35°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Vandal Resistance	IK10	
Dimensions	∅122mm × 90mm	
Weight	0.5kg	

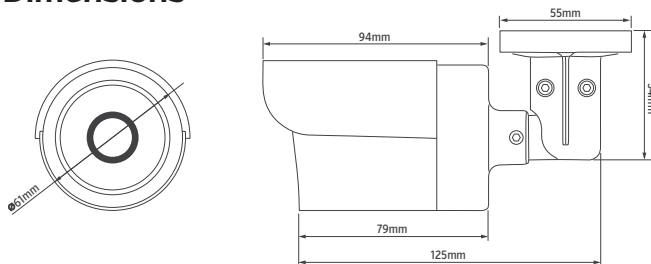


5 Megapixel IR Mini Bullet IP Camera

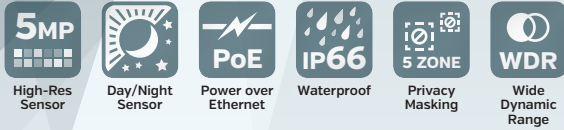
Features

- 1/2.5" 5 Megapixel Progressive Scan CMOS
- 4mm Fixed Lens offering a 71.5° Field of View
- H.264 & MJPEG Dual-Stream Compression
- Max 10fps@5M [2592×1920] & 25/30fps@1080p [1920×1080]
- Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with PC [Internet Browser, X5 Synergy VMS]
- 10m/30ft IR LED Distance
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Processor	High-Performance TI DaVinci DSP	
Image Sensor	1/2.5" 5 Megapixel Progressive Scan CMOS	
Shutter Speed	1/5s ~ 1/50,000s	
S/N Ratio	> 50dB	
Video Output	1 channel, BNC (1.0Vp-p/75Ω)	
Camera Features		
Max IR Distance	10m / 30ft	
Day/Night	Auto-Switching IR Cut Filter	
Backlight Compensation	BLC / HLC / WDR	
White Balance	AWB	
Gain Control	AGC	
Noise Reduction	3D-DNR	
Privacy Masking	Up to 5 zones	
Lens		
Focal Length	4mm Lens	
Focus Control	Auto	
Angle of View	H: 71.5°	
Video		
Compression	H.264 / MJPEG	
Resolution	5M [2592×1920] / 3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [640×480]	
Frame Rate	Main Stream	5M [10fps] / 3M [20fps] / 1080p [25/30fps]
	Sub Stream	D1 [25/30fps]
Bit Rate	200 ~ 12,000Kbps	
Audio		
Compression	G.711a / G.711μ / PCM	
Interface	1/1 Channel In/Out	
Network		
Ethernet	RJ-45 [10M/100M adaptive]	
Protocol	IPv4/IPv6, HTTP, TCP, UDP, RTSP, RTP, RTCP, DHCP, DNS, PPPoE, DDNS	
Compatibility	ONVIF v2.4	
Remote Access	PC [Internet Browser, X5 Synergy VMS]	
General		
Power Supply	DC12V±10%, PoE [802.3af]	
Power Consumption	4W	
Working Environment	-40°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	163mm × 63mm × 63mm	
Mount	Integrated 3-Axis Mount	
Weight	370g	

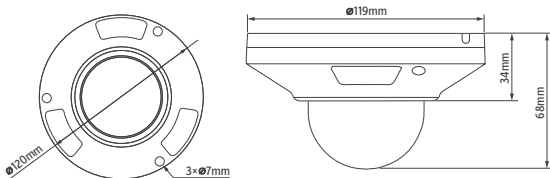


5 Megapixel IR Vandal Resistant Dome IP Camera

Features

- 1/2.5" 5 Megapixel Progressive Scan CMOS
- 4mm Fixed Lens offering a 71.5° Field of View
- H.264 & MJPEG Dual-Stream Compression
- Max 10fps@5M [2592×1920] & 25/30fps@1080p [1920×1080]
- Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with PC [Internet Browser, X5 Synergy VMS]
- Rugged IP66 Housing
- Optional Wall Mounting/Lifting Bracket
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Processor	High-Performance TI DaVinci DSP	
Image Sensor	1/2.5" 5 Megapixel Progressive Scan CMOS	
Shutter Speed	1/5s ~ 1/50,000s	
S/N Ratio	> 50dB	
Video Output	1 channel, BNC (1.0Vp-p/75Ω)	
Camera Features		
Day/Night	Auto-Switching IR Cut Filter	
Backlight Compensation	BLC / HLC / WDR	
White Balance	AWB	
Gain Control	AGC	
Noise Reduction	3D-DNR	
Privacy Masking	Up to 5 zones	
Lens		
Focal Length	4mm	
Focus Control	Auto	
Angle of View	H: 71.5°	
Video		
Compression	H.264 / MJPEG	
Resolution	5M [2592×1920] / 3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [640×480]	
Frame Rate	Main Stream	5M [10fps] / 3M [20fps] / 1080p [25/30fps]
	Sub Stream	D1 [25/30fps]
Bit Rate	200 ~ 12,000Kbps	
Network		
Ethernet	RJ-45 [10M/100M adaptive]	
Protocol	IPv4/IPv6, HTTP, TCP, UDP, RTSP, RTP, RTCP, DHCP, DNS, PPPoE, DDNS	
Compatibility	ONVIF v2.4	
Remote Access	PC [Internet Browser, X5 Synergy VMS]	
General		
Power Supply	DC12V±10%, PoE [802.3af]	
Power Consumption	<2.5W	
Working Environment	-40°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	∅120mm × 68mm	
Weight	270g	

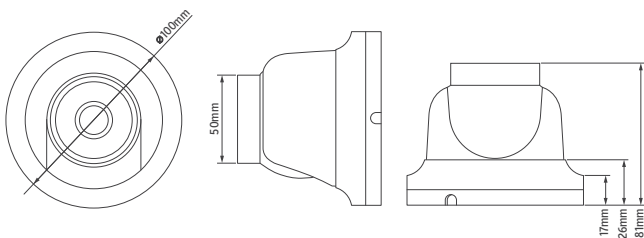


5 Megapixel IR Dome Camera

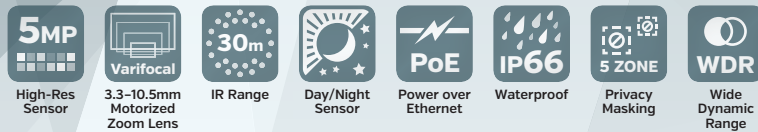
Features

- 1/2.5" 5 Megapixel Progressive Scan CMOS
- 4mm Fixed Lens offering a 71.5° Field of View
- H.264 & MJPEG Dual-Stream Compression
- Max 10fps@5M [2592x1920] & 25/30fps@1080p [1920x1080]
- Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with PC [Internet Browser, X5 Synergy VMS]
- 15m/50ft IR LED Distance
- Rugged IP66 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Processor	High-Performance TI DaVinci DSP	
Image Sensor	1/2.5" 5 Megapixel Progressive Scan CMOS	
Shutter Speed	1/5s ~ 1/50,000s	
S/N Ratio	> 50dB	
Video Output	1 channel, BNC (1.0Vp-p/75Ω)	
Camera Features		
Max IR Distance	15m / 50ft	
Day/Night	Auto-Switching IR Cut Filter	
Backlight Compensation	BLC / HLC / WDR	
White Balance	AWB	
Gain Control	AGC	
Noise Reduction	3D-DNR	
Privacy Masking	Up to 5 zones	
Lens		
Focal Length	4mm	
Focus Control	Auto	
Angle of View	H: 71.5°	
Video		
Compression	H.264 / MJPEG	
Resolution	5M [2592x1920] / 3M [2048x1536] / 1080p [1920x1080] / 720p [1280x720] / D1 [640x480]	
Frame Rate	Main Stream	5M [10fps] / 3M [20fps] / 1080p [25/30fps]
	Sub Stream	D1 [25/30fps]
Bit Rate	200 ~ 12,000Kbps	
Audio		
Compression	G.711a / G.711μ / PCM	
Interface	1/1 Channel In/Out	
Network		
Ethernet	RJ-45 [10M/100M adaptive]	
Protocol	IPv4/IPv6, HTTP, TCP, UDP, RTSP, RTP, RTCP, DHCP, DNS, PPPoE, DDNS	
Compatibility	ONVIF v2.4	
Remote Access	PC [Internet Browser, X5 Synergy VMS]	
General		
Power Supply	DC12V±10%, PoE [802.3af]	
Power Consumption	4.5W	
Working Environment	-40°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	100mm × 100mm × 81mm	
Weight	400g	

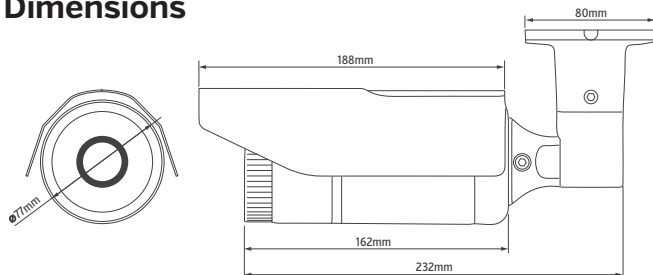


5 Megapixel IR Bullet IP Camera w/Motorized Lens

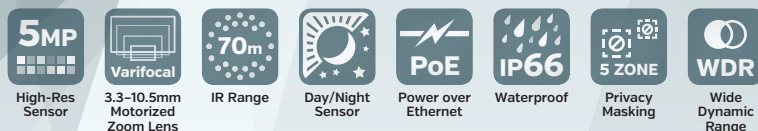
Features

- 1/2.5" 5 Megapixel Progressive Scan CMOS
- 3.3-10.5mm Varifocal Motorized Lens offering a 82-31° Field of View
- H.264 & MJPEG Dual-Stream Compression
- Max 10fps@5M [2592x1920] & 25/30fps@1080p [1920x1080]
- Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with PC [Internet Browser, X5 Synergy VMS]
- 30m/100ft IR LED Distance
- Alarm I/O, Audio & RS485 Interfaces
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Processor	High-Performance TI DaVinci DSP	
Image Sensor	1/2.5" 5 Megapixel Progressive Scan CMOS	
Shutter Speed	1/5s ~ 1/50,000s	
S/N Ratio	> 50dB	
Video Output	1 channel, BNC [1.0Vp-p/75Ω]	
Camera Features		
Max IR Distance	30m / 100ft	
Day/Night	Auto-Switching IR Cut Filter	
Backlight Compensation	BLC / HLC / WDR	
White Balance	AWB	
Gain Control	AGC	
Noise Reduction	3D-DNR	
Privacy Masking	Up to 5 zones	
Lens		
Focal Length	3.3-10.5mm Motorized Lens	
Focus Control	Auto	
Angle of View	H: 82.2° ~ 30.7°	
Video		
Compression	H.264 / MJPEG	
Resolution	5M [2592x1920] / 3M [2048x1536] / 1080p [1920x1080] / 720p [1280x720] / D1 [640x480]	
Frame Rate	Main Stream	5M [10fps] / 3M [20fps] / 1080p [25/30fps]
	Sub Stream	D1 [25/30fps]
Bit Rate	200 ~ 12,000Kbps	
Audio		
Compression	G.711a / G.711μ / PCM	
Interface	1/1 Channel In/Out	
Network		
Ethernet	RJ-45 [10M/100M adaptive]	
Protocol	IPv4/IPv6, HTTP, TCP, UDP, RTSP, RTP, RTCP, DHCP, DNS, PPPoE, DDNS	
Compatibility	ONVIF v2.4	
Remote Access	PC [Internet Browser, X5 Synergy VMS]	
Auxiliary Ports		
RS485	1 Port [half duplex]	
Alarm	1/1 Channel In/Out	
General		
Power Supply	DC12V±10%,PoE [802.3af]	
Power Consumption	7W	
Working Environment	-40°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	310mm × 75mm × 90mm	
Mount	Integrated 3-Axis Mount	
Weight	1.02kg	

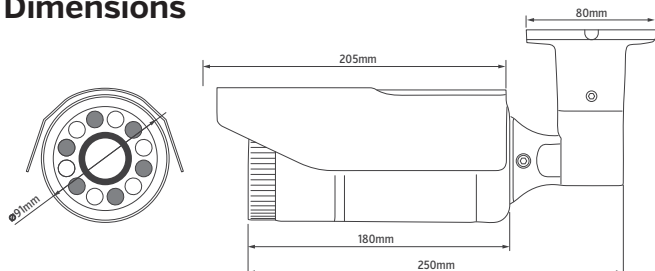


5 Megapixel IR Bullet IP Camera w/Motorized Lens

Features

- 1/2.5" 5 Megapixel Progressive Scan CMOS
- 3.3-10.5mm Varifocal Motorized Lens offering a 82-31° Field of View
- H.264 & MJPEG Dual-Stream Compression
- Max 10fps@5M [2592x1920] & 25/30fps@1080p [1920x1080]
- Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with PC [Internet Browser, X5 Synergy VMS]
- 70m/230ft IR LED Distance
- Alarm I/O, Audio & RS485 Interfaces
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Processor	High-Performance TI DaVinci DSP	
Image Sensor	1/2.5" 5 Megapixel Progressive Scan CMOS	
Shutter Speed	1/5s ~ 1/50,000s	
S/N Ratio	> 50dB	
Video Output	1 channel, BNC (1.0Vp-p/75Ω)	
Camera Features		
Max IR Distance	70m / 230ft	
Day/Night	Auto-Switching IR Cut Filter	
Backlight Compensation	BLC / HLC / WDR	
White Balance	Auto	
Gain Control	Auto	
Noise Reduction	3D	
Privacy Masking	Up to 5 zones	
Lens		
Focal Length	3.3-10.5mm Motorized Lens	
Focus Control	Auto	
Angle of View	H: 82.2° ~ 30.7°	
Video		
Compression	H.264 / MJPEG	
Resolution	5M [2592x1920] / 3M [2048x1536] / 1080p [1920x1080] / 720p [1280x720] / D1 [640x480]	
Frame Rate	Main Stream	5M [10fps] / 3M [20fps] / 1080p [25/30fps]
	Sub Stream	D1 [25/30fps]
Bit Rate	200 ~ 12,000Kbps	
Audio		
Compression	G.711a / G.711μ / PCM	
Interface	1/1 Channel In/Out	
Network		
Ethernet	RJ-45 [10M/100M adaptive]	
Protocol	IPv4/IPv6, HTTP, TCP, UDP, RTSP, RTP, RTCP, DHCP, DNS, PPPoE, DDNS	
Compatibility	ONVIF v2.4	
Remote Access	PC [Internet Browser, X5 Synergy VMS]	
General		
Power Supply	DC12V±10%, PoE [802.3af]	
Power Consumption	10W	
Working Environment	-40°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	330mm x 105mm x 120mm	
Mount	Integrated 3-Axis Mount	
Weight	1.13kg	

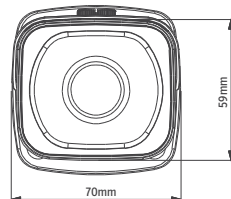
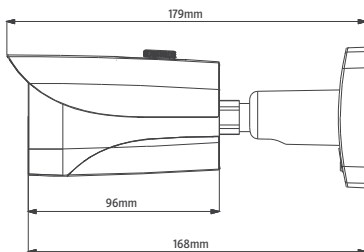


4K Ultra HD Network IR Mini Bullet Camera

Features

- 1/2.3" 4K Progressive Scan CMOS
- 4K [8 Megapixel] Resolution
- H.264 & MJPEG Dual-Stream Compression
- 7fps @ 4K [3840x2160]
- DWDR, Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- 4mm Fixed Lens offering a 80° Field of View
- 30m/100ft IR LED Distance
- Rugged IP66 Housing
- Integrated 3-Axis Mount
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/2.3" 4K Progressive Scan CMOS	
Effective Pixels	3840 × 2160 [8,294,400 Pixels]	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.1 Lux/f1.6 [Color], 0 Lux/f1.6 [IR on]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	30m / 100ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	4mm	
Max Aperture	f1.6	
Focus Control	Manual	
Angle of View	H: 80°	
Video		
Compression	H.264 / MJPEG	
Resolution	4K [3840×2160] / 3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×480] / CIF [352×240]	
Frame Rate	Main Stream	4K [1-7fps] / 3M/1080p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	H.264: 20K ~ 16Mbps	
Network		
Ethernet	RJ-45 [10/100Base-T]	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V, PoE [802.3af]	
Power Consumption	< 7.5W	
Working Environment	-35°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Dimensions	179mm × 70mm × 70mm	
Mount	Integrated 3-Axis Mount	
Weight	528g	

Accessories (optional)

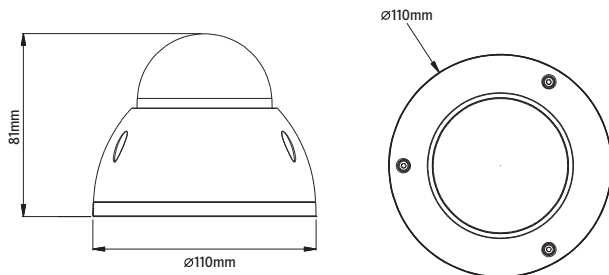


4K Ultra HD Network IR Mini Dome Camera

Features

- 1/2.3" 4K Progressive Scan CMOS
- 4K [8 Megapixel] Resolution
- H.264 & MJPEG Dual-Stream Compression
- 7fps @ 4K [3840x2160]
- DWDR, Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- 4mm Fixed Lens offering a 80° Field of View
- 20m/65ft IR LED Distance
- Rugged IP66 & IK10 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/2.3" 4K Progressive Scan CMOS	
Effective Pixels	3840 x 2160 [8,294,400 Pixels]	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.1 Lux/f1.6 [Color], 0 Lux/f1.8 [IR on]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	20m / 65ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	4mm	
Max Aperture	f1.6	
Focus Control	Manual	
Angle of View	H: 80°	
Video		
Compression	H.264 / MJPEG	
Resolution	4K [3840x2160] / 3M [2048x1536] / 1080p [1920x1080] / 720p [1280x720] / D1 [704x480] / CIF [352x240]	
Frame Rate	Main Stream	4K [1-7fps] / 3M/1080p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	H.264: 20K ~ 16Mbps	
Network		
Ethernet	RJ-45 [10/100Base-T]	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V, PoE [802.3af]	
Power Consumption	< 7W	
Working Environment	-35°C ~ +60°C, < 95% RH	
Ingress Protection	IP66	
Vandal Resistance	IK10	
Dimensions	Ø110mm x 81mm	
Weight	406g	

Accessories (optional)

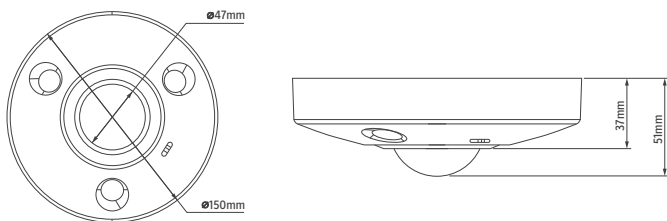


12MP Ultra HD Vandal Resistant IR Network Fisheye Camera

Features

- 1/2.3" 12MP Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- 15fps@12M [4000x3000], 25/30fps@3M [2048x1536]
- Multiple Dewarping Display Modes: Panoramic, Dual Panoramic, ePTZ, Split Screen: 1+3/4
- DWDR, Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- Ultra-wide 185° 1.57mm Fisheye Lens offering a 360° Panoramic View
- 10m/30ft IR LED Distance
- Edge Recording via SD Card
- Extra Rugged IP67 & IK10 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/2.3" 12MP Progressive Scan CMOS	
Effective Pixels	4000 × 3000 [12,000,000 Pixels]	
Shutter Speed	Auto/Manual 1/3-1/10000	
Min. Illumination	0.01 Lux/f2.2 [Color], 0 Lux/f2.2 [IR on]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	10m / 30ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	1.57mm	
Max Aperture	f2.2	
Focus Control	Manual	
Angle of View	185°	
Video		
Compression	H.264H / MJPEG / JPEG	
Resolution	12M [4000×3000] / 8M [2880×2880] / 6M [2880×2160] / 3M [2048×1536]	
Frame Rate	Main Stream	12M [1-15fps] / 3M [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
Bit Rate	40Kbps-8192Kbps	
Dewarping	Yes, removes fisheye effect	
Display Modes	Panoramic, Dual Panoramic, Split Screen: 1+3/4	
Audio		
Compression	G.711a / G.711μ / PCM	
Interface	1/1 Channel In/Out [Built-in Mic]	
Network		
Ethernet	RJ-45 [10/100Base-T]	
Protocol	HTTP, TCP, ARP, RTSP, RTP, UDP, RTCP, DHCP, DNS, DDNS, PPPoE, IPv4/v6, SNMP, UPnP, NTP	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Auxiliary Ports		
Memory Slot	Micro SD	
Alarm	2/1 Channel In/Out	
General		
Power Supply	DC12V, PoE [802.3af]	
Power Consumption	< 13W	
Working Environment	-30°C ~ +60°C, < 95% RH	
Ingress Protection	IP67	
Vandal Resistance	IK10	
Dimensions	ø150mm × 51mm	
Weight	580g	

Accessories (optional)



*Lens not included.



Ultra High Res Sensor



0.001 Lux Capable



Power over Ethernet



Privacy Masking



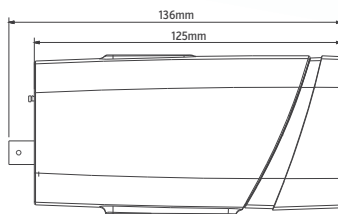
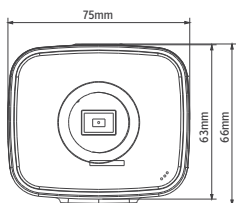
Digital Wide Dynamic Range

12 Megapixel Ultra HD Network Camera

Features

- 1/2.3" 12MP Progressive Scan CMOS
- H.264 & MJPEG Dual-Stream Compression
- 15fps@12M [4000x3000]
- Defog, ROI, EIS
- Auto Back Focus
- Built-in Mic
- 100/100M Base-T Ethernet

Dimensions



Camera		
Image Sensor	1/2.3" 12MP Progressive Scan CMOS	
Effective Pixels	4000 × 3000 [12,000,000 Pixels]	
Shutter Speed	Auto/Manual 1/3-1/10000	
Min. Illumination	0.01 Lux/f1.2 [Color], 0.001 Lux/f1.2 [B&W]	
S/N Ratio	> 50dB	
Video Output	1 Channel, BNC [1.0Vp-p,75Ω]	
Camera Features		
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
EIS	Supported	
Defog	Supported	
Focus	ABF	
Lens		
Mount Type	C/CS	
Video		
Compression	H.264 / MJPEG	
Resolution	12M [4000×3000] / 8M [3840×2160] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	12M [1-15fps] / 8M/1080p [1-25/30fps]
	Sub Stream	D1/CIF [1-50/60fps]
	Third Stream	1080p/720p/D1 [1-50/60fps]
Bit Rate	H.264: 32K-96Mbps	
ROI	Up to 4 zones	
Audio		
Compression	G.711a / G.711μ	
Interface	1/1 Channel In/Out [Built-in Mic]	
Network		
Ethernet	RJ-45 [10/100/1000Base-T]	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Auxiliary Ports		
Memory Slot	Micro SD, Max 128GB	
RS485	1 Port	
Alarm	2/1 Channel In/Out	
General		
Power Supply	DC12V/AC24V, PoE [802.3af]	
Power Consumption	< 12W [ABF & ICR On]	
Working Environment	-30°C ~ +60°C, < 95% RH	
Dimensions	75mm × 66mm × 136mm	
Weight	300g	



Ascendent Video Analytics

Our new line of AVA cameras offer advanced analytics including: Perimeter Intrusion, Tripwire, Restricted Zone, Missing Object, Camera Tampering, Face Detection and Audio Detection.

Using these intelligent detection filters provides real-time alerts, allowing for proactive use of video surveillance as events are occurring.

3MP-B-IR-2712-AVA-CS

3MP-VRD-IR-2712-AVA-CS

4MP-VRD-IR-2712-MZ-AVA-CS

[See more AVA Cameras and NVRs →](#)

PTZ Analytics



Intelligent PTZ Positioning

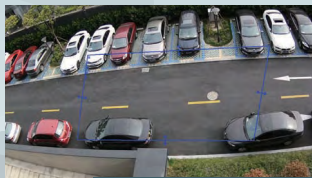
Ascendent's C Series AVA IP cameras support Intelligent PTZ Positioning by activating user-defined presets on X5S NVRs when detection analytics are triggered providing an automated surveillance solution. This can be augmented by a human operator to track and identify the threat in real time for unparalleled security and protection.

PTZ Auto-Tracking

Ascendent's C Series AVA PTZs can use the AVA algorithms to trigger auto-tracking of targets. The Sigma/Terra PTZ series can provide ultra-long range auto-tracking at distances up to 30km day/night, and can utilize C Series AVA IP cameras as auxiliary sensors for detection and acquisition of targets making it ideal for large perimeters, critical infrastructure, and border protection. This revolutionary technology offers a superior solution that provides not only detection, but true day/night identification of targets making it the clear industry leader.

[AVA Detection Types →](#)

[Additional Features →](#)



Normal Status



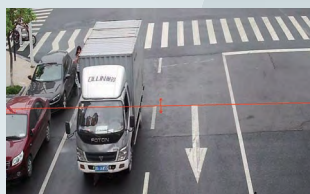
Alarm Status

Perimeter Intrusion Detection

Perimeter Intrusion Detection allows user-defined zones to be drawn, and will trigger an alarm and recording when intrusions occur.



Normal Status



Alarm Status

Tripwire

Tripwires allow a user-defined line to be drawn, which can be set to trigger alarms and recording when the line is crossed. This can be configured to be triggered in a single direction, or bi-directionally.



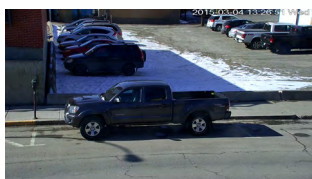
Normal Status



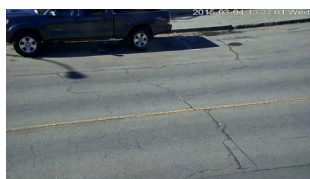
Alarm Status

Restricted Zone/Missing Object

These rules allow a user to define a zone and a time limit that will trigger an alarm and recording if an object/vehicle/person dwells in the zone for too long, or exits the zone for too long.



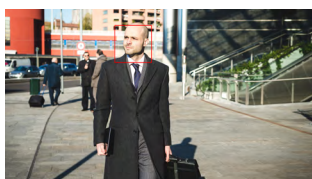
Normal



Tampered

Camera Tampering Detection

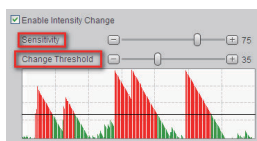
Detects when the camera is out of focus or if the camera has been moved and can trigger an alarm and recording.



Face Detection

Face Detection

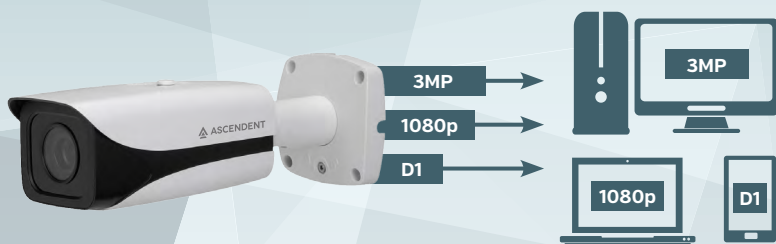
Face Detection can detect when a face is present in an image, and trigger alarms and recording.



Audio Detection

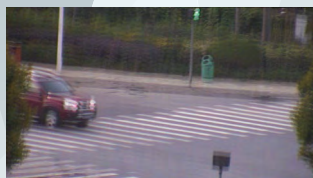
Audio Detection can trigger an alarm and recording when sound levels exceed a user-defined threshold.

Additional Features →

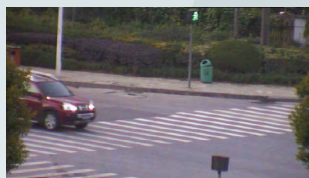


Triple Streams

Triple Streams provide flexibility by allowing separate resolutions, codec, frame rate, and bitrate settings on each stream.



EIS Off



EIS On

Electronic Image Stabilization

EIS reduces blurring of images caused by camera vibration and oscillation.



Defog Off



Defog On

Defog

Defog technology mitigates the effects of fog, haze, smog, mist, and other atmospheric conditions to deliver superior performance in difficult environments.

AVA Cameras

3MP-B-IR-2712-AVA-CS

3MP-VRD-IR-2712-AVA-CS

4MP-VRD-IR-2712-MZ-AVA-CS

2MP-PTZ-IR-20X-AT-CS

2MP-PTZ-IR-30X-AT-CS

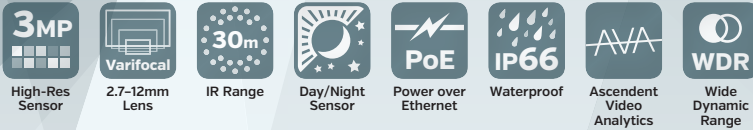
2MP-PTZ-IR-39X-LR-AVA-CS

AVA Capable NVRs

X5S-NVR-2U-64CH/124CH-4K-AVA

X5S-NVR-3U-64CH/124CH-4K-AVA

X5S-NVR-4U-250CH-4K-AVA

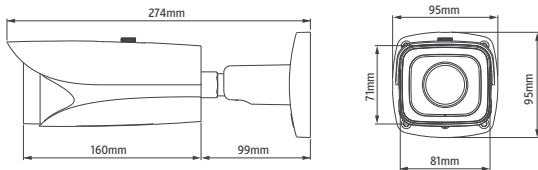


3MP IR Bullet IP Camera w/AVA Analytics

Features

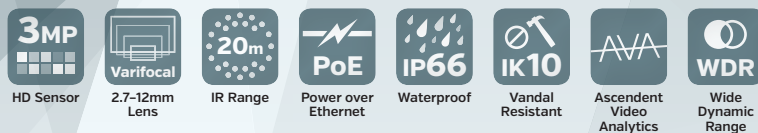
- 1/3" 3 Megapixel Progressive Scan CMOS
- Supports H.264 & MJPEG Compression
- Triple Video Stream Encoding
- Max 25/30fps@3MP [2048x1536]
- WDR, Day/Night (ICR), 3D-DNR, Auto Iris, AWB, AGC, BLC
- Defog, ROI, EIS, Intelligent Adaptive IR
- AVA Analytics: Face Detection, Bi-Directional Tripwire, Perimeter Intrusion Detection
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- 30m/100ft IR LED Distance
- 100/1000M Base-T Ethernet, PoE
- Edge Recording via SD Card
- Rugged IP66 Housing
- Integrated 3-Axis Mount

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 × 1536 [3,145,728 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/4-1/10000s	
Min. Illumination	0.1 Lux/f1.2 [Color], 0.01 Lux/f1.2 [B&W]	
S/N Ratio	> 50dB	
Video Output	1 port	
Camera Features		
Max IR Distance	30m / 100ft, Intelligent Adaptive IR	
Day/Night	Auto (ICR) / Color / B&W	
Backlight Compensation	BLC / HLC / WDR	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
EIS	On/Off	
Dehaze/Defog	On/Off	
Lens		
Focal Length	2.7mm-12mm	
Max Aperture	f1.2	
Focus Control	Manual	
Angle of View	H: 91.2°-31.1°	
Video		
Compression	H.264 / MJPEG	
Resolution	3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	3M/1080p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
	Third Stream	1080p/720p/D1 [1-25/30fps]
Bit Rate	H.264: 48K ~ 8192Kbps	
ROI	Up to 4 zones	
Audio		
Compression	G.711a / G.711μ	
Interface	1/1 Channel In/Out	
AVA Analytics		
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Scene Change, Camera Tampering, Audio Detection, Face Detection	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V, PoE [802.3af], < 12W Power Consumption	
Working Environment	-35°C ~ +60°C, < 90% RH	
Ingress Protection	IP66	
Dimensions	274mm × 95mm × 95mm	
Mount	Integrated 3-Axis Mount	
Weight	1.25kg	

Accessories (optional)

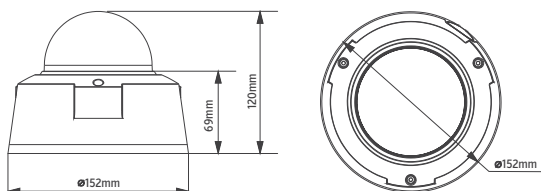


3MP IR Dome IP Camera w/AVA Analytics

Features

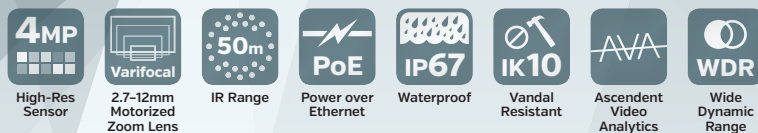
- 1/3" 3 Megapixel Progressive Scan CMOS
- Supports H.264 & MJPEG Compression
- Triple Video Stream Encoding
- Max 25/30fps@3MP [2048x1536]
- WDR, 3D-DNR, Defog, ROI, EIS, Intelligent Adaptive IR
- Day/Night Sensor
- AVA Analytics: Face Detection, Bi-Directional Tripwire, Perimeter Intrusion Detection
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- 100/1000M Base-T Ethernet, PoE
- 20m/65ft IR LED Distance
- Edge Recording via SD Card
- Rugged IK10 & IP66 Housing

Dimensions



Camera		
Image Sensor	1/3" 3 Megapixel Progressive Scan CMOS	
Effective Pixels	2048 × 1536 [3,145,728 Pixels]	
Shutter Speed	Auto/Manual, 1/3-1/10000	
Min. Illumination	0.1 Lux/f1.4 [Color], 0.01 Lux/f1.4 [B&W]	
S/N Ratio	> 50dB	
Video Output	1 port	
Camera Features		
Max IR Distance	20m / 65ft, Intelligent Adaptive IR	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / WDR [120dB]	
White Balance	Auto	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
EIS	On/Off	
Defog	On/Off	
Lens		
Focal Length	2.7mm-12mm	
Max Aperture	f1.4	
Focus Control	Manual	
Angle of View	H: 82°-25°	
Video		
Compression	H.264 / MJPEG	
Resolution	3M [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	3M/1080p/720p [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
	Third Stream	1080p/720p/D1 [1-25/30fps]
Bit Rate	H.264: 32K - 8192Kbps	
ROI	Up to 4 zones	
Audio		
Compression	G.711a / G.711μ	
Interface	1/1 Channel In/Out	
AVA Analytics		
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Scene Change, Camera Tampering, Audio Detection, Face Detection	
Network		
Ethernet	RJ-45 [100/1000Base-T]	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V/AC24V, PoE [802.3af]	
Power Consumption	Max 8W [IR ON:+2W]	
Working Environment	-30°C ~ +60°C, < 90% RH	
Ingress Protection	IP66	
Vandal Resistance	IK10	
Weight	1.25kg	

Accessories (optional)

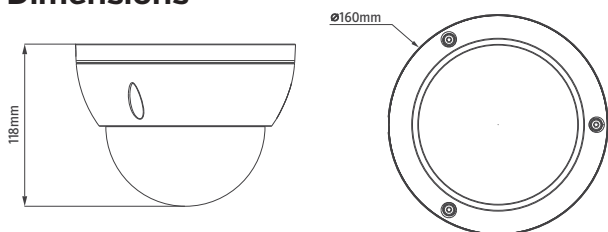


4 Megapixel IR Vandal Resistant Dome IP Camera

Features

- 1/3" 4 Megapixel Progressive Scan CMOS
- H.264 & MJPEG Triple-Stream Compression
- Max 20fps@4M [2560×1440] & 25/30fps@3M [2304×1296]
- WDR, Day/Night [ICR], 3D-DNR, AWB, AGC, BLC
- AVA Analytics: Face Detection, Bi-Directional Tripwire, Perimeter Intrusion Detection
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- 2.7mm-12mm Motorized Zoom Lens offering a 82-25° Field of View
- 50m/160ft IR LED Distance
- Extra Rugged IK10 & IP67 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions

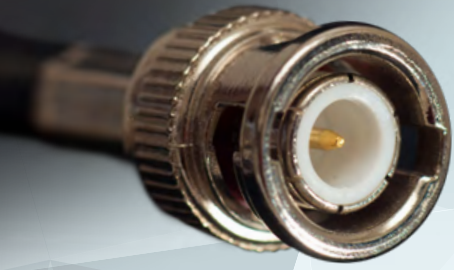


Camera		
Image Sensor	1/3" 4 Megapixel Progressive Scan CMOS	
Effective Pixels	2688 × 1520 [4,085,760 Pixels]	
Scanning System	Progressive	
Shutter Speed	Auto/Manual, 1/3[4]-1/10000s	
Min. Illumination	0.01 Lux/f1.4 [Color], 0 Lux/f1.4 [B&W, IR on]	
S/N Ratio	> 50dB	
Camera Features		
Max IR Distance	50m / 160ft	
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / WDR [120dB]	
White Balance	Auto/Manual	
Gain Control	Auto/Manual	
Noise Reduction	3D	
Privacy Masking	Up to 4 zones	
Lens		
Focal Length	2.7mm ~ 12mm	
Max Aperture	f1.4	
Focus Control	Motorized	
Angle of View	H: 82°~25°	
Video		
Compression	H.264 / MJPEG	
Resolution	4M [2560×1440] / 3M [2304×1296] / 1080p [1920×1080] / 1.3M [1280×960] / 720p [1280×720] / D1 [704×480] / CIF [352×240]	
Frame Rate	Main Stream	4M [1-20fps] / 3M [1-25/30fps]
	Sub Stream	D1/CIF [1-25/30fps]
	Third Stream	720p [1-5/8fps], WDR on / 720p [1-18/2fps], WDR off
Bit Rate	H.264: 32K ~ 10Mbps	
Corridor Mode	Support	
Audio		
Compression	G.711a / G.711μ / PCM	
Interface	1/1 Channel In/Out	
AVA Analytics		
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Scene Change, Camera Tampering, Audio Detection, Face Detection	
Network		
Ethernet	RJ-45 [10/100]	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	DC12V[AC24V optional], PoE [802.3af]	
Power Consumption	Max 10W [with IR and Motorized Lens on]	
Working Environment	-40°C ~ +60°C, < 95% RH	
Ingress Protection	IP67	
Vandal Resistance	IK10	
Dimensions	∅160mm × 118mm	
Weight	800g	





*Uncompressed 1080p
HD Video over Coax
500m Transmission Distance
Zero Latency
OSD & Lens Control
Use existing Coax
Plug & Play*



HDX Cameras

High Definition over Coaxial Cable

New HDX technology offers Full HD 1080P resolution surveillance over standard coax cable. HDX technology is set to revolutionize the CCTV industry by offering easy upgrades to existing installations, and a low cost alternative to Analog, SDI, and IP cameras. Hybrid HDX DVRs make it easy to add new HDX or IP cameras while maintaining existing analog cameras.

Our HDX Camera Lineup

HDX-1MP-EB-IR-28

HDX-1MP-EB-IR-2812

HDX-2MP-EB-IR-28

HDX-2MP-EB-IR-2812-MZ

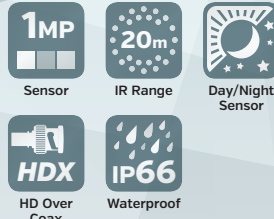
HDX-2MP-B-IR-20X

Our HDX DVR Lineup

X5S-HDX-Mini-4CH-1MP

X5S-HDX-1U-8CH-2MP

X5S-HVR-1.5U-4CH/8CH/16CH-2MP

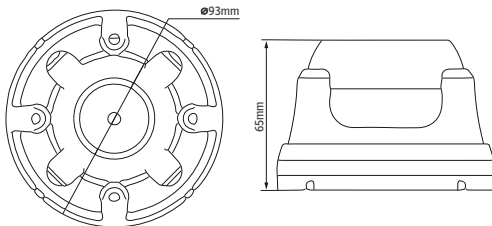


1 Megapixel Outdoor HDX IR Dome Camera

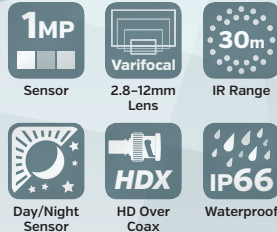
Features

- 1/2.9" 1 Megapixel CMOS Sensor
- 2.8mm Lens offering a 82° Field of View
- Real-time HD Video over Coaxial Cable
- Long Distance 500m Transmission via 75-3 cable
- Auto Flickerless
- Auto Day/Night [ICR]
- New IR LED Array Technology
- 20m/65ft IR LED Distance
- HDX Output
- Waterproof IP66 Housing

Dimensions



Camera	
Image Sensor	1/2.9" 1.0 Megapixel Progressive Scan CMOS
Effective Pixels	1280×720 [921,600 Pixels]
Shutter Speed	4/25 ~ 1/450000s
Min. Illumination	0 Lux/f1.2 [IR on]
Synchronization	Internal
Camera Features	
Max IR Distance	20m/65', 2 IR LED Array
Day/Night	Auto
Backlight Compensation	Auto
White Balance	Auto
Lens	
Focal Length	2.8mm
Max Aperture	f1.2
Angle of View	H: 82°
Video	
Resolution	1280×720
Frame Rate	50Hz: 720p@25fps / 60Hz: 720p@30fps
Video Output	HDX [BNC]
General	
Power Supply	DC12V±10%, 300mA
Power Consumption	<4W
Working Environment	-10°C ~ +50°C, < 85 % RH [non-condensation]
Ingress Protection	IP66
Weight	300g



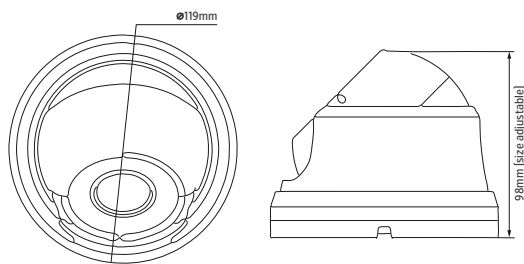
Camera	
Image Sensor	1/2.9" 1.0 Megapixel Progressive Scan CMOS
Effective Pixels	1280×720 [921,600 Pixels]
Shutter Speed	4/25 ~ 1/450000s
Min. Illumination	0 Lux/f1.2 [IR on]
Synchronization	Internal
Camera Features	
Max IR Distance	30m/100'; 3 IR LED Array
Day/Night	Auto
Backlight Compensation	Auto
White Balance	Auto
Lens	
Focal Length	2.8mm ~ 12mm
Max Aperture	f1.2
Angle of View	H: 82° ~ 23°
Video	
Resolution	1280×720
Frame Rate	50Hz: 720p@25fps / 60Hz: 720p@30fps
Video Output	HDX [BNC]
General	
Power Supply	DC12V±10%, 390mA
Power Consumption	<5W
Working Environment	-10°C ~ +50°C, < 85 % RH [non-condensation]
Ingress Protection	IP66
Weight	630g

1 Megapixel Outdoor HDX IR Dome Camera

Features

- 1/2.9" 1 Megapixel CMOS Sensor
- 2.8-12mm Lens offering a 82-23° Field of View
- Real-time HD Video over Coaxial Cable
- Long Distance 500m Transmission via 75-3 cable
- Auto Flickerless
- Auto Day/Night [ICR]
- New IR LED Array Technology
- 30m/100ft IR LED Distance
- HDX Output
- Waterproof IP66 Housing

Dimensions



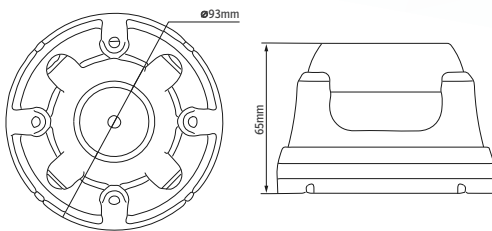


2 Megapixel Outdoor HDX IR Dome Camera

Features

- 1/2.8" 2 Megapixel Sony Exmor CMOS Sensor
- 2.8mm Lens offering a 83° Field of View
- Real-time Full HD Video over Coaxial Cable
- Long Distance 500m Transmission via 75-3 cable
- Defog, DWDR, 8X Digital Zoom
- New IR LED Array Technology
- 20m/65ft IR LED Distance
- HDX/BNC 960H Dual Output
- Waterproof IP66 Housing

Dimensions



Camera	
Image Sensor	1/2.8" 2.0 Megapixel Sony Exmor CMOS
Effective Pixels	1984x1105 (2,192,320 Pixels)
Min. Illumination	0 Lux/f2.0 [IR on]
S/N Ratio	>50dB [AGC off]
Camera Features	
Max IR Distance	20m/65', 2 IR LED Array
Day/Night	External, Color, B&W, Auto
White Balance	Auto
Defog	On/Off
DNR	2D & 3D NR
WDR	Off/Low/Middle/High
Privacy Mask	16 Areas
Motion Detection	4 Areas
Lens	
Focal Length	2.8mm
Max Aperture	f2.0
Angle of View	H: 83°
Video	
Resolution	1080p Digital / 700TVL Analog
Frame Rate	30fps
Video Output	HDX [BNC] / 1Vp-p Composite Output [75Ω/BNC]
General	
Power Supply	DC12V±10%, 300mA
Power Consumption	<4W
Working Environment	-10°C ~ +50°C, < 85 % RH [non-condensation]
Ingress Protection	IP66
Weight	310g



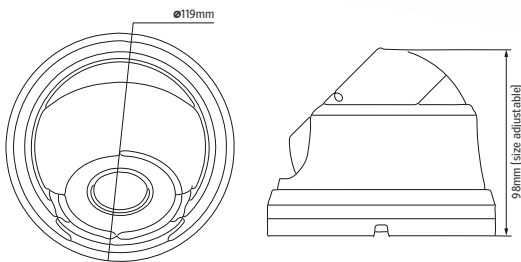
- 2MP**
Sensor
- Varifocal**
2.8-12mm
Motorized
Zoom Lens
- 40m**
IR Range
- Day/Night**
Sensor
- HDX**
HD Over
Coax
- IP66**
Waterproof
- DWDR**
Digital Wide
Dynamic
Range

2 Megapixel Outdoor HDX IR Dome Camera

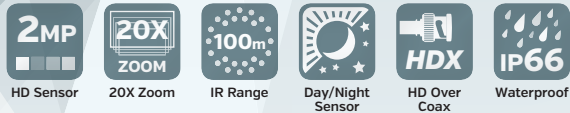
Features

- 1/2.8" 2 Megapixel Sony Exmor CMOS Sensor
- 2.8-12mm Motorized Zoom Lens offering a 83-24° Field of View
- Real-time Full HD Video over Coaxial Cable
- Long Distance 500m Transmission via 75-3 cable
- Defog, DWDR, 8X Digital Zoom
- New IR LED Array Technology
- 40m/130ft IR LED Distance
- HDX/BNC 960H Dual Output
- Waterproof IP66 Housing

Dimensions



Camera	
Image Sensor	1/2.8" 2.0 Megapixel Sony Exmor CMOS
Effective Pixels	1984x1105 (2,192,320 Pixels)
Min. Illumination	0 Lux/f2.0 [IR on]
S/N Ratio	>50dB [AGC off]
Camera Features	
Max IR Distance	40m/130', 3 IR LED Array
Day/Night	External, Color, B&W, Auto
White Balance	Auto
Defog	On/Off
DNR	2D & 3D NR
WDR	Off/Low/Middle/High
Privacy Mask	16 Areas
Motion Detection	4 Areas
Lens	
Focal Length	2.8mm ~ 12mm Motorized Zoom
Max Aperture	f2.0
Angle of View	H: 83° ~ 24°
Video	
Resolution	1080p Digital / 700TVL Analog
Frame Rate	30fps
Video Output	HDX [BNC] / 1Vp-p Composite Output [75Ω/BNC]
General	
Power Supply	DC12V±10%, 410mA
Power Consumption	<5W
Working Environment	-10°C ~ +50°C, < 85 % RH [non-condensation]
Ingress Protection	IP66
Weight	620g



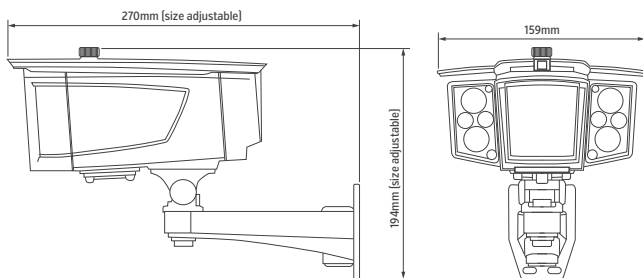
Camera	
Image Sensor	1/3" 2 Megapixel Sony Exmor CMOS
Effective Pixels	1984x1105 (2,192,320 Pixels)
Min. Illumination	0 Lux/f2.0 (IR on)
S/N Ratio	>50dB (AGC off)
Camera Features	
Max IR Distance	100m/325ft, 4 Super Power IR Array, 4 Mini IR Array
Day/Night	External, Color, B&W, Auto
Privacy Mask	16 Areas
Motion Detection	4 Areas
Lens	
Focal Length	4.8mm ~ 96mm (20X Zoom)
Max Aperture	f2.0
Angle of View	H: 53° ~ 2.8°
Video	
Resolution	1080p Digital / 700TVL Analog
Frame Rate	30fps
Video Output	HDX [BNC] / 1Vp-p Composite Output [75Ω/BNC]
General	
Power Supply	DC12V±10%, 410mA
Power Consumption	<5W
Working Environment	-10° C ~ +50° C, < 85 % RH (non-condensation)
Ingress Protection	IP66
Weight	1.5kg

2 Megapixel Outdoor HDX IR Bullet Camera

Features

- 1/3" 2 Megapixel Sony Exmor CMOS Sensor
- 4.8–96mm Lens offering a 53–3° Field of View (20X Zoom)
- Real-time HD Video & Control over Coax
- Long Distance 500m Transmission via 75-3 cable
- Auto Focus, HLC, IR Control
- 100m/325ft IR LED Distance
- Zoom/Focus Control from DVR
- Waterproof IP66 Housing

Dimensions



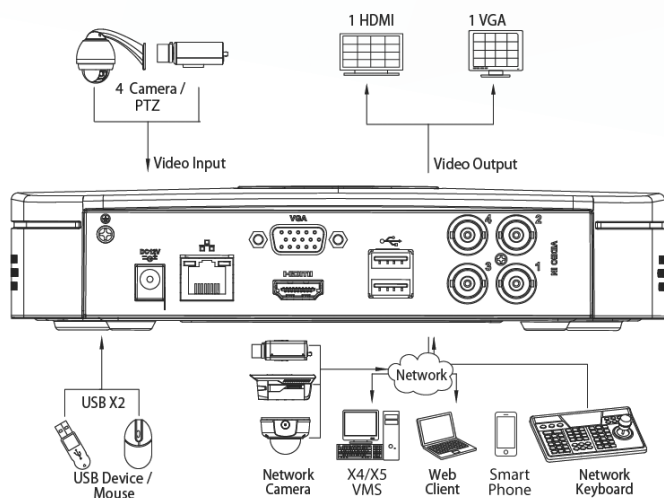


HDX 1U 4 Channel Standalone DVR

Features

- 1080p Realtime Preview
- 720p Realtime Recording
- Timeline Search
- H.264 Dual-Stream Video Compression
- HDMI/VGA Simultaneous Video Output
- Supports 1 SATA HDD up to 4TB
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video	
Input	4 Channels, BNC
Video Standard	1080p/720p HDX
Audio	
Input	4 Channels, RCA
Output	1 Channel, RCA
Two-way Talk	Reuse Audio In, 1 Channel Out
Display	
Interface	2 HDMI, 1 VGA
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600
Display Split	1/4/8/9
Privacy Masking	4 Rectangular Zones per Camera
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording
Recording	
A/V Compression	H.264/G.711
Resolution	1080p [1920×1080] ~ QCIF [176×120]
Record Rate	Main Stream 720p/960H/D1/HD1/2CIF/CIF [1-25/30fps] Extra Stream CIF/QCIF [1-25/30fps], D1 [1-12/15fps]
Bit Rate	48-4096Kbps
Record Mode	Manual, Continuous, Motion Detection, Alarm
Pre/Post Record	Pre-record: 1-30 sec, Post-record: 10-300 sec
Video Detection & Alarm	
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup
Video Detection	Motion Detection, Video Loss, Camera Masking
Playback & Backup	
Sync Playback	1/4 (limited by resolution and bitrate)
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom
Backup Mode	Network / USB / External CD-R & DVD-RW
Network	
Ethernet	RJ-45 Port [10/100M]
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter, SNMP, P2P
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]
Storage	
Internal HDD	1 SATA Ports (up to 4TB)
Auxiliary Ports	
USB	2 Ports [2 Rear USB 2.0]
RS485	1 Port [for PTZ Control]
General	
Power Supply	DC12V/2A
Power Consumption	10W [without HDD]
Working Environment	-10°C ~ +55°C / 10%~90% RH / 86~106kpa
Dimension (W×D×H)	205mm×205mm×40mm
Weight	0.5kg [without HDD]

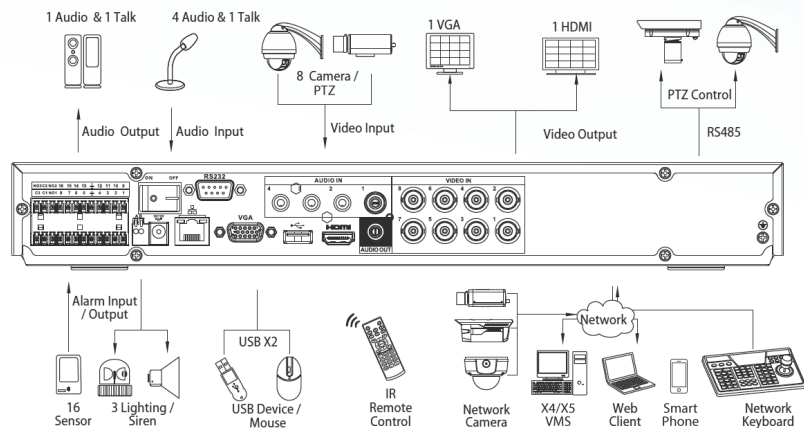


HDX 1U 8 Channel Standalone DVR

Features

- Supports HDX/Analog Input
- 1080p Realtime Live View & Realtime Recording
- Timeline Search
- H.264 Dual-Stream Video Compression
- Supports 2 SATA HDDs up to 8TB
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



System		
Main Processor	Embedded Processor	
Operating System	Embedded LINUX	
Video		
Input	8 Channels, BNC	
Video Standard	HDX	1080p/720p HDX
	Analog	NTSC, PAL
Audio		
Input	4 Channels, RCA	
Output	1 Channel, RCA	
Two-way Talk	Reuse Audio In, 1 Channel Out	
Display		
Interface	2 HDMI, 1 VGA	
Resolution	1920x1080, 1280x1024, 1280x720, 1024x768, 800x600	
Display Split	1/4/8/9	
Privacy Masking	4 Rectangular Zones per Camera	
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
A/V Compression	H.264/G.711	
Resolution	1080p [1920x1080] ~ QCIF [176x120]	
Record Rate	Main Stream	1080p/720p/960H/D1/HD1/2CIF/CIF [1-25/30fps]
	Extra Stream	CIF/QCIF [1-25/30fps], D1 [1-12/15fps]
Bit Rate	48-6144Kbps	
Record Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Record	Pre-record: 1-30 sec, Post-record: 10-300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	16 Channels In, 3 Channels Out	
Playback & Backup		
Sync Playback	1/4/9 (limited by resolution and bitrate)	
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Mode	Network / USB / External CD-R & DVD-RW	
Network		
Ethernet	RJ-45 Port [10/100/1000M]	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Storage		
Internal HDD	2 SATA Ports (up to 8TB)	
Auxiliary Ports		
USB	2 Ports (1 Rear USB 2.0, 1 Front USB 2.0)	
RS485	1 Port [for PTZ Control]	
General		
Power Supply	DC12V/5A	
Power Consumption	15W [without HDDs]	
Working Environment	-10°C ~ +55°C / 10%~90% RH / 86~106kpa	
Dimension [W×D×H]	1U, 375mm×285mm×55mm	
Weight	2.35kg [without HDDs]	

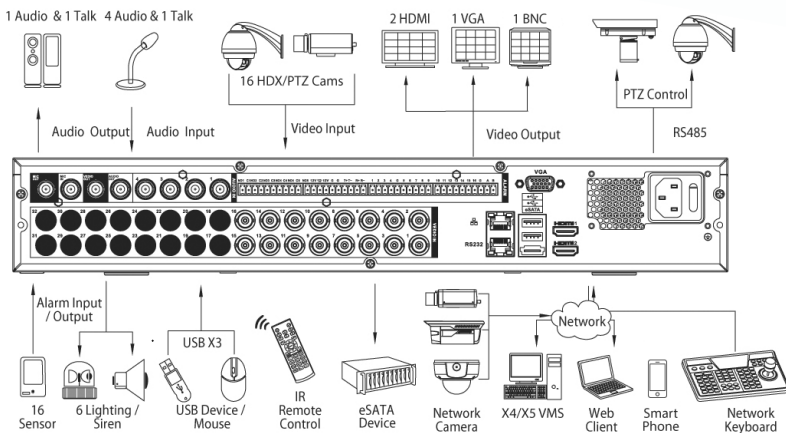


HDX 1.5U 4/8/16 Channel Hybrid Standalone DVR

Features

- Each Channel Supports HDX/Analog/IP Video Inputs
- 1 HDMI/VGA/TV Video Output, 1 HDMI Separate Output
- 1080p Realtime Live View
- Timeline Search
- H.264 Dual-Stream Video Compression
- Supports 4 SATA HDDs up to 16TB
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



	X4S-HDX-15U-HY-4CH	X4S-HDX-15U-HY-8CH	X4S-HDX-15U-HY-16CH
System			
Main Processor	Embedded Processor		
Operating System	Embedded LINUX		
Video			
Input	4 Channels	8 Channels	16 Channels
Video Standard	HDX	1080p/720p HDX	
	Analog	NTSC, PAL, Effio 960H	
	IP	1080p, 720p, D1, CIF	
Audio			
Input	4 Channels, BNC		
Output	1 Channel, BNC		
Two-way Talk	1 Channel In, 1 Channel Out, BNC		
Display			
Interface	2 HDMI, 1 VGA, 1 TV		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768, 800×600		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 Rectangular Zones per Camera		
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
A/V Compression	H.264/G.711		
Resolution	1080p (1920×1080) ~ QCIF (176×120)		
Record Rate	Main Stream	1080p/720p/960H/D1/HD1/2CIF/CIF [1-25/30fps]	
	Extra Stream	CIF/QCIF [1-25/30fps]	
Bit Rate	48-8192Kbps		
Record Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Record	Pre-record: 1-30 sec, Post-record: 10-300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Alarm Input	4 Channels	8 Channels	16 Channels
Relay Output	6 Channels		
Playback & Backup			
Sync Playback	1/4 (limited by resolution and bitrate)	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Mode	Network / USB / Internal CD-R & DVD-RW / eSATA		
Network			
Ethernet	RJ-45 Port [10/100/1000M]		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter		
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)		
Storage			
Internal HDD	4 SATA Ports (up to 16TB)		
External HDD	1 eSATA Port (up to 16TB)		
Auxiliary Ports			
USB	3 Ports (2 Rear USB 2.0, 1 Front USB 2.0)		
RS232	1 Port (for PC Communication & Keyboard)		
RS422	1 Port (for Keyboard)		
RS485	1 Port (for PTZ Control)		
General			
Power Supply	AC 100-240 V, 50/60 Hz		
Power Consumption	40W (without HDDs)		
Working Environment	-10°C ~ +55°C / 10%~90% RH / 86-106kpa		
Dimension (W×D×H)	1.5U, 440mm×410mm×70mm		
Weight	6kg (without HDDs)		





Analog Cameras

CCTV Closed-Circuit Television

Analog Cameras

700-MEB-IR-36

700-EB-2810

700-VRD-35IR-2812

700-B-72IR-2812

AP-700-IR-550-PRO

AP-700-IR-550

SR-700-3IR-2812

540-SUB-LED-30M

Nova Series

NV-580-50M-12X

NV-600-120M-37X

NV-600-140M-37X

NV-600-200M-37X

Analog PTZ

540-PTZ-36X-2FL



Day/Night



Zero Light Capabilities



Waterproof



Vandal Resistant



IR Range

Micro-Size Vandal Resistant IR Dome

Features

- Ultra-Compact Size
- 1/3" 700TVL Super HAD CCD Sensor
- 3.6mm IR Corrected Fixed Lens offering a 67° Field of View
- 24 LEDs Provide up to 20m/65ft of IR Illumination
- Rugged IP66 Vandal Proof Housing
- Designed for both indoor and outdoor applications

Camera	
Image Sensor	1/3" Ex-View HADII CCD
Resolution	700TVL
Shutter Speed	1/60 ~ 1/100,000s
S/N Ratio	>50dB
Video Output	1 V _{pp} , 75Ω
IR Illumination	
Day/Night	Electronic Photocell Controlled (EPC)
Distance	20m/65'
Wavelength	810nm [940nm Stealth optional]
IR LEDs	24 IR LEDs
Lens	
Focal Length	3.6mm Fixed Lens
Max Aperture	f2.0
Angle of View	H: 67.4°
Min. Illumination	0.32 Lux [Color], 0 Lux [B&W, IR on]
Installation	
Lens Adjustment	3-Axis Design for Easy Adjustment of Camera and Lens
General	
Power Supply	12V DC
Power Consumption	350 mA
Working Environment	-10°C to +45°C, <95% RH
Ingress Protection	IP66
Dimensions (W×H)	ø94mm×80mm
Weight	430g



Day/Night



Zero Light Capabilities



Waterproof



IR Range

Vandal Resistant Dome

Features

- 700TVL 1/3" Super HAD CCD Sensor
- Precision Engineered IR Corrected 2.8mm-10mm Lens offering a 81-27° Field of View
- IP 66 Sealed; No Water Or Dust Ingression
- Rugged Vandal-Proof Dome Enclosure
- Integrated 35 IR LEDs for IR Illumination (16m/55ft)
- Photocell for Automatic Day/Night Operation
- DNR, HLC, BLC, AWB, etc. via Optional OSD
- 3-axis Ball Design for Easy Camera Positioning
- Weatherproof -25°C to +50°C
- Easy Lens Focus and Adjustment with Screwdriver
- Ceiling, Wall, Upright, and Inverted Mounting
- Plug-and-Play Installation in Under 10 Minutes
- Cost Effective Day/Night Camera

Camera	
Image Sensor	1/3" Super HAD CCD
Resolution	700TVL
Shutter Speed	1/60 ~ 1/100,000s
S/N Ratio	48dB+
Video Output	700TVL
IR Illumination	
Day/Night	Electronic Photocell Controlled (EPC)
Distance	16m/55'
Wavelength	810nm [940nm Stealth optional]
IR LEDs	35 High Output IR LEDs
Intelligent Illumination	Automatically Adjusts IR for Even Illumination
Lens	
Focal Length	2.8mm-10mm Aspherical Varifocal Lens
Angle of View	H: 81.2° - 27.0°
Min. Illumination	0.32 Lux [Color], 0 Lux [B&W, IR on]
Installation	
Lens Adjustment	3-Axis Design for Easy Adjustment of Camera and Lens
General	
Power Supply	12V DC
Power Consumption	400 mA
Working Environment	-25°C to +50°C
Ingress Protection	IP66
Dimensions (W×H)	83mm×119mm
Weight	1.4kg



Day/Night



Zero Light Capabilities



Submersible Waterproof



Vandal Resistant



IR Range

Vandal Resistant Dome

Features

- 700TVL 1/3" Super HAD CCD Sensor
- Precision Engineered IR Corrected 2.8mm-12mm Lens offering a 81-23° Field of View
- IP 68 Sealed; No Water Or Dust Ingression
- Rugged Vandal-Proof Dome Enclosure
- Extreme Weather -55°C to +60°C
- Intelligent Active IR Illumination (18m/60ft)
- IR Cut Filter 0 Phase Shift Between Day/Night Mode
- Photocell for Automatic Day/Night Operation
- Low Light Sensitivity with DNR 2 and Sense-Up
- User Defined DNR, HLC, BLC, AWB, etc. via OSD
- Dual Voltage 12VDC/24VAC auto-sensing
- 4 Axis Design for Easy Camera and Lens Adjustment
- Easy Twist & Lock Installation with 3 Security Screws
- Mounts for Upright, Inverted, and Pole Installation
- Easy Mount Wall Mount

Camera	
Image Sensor	1/3" Sony Super HAD CCD
Resolution	700TVL
Shutter Speed	1/50 ~ 1/10,000s
S/N Ratio	50dB (AGC off)
Video Output	1 V _{pp} Composite Output, 75Ω
IR Illumination	
Day/Night	Electronic Photocell Controlled (EPC)
Distance	18m/60' Rated
Wavelength	810nm [940nm Stealth optional]
IR LEDs	35 High Output IR LEDs
Intelligent Illumination	Automatically Adjusts IR for Even Illumination
Lens	
Focal Length	2.8mm-12mm Aspherical Varifocal Lens
Angle of View	H: 81.2° - 22.6°
IR Filter	MICF (Mechanical IR Cut Filter)
Min. Illumination	0.32 Lux [Color], 0 Lux [B&W, IR on]
Installation	
OSD	HCL, BLC, AWB, ACE, PIP, TBL, DNR 2, Mirror, Flip, Privacy, Brightness, Freeze, Sharpness, Sense-Up, Day/Night
Lens Adjustment	4-Axis Twist & Lock for Easy Adjustment of Camera, Lens, and IR Board
Configuration	User Defined Area and Intensity for Image Enhancements
General	
Power Supply	Dual Voltage 12 Volt DC/ 24V AC
Power Consumption	350 mA / 700 mA [IR on]
Working Environment	-55°C ~ +60°C
Ingress Protection	IP68 Sealed, NEMA 4X
Dimensions (W×H)	148mm×137mm
Weight	1.4kg



Day/Night



Zero Light Capabilities



Waterproof



2.8-12mm Lens



IR Range

IR Rugged Extreme Weather Surveillance Security Camera

Features

- 1/3" 700TVL Ex-CCD for Superb Color Images By Day
- 35m/120ft of Identification Performance in Complete Darkness for Excellent True Day/Night Performance
- 2.8-12mm Varifocal IR Corrected Lens offering a 81-23° Field of View
- Split Window Eliminates IR Bleed and Reflection
- Easy Installation via OSD and Lens Trap Door
- Intelligent IR with No Washout or Hotspots
- IP66 Rugged Vandal Proof Enclosure and Mount
- Internal Heater/Blower -50°C to +50°C Operation
- Installer Friendly Plug and Play Operation
- Photocell for Automatic Day/Night Switching (EPC)
- 150m Adaptive IR Illumination Distance
- IP66 Extruded High Strength Aluminum Construction

Camera	
Image Sensor	1/3" Sony EXview HAD CCD II
Resolution	700TVL
Shutter Speed	1/50 ~ 1/100,000s
S/N Ratio	> 52dB
Video Output	1 V _{pp} , 72Ω
IR Illumination	
Day/Night	Electronic Photocell Controlled (EPC)
Distance	60m/195' Rated
Wavelength	810nm [940nm Stealth optional]
IR LEDs	72 Super Bright IR LEDs
Intelligent IR Control	Automatic Microprocessor Control (AMC)
Lens	
Focal Length	2.8mm-12mm Varifocal Lens
Angle of View	H: 81.2° - 22.6°
IR Filter	MICF [Mechanical IR Cut Filter]
Min. Illumination	0.05 Lux [Color], 0 Lux [B&W, IR on]
Installation	
OSD	Backlight, Flickerless, Gain Control, White Balance, Etc.
Lens Adjustment	Trap Door for Lens Focus and Adjustment
Mount	Rotating Wall Mount
General	
Power Supply	DC12V at Minimum 750mA
Working Environment	-25°C ~ +50°C
Ingress Protection	IP66
Dimensions (W×H×L)	Xmm×Xmm×Xmm
Weight	1.6kg



Day/Night



Zero Light Capabilities



Waterproof



5-50mm Lens



IR Range

Long Range Rugged IR Camera

Features

- Long-Range True Day/Night IR Camera
- Superb Color By Day and Quality B&W at Night
- 1/3" 700TVL Ex-CCD for Crystal Clear Images
- 5-50mm Varifocal IR Corrected Lens offering a 51-6° Field of View
- Active IR Performs in 0 Lux (complete darkness)
- Rated for 180m/600ft IR Recognition, 100m/350ft Identification
- Split Window Eliminates IR Bleed and Reflection
- Optically Pure Polycarbonate Viewing Window
- Easy Installation via OSD and Lens Trap Door
- Intelligent IR with No Washout or Hotspots
- IP66 Rugged Vandal Proof Enclosure and Mount
- Internal Heater/Blower -50°C to +50°C Operation
- Installer Friendly Plug and Play Operation
- Photocell for Automatic Day/Night Switching (EPC)
- 150m Adaptive IR Illumination Distance
- IP66 Extruded High Strength Aluminum Construction

Camera	
Image Sensor	1/3" Sony Super HAD CCD
Resolution	700TVL
Shutter Speed	1/50 ~ 1/100,000s
S/N Ratio	> 50dB+
Video Output	1 V _{pp} Composite Output, 75Ω
IR Illumination	
Day/Night	Electronic Photocell Controlled (EPC)
Distance	600' Recognition, 350' Identification
Wavelength	810nm [940nm Stealth optional]
IR LEDs	PRO Series Hybrid LEDs
Intelligent IR Control	Automatic Microprocessor Control (AMC)
Lifetime	20,000 Hours [hand-welded]
Lens	
Focal Length	5mm-50mm IR Corrected Varifocal Lens
Angle of View	H: 51.3° - 5.5°
IR Filter	MICF (Mechanical IR Cut Filter)
Min. Illumination	0.05 Lux (Color), 0 Lux (B&W, IR on)
Installation	
OSD	Backlight, Flickerless, Gain Control, White Balance, Etc.
Lens Adjustment	Trap Door for Lens Focus and Adjustment
Mount	Rotating Wall Mount
General	
Power Supply	24V AC (CE, ROHS, FCC)
Power Consumption	<26W (IR on, Heater on)
Working Environment	-50°C ~ +50°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions (W×H×L)	300mm×158mm×354mm
Weight	4.5kg



Day/Night



Zero Light Capabilities



Waterproof



5-50mm Lens



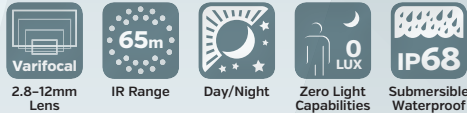
IR Range

Long Range Rugged IR Camera

Features

- Long-Range True Day/Night IR Camera
- Superb Color By Day and Quality B&W at Night
- 1/3" 700TVL Ex-CCD for Crystal Clear Images
- 5-50mm Varifocal IR Corrected Lens offering a 51-6° Field of View
- Active IR Performs in 0 Lux (complete darkness)
- Rated for 150m/500ft IR Recognition, 100m/350ft Identification
- Split Window Eliminates IR Bleed and Reflection
- Optically Pure Polycarbonate Viewing Window
- Easy Installation via OSD and Lens Trap Door
- Intelligent IR with No Washout or Hotspots
- IP66 Rugged Vandal Proof Enclosure and Mount
- Internal Heater/Blower -50°C to +50°C Operation
- Installer Friendly Plug and Play Operation
- Photocell for Automatic Day/Night Switching (EPC)
- 150m Adaptive IR Illumination Distance
- IP66 Extruded High Strength Aluminum Construction

Camera	
Image Sensor	1/3" Sony Super HAD CCD
Resolution	700TVL
Shutter Speed	1/50 ~ 1/100,000s
S/N Ratio	> 50dB+
Video Output	1 V _{pp} Composite Output, 75Ω
IR Illumination	
Day/Night	Electronic Photocell Controlled (EPC)
Distance (Rated)	150m/500' Recognition, 100m/350' Identification
Wavelength	810nm [940nm Stealth optional]
IR LEDs	14 Long-Range, 22 Wide-Angle
Intelligent IR Control	Automatic Microprocessor Control (AMC)
Lifetime	20,000 Hours [hand-welded]
Lens	
Focal Length	5mm-50mm IR Corrected Varifocal Lens
Angle of View	H: 51.3° - 5.5°
IR Filter	MICF (Mechanical IR Cut Filter)
Min. Illumination	0.05 Lux (Color), 0 Lux (B&W, IR on)
Installation	
OSD	Backlight, Flickerless, Gain Control, White Balance, Etc.
Lens Adjustment	Trap Door for Lens Focus and Adjustment
Mount	Rotating Wall Mount
General	
Power Supply	24V AC (CE, ROHS, FCC)
Power Consumption	<26W (IR on, Heater on)
Working Environment	-50°C ~ +50°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions (W×H×L)	300mm×158mm×354mm
Weight	4.5kg



The Stingray IR Camera

Features

- 700TVL 1/3" Super HAD CCD sensor
- Precision Engineered IR Corrected 2.8mm-12mm Lens offering a 81-23° Field of View
- IP 68 sealed; zero water or dust ingress
- Medium-range true day/night IR camera
- Extreme weather -55°C to +60°C
- Intelligent active IR illumination (220 feet)
- IR cut filter 0 phase shift between day/night mode
- Photocell for automatic day/night operation
- Low light sensitivity with DNR 2 and Sens-Up
- User defined DNR, HLC, BLC, AWB, etc. via OSD
- Installer friendly plug and play operation
- Intelligent IR with no washout or hotspots
- Integrated 3-Axis Mount

Camera	
Image Sensor	1/3" Ex-View Super HAD II CCD
Resolution	700TVL True Day/Night
Shutter Speed	1/60 - 1/10,000s
S/N Ratio	50dB+
Video Output	1 V _{pp} Composite Output, 75Ω
IR Illumination	
IR Lens	3 Large, Super Bright Hybrid Arrays
Distance	65m/220' Recognition, 35m/120' Identification
Day/Night Switching	Electronic Photocell Controlled (EPC)
Wavelength	810nm [940nm Stealth optional]
Intelligent IR Control	Automatic Microprocessor Control (AMC)
Lifetime	50,000 Hours
Lens	
Focal Length	2.8mm-12mm IR Corrected Varifocal Lens
Angle of View	H: 81.2° - 22.6°
IR Filter	MICF (Mechanical IR Cut Filter)
Min. Illumination	0.05 Lux Color, 0 Lux B&W (IR on)
Installation	
OSD	Backlight, Flickerless, Gain Control, White Balance, Etc.
Lens Adjustment	External Zoom and Focus Adjustment with Allen Key
Mount	4-axis Rotating Wall Mount to position camera
General	
Construction	High Strength Aluminum & Optically Pure Glass
Power Supply	12VDC / 24VAC
Power Consumption	≤26W (Heater on)
Working Environment	-55°C to +60°C [temperature controlled heater/blower]
Ingress Protection	IP68
Dimensions (W×H×L)	145mm×90mm×305mm
Mount	Integrated 3-Axis Mount
Weight	1.6kg



Zero Light Capabilities



Submersible Waterproof

Camera	
Image Sensor	1/3" Sony Super HAD CCD
Resolution	540TVL
Shutter Speed	1/60 ~ 1/100,000s
S/N Ratio	≥50dB (AGC off)
Video Output	1 V _{pp} Composite Output, 75Ω
Illumination	8 White Light LEDs
LED Effective Distance	5m
Lens	
Focal Length	6mm Fixed Lens
Max Aperture	f1.8
Angle of View	H: 43.6°
Min. Illumination	0 Lux (f1.4 3200°K/LED Activated)
General	
Power Supply	12V DC
Working Environment	-10°C ~ +50°C / 30% ~ 90% RH
Ingress Protection	IP68
Weight	2.4kg (shipping weight)

Submersible Underwater IP68 Snake Camera

Features

- 1/3" 540TVL Super HAD CCD Sensor
- 6mm Fixed Lens offering a 43° Field of View
- 8 White Light LEDs for operation in complete darkness
- 30m Cable Lead
- Remote Control



IR Range



Day/Night



Zero Light Capabilities



12X ZOOM
5-55mm Lens



IP66 Waterproof

IR High Speed Dome

Features

- Mid-range day/night PTZ surveillance solution
- Color by day and quality monochrome at night
- 1/3" HAD CCD greatly increases IR light distance
- Endless 360° high-speed, PTZ positioning
- IR intensity adjusts with motorized zoom lens
- 55m/180ft Recognition, 35m/110ft Identification
- 4-46mm IR corrected continuous zoom lens offering a 62-6° Field of View
- Accurate to 0.01° [Micro-Step Technology]
- Flawless IR with no washout or hotspots
- Up to 220 Pan-Tilt-Zoom presets with guard tours
- Adjustable EPC for automatic day/night and IR activation
- Extreme -45°C to +60°C heater/blower
- Rugged IP 66, 4.5" housing for harsh environments
- All brackets and fastening hardware included
- Pelco D/P communication protocol via RS-485
- 12X optical zoom / 16X digital zoom = 192X total zoom
- Image Enhancers: TBL/ATW/DIS/HLC/SSNR II
- OSD for programming configuration
- Endless 360° rotation / 90° tilt up to 200°/s

Camera	
Image Sensor	1/3" HAD CCD
Resolution	580TVL Day / 680TVL Night
Shutter Speed	1/50 ~ 1/100,000s
IR Illumination	
Hybrid IR LEDs	Syncs with Zoom Lens
Distance	55m/180' Recognition, 35m/110' Identification
Wavelength	810nm [940nm Stealth optional]
Lens	
Focal Length	4mm-46mm IR Corrected Continuous Zoom Lens
Zoom	12X Optical, 16X Digital [192X Total]
Angle of View	H: 61.9° - 6.0°
IR Filter	Dual MICF [Mechanical IR Cut Filter]
Min. Illumination	0.05 Lux Color, 0 Lux B&W [IR on]
Communication & Presets	
Presets	220 Presets
Preset Tours	3 Preset Tours
Home Position	Yes [preset 1 or tour]
Communication	RS485
Control Protocol	Pelco-D, Pelco-P
Mechanical	
Accuracy	< 0.01° Micro-Step Technology
Drive Unit	Integral Micro-Step Pan and Tilt
Pan Angle	360° Continuous Pan
Tilt Angle	90°
Speed Control	Closed Loop Electronics [0.05°-200°]
Preset Accuracy	> 0.1°
Proportional P/T to Zoom Position	Yes
General	
Construction	High Strength Aluminum & Flat Tempered Glass
Power Supply	24V AC [CE, ROHS, FCC]
Power Consumption	≤40W [Heater on]
Lightning Protection	3,000 Volts
Working Environment	-45°C to +60°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions [H×Ø]	300mm×114mm
Weight	2.1kg



120m
IR Range



Day/Night



0 LUX
Zero Light Capabilities



37X
ZOOM
3.5-129.5mm Lens



IP66
Waterproof

IR High Speed Dome

Features

- Long-range day/night PTZ surveillance solution
- Color by day and quality monochrome at night
- 1/4" EX-View HAD II greatly increases IR light distance
- PTZ positioning, 90° tilt up to 200°/s
- IR intensity adjusts with motorized zoom lens
- 140m/450ft Recognition, 100m/325ft Identification
- 3.5-129mm IR corrected continuous zoom lens offering a 54-2° Field of View
- Accurate to 0.01° [Micro-Step Technology]
- Flawless IR with no washout or hotspots
- Up to 120 Pan-Tilt-Zoom presets with guard tours
- Adjustable EPC for automatic day/night and IR activation
- Extreme -45°C to +60°C heater/blower
- Rugged IP 66, 7" housing for harsh environments
- All brackets and fastening hardware included
- Pelco D/P communication protocol via RS-485
- 37X optical zoom / 12X digital zoom = 592X total zoom
- Image Enhancers: TBL/ATW/DIS/HLC/SSNR II
- OSD for programming configuration
- Endless high speed 360° rotation

Camera	
Image Sensor	1/4" Ex-View II HAD CCD
Resolution	600TVL Day / 700TVL Night
Shutter Speed	1/50 ~ 1/10,000s
IR Illumination	
Hybrid IR LEDs	Syncs with Zoom Lens
Distance	120m Recognition, 90m Identification
Wavelength	810nm [940nm Stealth optional]
Lens	
Focal Length	3.5mm-129.5mm IR Corrected Continuous Zoom Lens
Zoom	37X Optical, 12X Digital [444X Total]
Angle of View	H: 54.4° - 1.6°
IR Filter	Dual MICF [Mechanical IR Cut Filter]
Min. Illumination	0.05 Lux Color, 0 Lux B&W [IR on]
Communication & Presets	
Presets	120 Presets
Preset Tours	3 Preset Tours
Home Position	Yes [preset 1 or tour]
Communication	RS485
Control Protocol	Pelco-D, Pelco-P
Mechanical	
Accuracy	< 0.05° Micro-Step Technology
Drive Unit	Integral Micro-Step Pan and Tilt
Pan Angle	360° Continuous Pan
Tilt Angle	90°
Speed Control	Closed Loop Electronics [0.05°-200°]
Preset Accuracy	> 0.1°
Proportional P/T to Zoom Position	Yes
General	
Construction	High Strength Aluminum & Flat Tempered Glass
Power Supply	24V AC [CE, ROHS, FCC]
Power Consumption	≤40W [Heater on]
Lightning Protection	3,000 Volts
Working Environment	-45°C to +60°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions [H×Ø]	300mm×215mm
Weight	2.7kg



140m
IR Range



Day/Night



0 LUX
Zero Light Capabilities



3.5-129.5mm
Lens



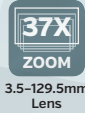
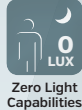
IP66
Waterproof

Variable ZID IR High Speed Dome

Features

- Long-range day/night PTZ surveillance solution
- Color by day and quality monochrome at night
- 1/4" Ex-View HAD II greatly increases IR light distance
- PTZ positioning, 90° tilt up to 200°/s
- Active IR performs in 0 Lux (complete darkness)
- 140m/460ft Recognition, 100m/325ft Identification
- 3.5-129mm IR corrected continuous zoom lens offering a 54-2° Field of View
- Accurate to 0.01° [Micro-Step Technology]
- Flawless IR with no washout or hotspots
- Up to 220 Pan-Tilt-Zoom presets with guard tours
- Adjustable EPC for automatic day/night and IR activation
- Extreme -45°C to +60°C heater/blower
- Rugged IP 66, 7" housing for harsh environments
- All brackets and fastening hardware included
- Pelco D/P communication protocol via RS-485
- 37X optical zoom / 12X digital zoom = 592X total zoom
- Image Enhancers: WDR/TBL/ATW/DIS/HLC/SSNRII
- OSD for programming configuration
- Endless high speed 360° rotation

Camera	
Image Sensor	1/4" Ex-View II HAD CCD
Resolution	600TVL Day / 700TVL Night
Shutter Speed	1/50 ~ 1/10,000s
IR Illumination	
ZID	Zoom IR Diode
Distance	140m/460' Recognition, 100m/325' Identification
Angle	5°-60°
Wavelength	810nm [940nm Stealth optional]
Lens	
Focal Length	3.5mm-129.5mm IR Corrected Continuous Zoom Lens
Zoom	37X Optical, 12X Digital [444X Total]
Angle of View	H: 54.4° - 1.6°
IR Filter	Dual MCF [Mechanical IR Cut Filter]
Min. Illumination	0.05 Lux Color, 0 Lux B&W [IR on]
Communication & Presets	
Presets	220 Presets
Preset Tours	3 Preset Tours
Home Position	Yes [preset 1 or tour]
Communication	RS485
Control Protocol	Pelco-D, Pelco-P
Mechanical	
Accuracy	< 0.01° Micro-Step Technology
Drive Unit	Integral Micro-Step Pan and Tilt
Pan Angle	360° Continuous Pan
Tilt Angle	90°
Speed Control	Closed Loop Electronics [0.05°-200°]
Preset Accuracy	> 0.1°
Proportional P/T to Zoom Position	Yes
General	
Construction	High Strength Aluminum & Flat Tempered Glass
Power Supply	24V AC (CE, ROHS, FCC)
Power Consumption	≤40W [Heater on]
Lightning Protection	3,000 Volts
Working Environment	-45°C to +60°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions [H×Ø]	300mm×215mm
Weight	2.7kg



Variable Laser High Speed Dome

Features

- Long-range day/night PTZ surveillance solution
- Color by day and quality monochrome at night
- 1/4" Ex-View HAD II greatly increases IR light distance
- PTZ positioning, 90° tilt up to 200°/s
- Active IR performs in 0 Lux [complete darkness]
- 200m/650ft Recognition, 150m/500ft Identification
- 3.5-129mm IR corrected continuous zoom lens offering a 54-2° Field of View
- Accurate to 0.01° [Micro-Step Technology]
- Flawless IR with no washout or hotspots
- Up to 220 Pan-Tilt-Zoom presets with guard tours
- Adjustable EPC for auto day/night and IR activation
- Extreme -45°C to +60°C heater/blower
- Rugged IP 66, 7" housing for harsh environments
- All brackets and fastening hardware included
- Pelco D/P communication protocol via RS-485
- 37X optical zoom / 12X digital zoom = 592X total zoom
- Image Enhancers: WDR/TBL/ATW/DIS/HLC/SSNRII
- OSD for programming configuration
- Endless high speed 360° rotation

Camera	
Image Sensor	1/4" Ex-View II HAD CCD
Resolution	600TVL Day / 700TVL Night
Shutter Speed	1/50 ~ 1/10,000s
IR Illumination	
ZLID	Zoom Laser IR Diode
Distance	200m/650' Recognition, 150m/500' Identification
Angle	5°-60°
Wavelength	810nm [940nm Stealth optional], NOHD 3.5m
Lens	
Focal Length	3.5mm-129.5mm IR Corrected Continuous Zoom Lens
Zoom	37X Optical, 12X Digital [444X Total]
Angle of View	H: 54.4° - 1.6°
IR Filter	Dual MCF [Mechanical IR Cut Filter]
Min. Illumination	0.05 Lux Color, 0 Lux B&W [IR on]
Communication & Presets	
Presets	220 Presets
Preset Tours	3 Preset Tours
Home Position	Yes [preset 1 or tour]
Communication	RS485
Control Protocol	Pelco-D, Pelco-P
Mechanical	
Accuracy	< 0.01° Micro-Step Technology
Drive Unit	Integral Micro-Step Pan and Tilt
Pan Angle	360° Continuous Pan
Tilt Angle	90° [Auto-Flip]
Speed Control	Closed Loop Electronics [0.05°-200°]
Preset Accuracy	> 0.1°
Proportional P/T to Zoom Position	Yes
General	
Construction	High Strength Aluminum & Flat Tempered Glass
Power Supply	24V AC (CE, ROHS, FCC)
Power Consumption	≤40W [Heater on]
Lightning Protection	3,000 Volts
Working Environment	-45°C to +60°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions [H×Ø]	300mm×215mm
Weight	2.7kg





Rugged Pan-Tilt-Zoom IR Camera

Features

- Active IR provides detection and identification in poor lighting environments
- Extremely rugged design: constructed of 5-15mm thick high strength aluminum alloy, to withstand the most brutal assaults
- IP66/NEMA 4X Weather proof housing with heater for a temperature variance of -50°C ~ 55°C
- Highly tuned precision-engineered IR corrected optics integrated MICF mechanical filter
- 3.4-122mm Continuous Zoom Lens offering a 60–2° Field of View
- Constructed of 5mm thick optically pure tempered glass eliminates dithering and distortion, further enhancing image clarity
- Gear box and micro-step technology for quick accurate pan and tilting better than [.01] providing reliability and performance
- Flexible mounting: can be installed vertically or inverted to accommodate installation in virtually any application
- Multi-protocol communication for integration with new or existing CCTV infrastructure to act either autonomously or part of a larger CCTV solution
- Mobile PPT Vehicle Mount Optional

Camera	
Image Sensor	1/4" CCD
Resolution	540TVL
Shutter Speed	1/4 – 1/10,000s
IR Illumination	
IR Lens	Two pairs of 7X 1W, 6X Ø8
Distance	Up to 70m of illumination
Angle	40°
Wavelength	840nm [940nm Stealth optional]
Lens	
Focal Length	3.4mm-122.4mm IR Corrected Continuous Zoom Lens
Zoom	36X Optical, 12X Digital [432X Total]
Max Aperture	f1.6 – f4.5
Angle of View	H: 57.8° - 1.7°
IR Filter	Dual MICF (Mechanical IR Cut Filter)
Min. Illumination	1.4 Lux Color, 0.01 Lux B&W (IR on)
Communication & Presets	
Presets	Up to 255 Presets accurate to <0.1°
Preset Tours	4 Preset Tours
Home Position	Yes (preset 1 or tour)
Communication	RS485 / RS422
Control Protocol	Pelco-D, Pelco-P
Camera Orientation Display Function	N, NE, E, SE, S, SW, W, NW [Total 8 Orientations]
Mechanical	
Drive Unit	Integral Pan/Tilt Brushless Motor Drive, Micro Step
Pan Angle & Speed	360° Continuous Pan, Variable Speed up to 90°/s
Tilt Angle & Speed	125°, Variable Speed up to 90°/s
Speed Control	Closed Loop Electronics
Preset Accuracy	> 0.1°
Proportional P/T to Zoom Position	Yes, Automatic adjust speed with zoom in for accurate pan tilt zoom
General	
Construction	5-15mm Thick High Strength Aluminum & 5mm Thick Flat Tempered Glass
Window Wiper	External Window Wiper Included
Power Supply	18VAC-24VAC/18VDC-24VDC (CE, ROHS, FCC)
Power Consumption	≤60W (Heater on)
Working Environment	-50°C to +55°C [temperature controlled heater/blower]
Ingress Protection	IP66, NEMA 4X
Dimensions [H×Ø]	483mm×173mm
Weight	12.3kg



60

59

57

60



PTZ Cameras

Pan/Tilt/Zoom

PTZ cameras can be Panned, Tilted, and Zoomed to cover large areas, reducing costs and providing greater flexibility than traditional fixed cameras. Operators can manually control PTZs to respond to incidents, track, and gather evidence on intruders. Powerful zoom allows for detection up to 100X further than a standard fixed lens camera, allowing you to capture license plates at distances up to 200m.

PTZs may also be placed on user defined guard tours which will move the camera to predetermined areas (Presets).

See Page 21 for more info on semi-autonomous PTZ.

IP PTZ Cameras

2MP-PTZ-12X-CS

2MP-PTZ-12X-IR-CS

2MP-PTZ-30X-IR-CS

2MP-PTZ-20X-CS

2MP-PTZ-30X-CS

2MP-PTZ-IR-20X-AT-CS

2MP-PTZ-IR-30X-AT-CS

2MP-PTZ-IR-39X-LR-AVA-CS

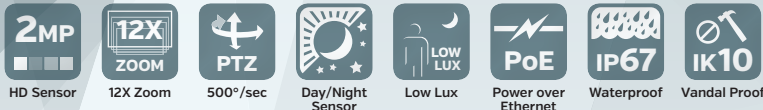
Analog PTZ

540-PTZ-36X-2FL

Mobile PTZ

PHX-30X-ZLID-450M/750M/1000M

PHX-37X-TI-35/50/100

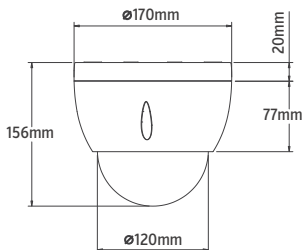


2 Megapixel 12X Mini PTZ IP Camera

Features

- Powerful 12X Optical Zoom, 16X Digital Zoom (192X)
- 1/2.8" HD CMOS Progressive Scan Sensor
- 5.1–61.2mm Lens offering a 51–5° Field of View
- H.264 & MJPEG Dual-Stream Compression
- DWDR, Day/Night (ICR), DNR (2D&3D), Auto Iris, Auto Focus, AWB, AGC, BLC
- Max 300°/s Pan Speed, 360° Endless Rotation
- Up to 80 Presets, 5 Auto Scans, 8 Tours, 5 Patterns
- Built-in 2/1 Alarm In/Out
- Rugged IP66 Housing
- PoE: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/2.8" Exmor Progressive Scan CMOS	
Effective Pixels	1944 × 1092 [2,122,848 Pixels]	
Shutter Speed	1/3 – 1/30,000s	
S/N Ratio	> 55dB	
Camera Features		
Day/Night	Auto (ICR) / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto / Manual	
Noise Reduction	2D/3D	
Privacy Masking	Up to 24 areas	
Lens		
Focal Length	5.1 mm ~ 61.2mm [12X Optical Zoom]	
Max Aperture	f1.6 – f3.0	
Focus Control	Auto / Manual	
Angle of View	H: 51.3° ~ 4.64°	
PTZ		
Pan/Tilt Range	Pan: 0° ~ 360° Endless; Tilt: -2° ~ 90°, Auto Flip 180°	
Manual Control Speed	Pan: 0.1° ~ 300°/s; Tilt: 0.1° ~ 120°/s	
Preset Speed	Pan: 300°/s; Tilt: 200°/s	
PTZ Modes	5 Patterns, 8 Tours, 5 Auto Scans, Auto Pan, 80 Presets	
Video		
Compression	H.264 / MJPEG	
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576 / 704×480] / CIF [352×288 / 352×240]	
Frame Rate	Main Stream	1080p/D1 [1 ~ 25/30fps], 720p [1~50/60fps]
	Sub Stream	D1/CIF [1 ~ 25/30fps]
Bit Rate	H.264: 448K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps	
Audio		
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]	
Interface	1/1 Channel In/Out	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	AC24V/1.5A(±10%), PoE [802.3at]	
Power Consumption	12W	
Working Environment	-20°C ~ 60°C / Less than 90% RH	
Ingress Protection	IP66	
Weight	1.8kg	

Accessories (optional)



1080p
FULL HD
HD Video

12X
ZOOM
12X Zoom

100m
IR Range

PTZ
400°/sec

Day/Night
Sensor

PoE+
Power over
Ethernet

IP66
Waterproof

24 ZONE
Privacy
Masking

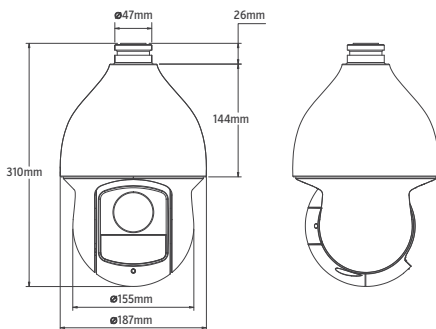


2 Megapixel 12X IR PTZ IP Camera

Features

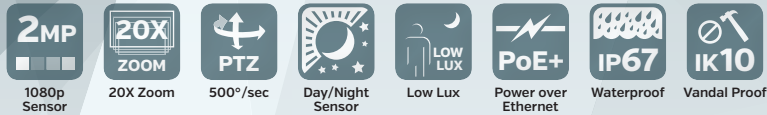
- Powerful 12X Optical Zoom, 16X Digital Zoom (192X)
- 1/2.8" HD CMOS Progressive Scan Sensor
- 5.1–61.2mm Lens offering a 51–5° Field of View
- H.264 & MJPEG Dual-Stream Compression
- DWDR, Day/Night (ICR), DNR, Auto Iris, Auto Focus
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Max 400°/s Pan Speed, 360° Endless Rotation
- Up to 300 Presets, 5 Auto Scans, 8 Tours, 5 Patterns
- Built-in 2/1 Alarm In/Out
- IR Distance up to 100m/325ft [AC24V] / 80m/260ft [DC12V]
- Edge Recording via SD Card
- Rugged IP66 Housing
- PoE+: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera					
Image Sensor	1/2.8" Exmor Progressive Scan CMOS				
Effective Pixels	1944 × 1092 [2,122,848 Pixels]				
Shutter Speed	1/3 – 1/30,000s				
S/N Ratio	> 55dB				
Camera Features					
Day/Night	Auto [ICR] / Color / B&W				
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]				
White Balance	Auto, ATW, Indoor, Outdoor, Manual				
Gain Control	Auto / Manual				
Noise Reduction	DNR [2D/3D]				
Privacy Masking	Up to 24 areas				
Lens					
Focal Length	5.1mm – 61.2mm [12X Optical Zoom]				
Max Aperture	f1.6 – f3.0				
Focus Control	Auto / Manual				
Angle of View	H: 51.3° – 4.64°				
PTZ					
Pan/Tilt Range	Pan: 0° – 360° Endless; Tilt: -15° – 90°, Auto Flip 180°				
Manual Control Speed	Pan: 0.1° – 300°/s, Tilt: 0.1° – 200°/s				
Preset Speed	Pan: 400°/s, Tilt: 300°/s				
PTZ Modes	5 Patterns, 8 Tours, 5 Auto Scans, Auto Pan, 300 Presets				
Video					
Compression	H.264 / MJPEG				
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576 / 704×480] / CIF [352×288 / 352×240]				
Frame Rate	<table border="1" style="font-size: small;"> <tr> <th>Main Stream</th> <td>1080p/D1 [1 – 25/30fps], 720p [1–50/60fps]</td> </tr> <tr> <th>Sub Stream</th> <td>D1/CIF [1 – 25/30fps]</td> </tr> </table>	Main Stream	1080p/D1 [1 – 25/30fps], 720p [1–50/60fps]	Sub Stream	D1/CIF [1 – 25/30fps]
Main Stream	1080p/D1 [1 – 25/30fps], 720p [1–50/60fps]				
Sub Stream	D1/CIF [1 – 25/30fps]				
Bit Rate	H.264: 448K – 8192Kbps, MJPEG: 5120K – 10240Kbps				
Audio					
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]				
Interface	1/1 Channel In/Out				
Network					
Ethernet	RJ-45				
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter				
Compatibility	ONVIF, PSIA, CGI				
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]				
General					
Power Supply	AC24V / DC12V, PoE+ [802.3at]				
Power Consumption	DC12V: 13W, 20W [IR on], AC24V: 13W, 23W [IR on]				
Working Environment	DC12V: -30°C – 60°C / Less than 90% RH AC24V: -40°C – 70°C / Less than 90% RH				
Ingress Protection	IP66				
Weight	3.5kg				

Accessories (optional)

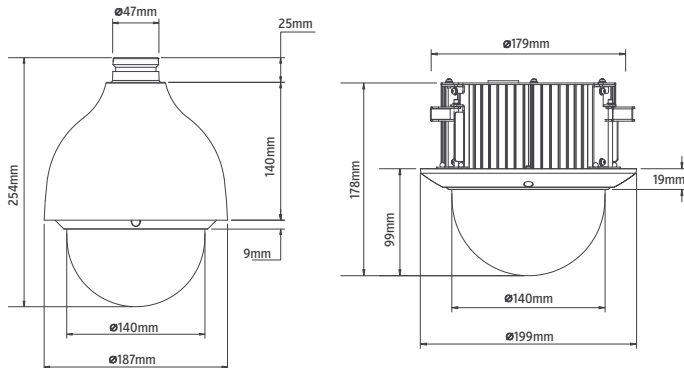


2MP 20X PTZ IP Camera

Features

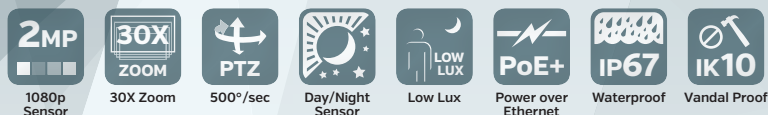
- Powerful 20X Optical Zoom, 16X Digital Zoom [320X]
- 1/2.8" HD CMOS Progressive Scan Sensor
- 5.5-110mm Lens offering a 51-3° Field of View
- H.264 & MJPEG Dual-Stream Compression
- DWDR, Day/Night (ICR), DNR, Auto Iris, Auto Focus
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Max 500°/S Pan Speed, 360° Endless Pan Rotation
- Up to 300 Presets, 5 Auto Scans, 8 Tours, 5 Patterns
- Built-in 2/1 Alarm In/Out
- Edge Recording via SD Card
- Extra Rugged IP67 & IK10 Housing
- PoE+: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera	
Image Sensor	1/2.8" Exmor Progressive Scan CMOS
Effective Pixels	1920 × 1080 [2,073,600 Pixels]
Shutter Speed	1/3 – 1/30,000s
S/N Ratio	> 55dB
Camera Features	
Day/Night	Auto [ICR] / Color / B&W
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	Ultra DNR [2D/3D]
Privacy Masking	Up to 24 areas
Lens	
Focal Length	5.5mm-110mm [20X Optical Zoom]
Max Aperture	f1.6-f3.5
Focus Control	Auto / Manual
Angle of View	H: 51.0° – 2.60°
PTZ	
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 90°, Auto Flip 180°
Manual Control Speed	Pan: 0.1° ~350° /s; Tilt: 0.1° ~250° /s
Preset Speed	Pan: 500° /s; Tilt: 500° /s
PTZ Modes	5 Patterns, 8 Tours, Auto Pan, Auto Scan, 300 presets
Video	
Compression	H.264 / MJPEG
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576 / 704×480] / CIF [352×288 / 352×240]
Frame Rate	Main Stream 1080p/D1 [1 ~ 25/30fps], 720p [1~50/60fps] Sub Stream D1/CIF [1 ~ 25/30fps]
Bit Rate	H.264: 448K ~ 8192Kbps
Audio	
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]
Interface	1/1 Channel In/Out
Network	
Ethernet	RJ-45
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter
Compatibility	ONVIF, PSIA, CGI
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]
General	
Power Supply	AC24V/1.5A [±10%], PoE plus[802.3at]
Power Consumption	Outdoor: 13W, 23W [Heater on]; In-ceiling: 13W
Working Environment	Outdoor: -40°C ~ 60°C / Less than 90% RH; In-ceiling: -20°C ~ 60°C / Less than 90% RH
Ingress Protection	IP67 [Outdoor], IK10
Weight	Outdoor: 2.5kg, In-ceiling: 2.2kg

Accessories (optional)

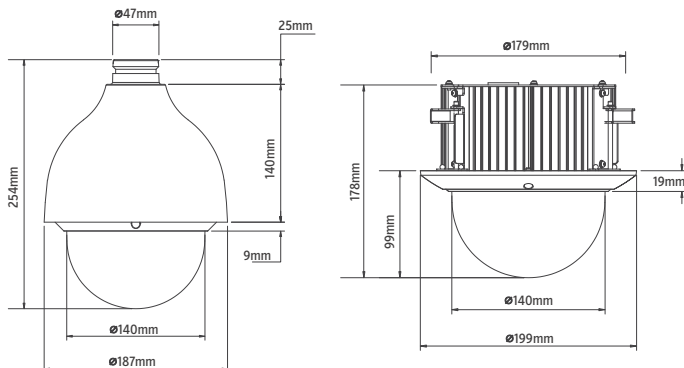


2MP 30X PTZ IP Camera

Features

- Powerful 30X Optical Zoom, 16X Digital Zoom [480X]
- 1/2.8" HD CMOS Progressive Scan Sensor
- 4.3-129mm Lens offering a 65-2° Field of View
- H.264 & MJPEG Dual-Stream Compression
- DWDR, Day/Night (ICR), DNR, Auto Iris, Auto Focus
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Max 500°/S Pan Speed, 360° Endless Pan Rotation
- Up to 300 Presets, 5 Auto Scans, 8 Tours, 5 Patterns
- Built-in 2/1 Alarm In/Out
- Edge Recording via SD Card
- Extra Rugged IP67 & IK10 Housing
- PoE+: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera		
Image Sensor	1/2.8" Exmor Progressive Scan CMOS	
Effective Pixels	1920 × 1080 [2,073,600 Pixels]	
Shutter Speed	1/3 – 1/30,000s	
S/N Ratio	> 55dB	
Camera Features		
Day/Night	Auto [ICR] / Color / B&W	
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto / Manual	
Noise Reduction	Ultra DNR [2D/3D]	
Privacy Masking	Up to 24 areas	
Lens		
Focal Length	4.3mm-129mm [30X Optical Zoom]	
Max Aperture	f1.6-f5.0	
Focus Control	Auto / Manual	
Angle of View	H: 65.1° – 2.34°	
PTZ		
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: 0° ~ 90°, Auto Flip 180°	
Manual Control Speed	Pan: 0.1° ~350° /s; Tilt: 0.1° ~250° /s	
Preset Speed	Pan: 500° /s; Tilt: 500° /s	
PTZ Modes	5 Patterns, 8 Tours, Auto Pan, Auto Scan, 300 presets	
Video		
Compression	H.264 / MJPEG	
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576 / 704×480] / CIF [352×288 / 352×240]	
Frame Rate	Main Stream	1080p/D1 [1 ~ 25/30fps], 720p [1~50/60fps]
	Sub Stream	D1/CIF [1 ~ 25/30fps]
Bit Rate	H.264: 448K ~ 8192Kbps	
Audio		
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]	
Interface	1/1 Channel In/Out	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	AC24V/1.5A [±10%], PoE plus[802.3at]	
Power Consumption	Outdoor: 13W, 23W [Heater on]; In-ceiling: 13W	
Working Environment	Outdoor: -40°C ~ 60°C / Less than 90% RH; In-ceiling: -20°C ~ 60°C / Less than 90% RH	
Ingress Protection	IP67 [Outdoor], IK10	
Weight	Outdoor: 2.5kg, In-ceiling: 2.2kg	

Accessories (optional)



1080p
FULL HD
HD Video

30X
ZOOM
30X Zoom

100m
IR Range

PTZ
400°/sec

Day/Night
Sensor

PoE+
Power over
Ethernet

IP66
Waterproof

24 ZONE
Privacy
Masking

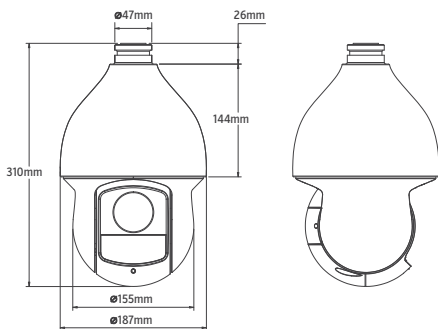


2 Megapixel 30X IR PTZ IP Camera

Features

- Powerful 30X Optical Zoom, 16X Digital Zoom (480X)
- 1/2.8" HD CMOS Progressive Scan Sensor
- 4.3-129mm Lens offering a 65-2° Field of View
- H.264 & MJPEG Dual-Stream Compression
- DWDR, Day/Night (ICR), DNR, Auto Iris, Auto Focus
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Max 400°/s Pan Speed, 360° Endless Rotation
- Up to 300 Presets, 5 Auto Scans, 8 Tours, 5 Patterns
- Built-in 2/1 Alarm In/Out
- IR Distance up to 100m/325ft [AC24V] / 80m/260ft [DC12V]
- Edge Recording via SD Card
- Rugged IP66 Housing
- PoE+: Power, Video & Control over a Single CAT5 Cable

Dimensions



Camera					
Image Sensor	1/2.8" Exmor Progressive Scan CMOS				
Effective Pixels	1944 × 1092 [2,122,848 Pixels]				
Shutter Speed	1/3 – 1/30,000s				
S/N Ratio	> 55dB				
Camera Features					
Day/Night	Auto [ICR] / Color / B&W				
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]				
White Balance	Auto, ATW, Indoor, Outdoor, Manual				
Gain Control	Auto / Manual				
Noise Reduction	DNR [2D/3D]				
Privacy Masking	Up to 24 areas				
Lens					
Focal Length	4.3mm-129mm [30X Optical Zoom]				
Max Aperture	f1.6 – f5.0				
Focus Control	Auto / Manual				
Angle of View	H: 65.1° – 2.34°				
PTZ					
Pan/Tilt Range	Pan: 0° ~ 360° Endless; Tilt: -15° ~ 90°, Auto Flip 180°				
Manual Control Speed	Pan: 0.1° ~ 300°/s, Tilt: 0.1° ~ 200°/s				
Preset Speed	Pan: 400°/s, Tilt: 300°/s				
PTZ Modes	5 Patterns, 8 Tours, 5 Auto Scans, Auto Pan, 300 Presets				
Video					
Compression	H.264 / MJPEG				
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576 / 704×480] / CIF [352×288 / 352×240]				
Frame Rate	<table border="1"> <tr> <th>Main Stream</th> <td>1080p/D1 [1 ~ 25/30fps], 720p [1~50/60fps]</td> </tr> <tr> <th>Sub Stream</th> <td>D1/CIF [1 ~ 25/30fps]</td> </tr> </table>	Main Stream	1080p/D1 [1 ~ 25/30fps], 720p [1~50/60fps]	Sub Stream	D1/CIF [1 ~ 25/30fps]
Main Stream	1080p/D1 [1 ~ 25/30fps], 720p [1~50/60fps]				
Sub Stream	D1/CIF [1 ~ 25/30fps]				
Bit Rate	H.264: 448K ~ 8192Kbps, MJPEG: 5120K ~ 10240Kbps				
Audio					
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]				
Interface	1/1 Channel In/Out				
Network					
Ethernet	RJ-45				
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter				
Compatibility	ONVIF, PSIA, CGI				
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]				
General					
Power Supply	AC24V / DC12V, PoE+ [802.3at]				
Power Consumption	DC12V: 13W, 20W [IR on], AC24V: 13W, 23W [IR on]				
Working Environment	DC12V: -30°C ~ 60°C / Less than 90% RH AC24V: -40°C ~ 70°C / Less than 90% RH				
Ingress Protection	IP66				
Weight	3.5kg				

Accessories (optional)



1080p
FULL HD
HD Video

20X
ZOOM
20X Zoom

150m
IR Range

PTZ
240°/sec

Day/Night
Sensor

IP66
Waterproof

AVA
Analytics

Auto
Tracking

24 ZONE
Privacy
Masking

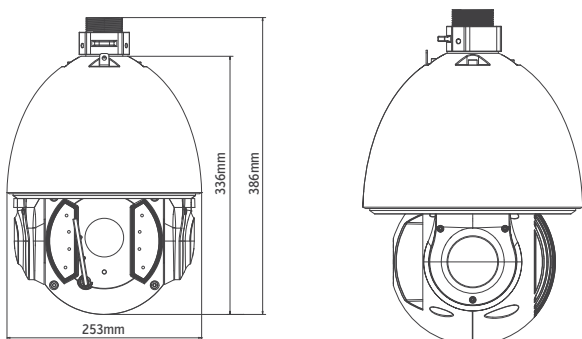


2MP IR 20X PTZ IP Camera w/AVA Analytics and Auto-Tracking

Features

- Powerful 20X Optical Zoom, 16X Digital Zoom (320X)
- 1/2.8" HD CMOS Progressive Scan Sensor
- 4.7–94mm Lens offering a 55–3° Field of View
- Auto-Tracking and AVA Analytics
- Defog, DWDR, Day/Night (ICR), DNR, EIS, Auto Focus
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- Triple Video Stream Encoding
- Built-in 7/2 Alarm In/Out
- 150m/500ft Adaptive IR Illumination Distance
- Edge Recording via SD Card
- Rugged IP66 Housing

Dimensions



Camera		
Image Sensor	1/2.8" Exmor Progressive Scan CMOS	
Effective Pixels	1944 × 1092 [2,122,848 Pixels]	
Shutter Speed	1/1 ~ 1/30,000s	
S/N Ratio	> 50dB	
Video Output	BNC [1V _{pp} /75Ω], PAL / NTSC	
Camera Features		
Day/Night	Auto (ICR) / Color / B/W	
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto / Manual	
Noise Reduction	DNR [2D/3D]	
Privacy Masking	Up to 24 areas	
Defog	On / Off	
Lens		
Focal Length	4.7mm–94.0mm [20x Optical zoom]	
Max Aperture	f1.6–f3.5	
Focus Control	Auto / Manual	
Angle of View	H: 55.4° ~ 2.80°	
PTZ		
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -10° ~ 90°, auto flip 180°	
Manual Control Speed	Pan: 0.1° ~ 200°/s; Tilt: 0.1° ~ 120°/s	
Preset Speed	Pan: 240°/s; Tilt: 200°/s	
PTZ Modes	5 Patterns, 8 Tours, Auto Pan, Auto Scan, 255 presets	
IR Illumination Distance	150m/500' Rated [100m/325' Effective], Zoom Adaptive	
Video		
Compression	H.264 / MJPEG	
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	1080p [1 ~ 25/30fps] / 720p [1~50/60fps]
	Sub Stream 1	D1/CIF [1 ~ 25/30fps]
	Sub Stream 2	720p/D1/CIF [1 ~ 25/30fps]
Bit Rate	H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps	
Audio		
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]	
Interface	1/1 Channel In/Out	
AVA Analytics & Auto Tracking		
Auto Tracking	Single-Scene, Multiple-Scene, Panoramic Scene	
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Loitering Detection, Missing Object Detection, Illegal Parking, Speed Trigger	
Tracking Trigger Mode	Manual / Auto [alarm triggered]	
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	AC 24V/3A [±16%]	
Power Consumption	20W, 43W [IR on, Heater on]	
Working Environment	-40°C ~ 70°C / Less than 90% RH	
Ingress Protection	IP66	
Weight	6.75kg	



1080p
FULL HD
HD Video

30X
ZOOM
30X Zoom

150m
IR Range

PTZ
240°/sec

Day/Night
Sensor

IP66
Waterproof

AVA
Analytics

Auto
Tracking

24 ZONE
Privacy
Masking

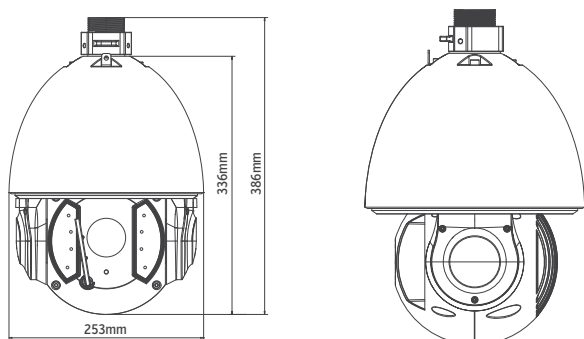


2MP IR 30X PTZ IP Camera w/AVA Analytics and Auto-Tracking

Features

- Powerful 30X Optical Zoom, 16X Digital Zoom (480X)
- 1/2.8" HD CMOS Progressive Scan Sensor
- 4.3-129mm Lens offering a 65-2° Field of View
- Auto-Tracking and AVA Analytics
- Defog, DWDR, Day/Night (ICR), DNR, EIS, Auto Focus
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Triple Video Stream Encoding
- Built-in 7/2 Alarm In/Out
- 150m/500ft Adaptive IR Illumination Distance
- Edge Recording via SD Card
- Rugged IP66 Housing

Dimensions



Camera		
Image Sensor	1/2.8" Exmor Progressive Scan CMOS	
Effective Pixels	1944 × 1092 [2,122,848 Pixels]	
Shutter Speed	1/1 ~ 1/30,000s	
S/N Ratio	> 50dB	
Video Output	BNC (1V _{pp} /75Ω), PAL / NTSC	
Camera Features		
Day/Night	Auto (ICR) / Color / B/W	
Backlight Compensation	BLC / HLC / DWDR [Digital WDR]	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto / Manual	
Noise Reduction	DNR [2D/3D]	
Privacy Masking	Up to 24 areas	
Defog	On / Off	
Lens		
Focal Length	4.3mm-129mm HD Lens [30x Optical Zoom]	
Max Aperture	f1.6-f4.7	
Focus Control	Auto / Manual	
Angle of View	H: 65.1° ~ 2.34°	
PTZ		
Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -10° ~ 90°, auto flip 180°	
Manual Control Speed	Pan: 0.1° ~ 200°/s; Tilt: 0.1° ~ 120°/s	
Preset Speed	Pan: 240°/s; Tilt: 200°/s	
PTZ Modes	5 Patterns, 8 Tours, Auto Pan, Auto Scan, 255 presets	
IR Illumination Distance	150m/500' Rated [100m/325' Effective], Zoom Adaptive	
Video		
Compression	H.264 / MJPEG	
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576] / CIF [352×288]	
Frame Rate	Main Stream	1080p [1 ~ 25/30fps] / 720p [1-50/60fps]
	Sub Stream 1	D1/CIF [1 ~ 25/30fps]
	Sub Stream 2	720p/D1/CIF [1 ~ 25/30fps]
Bit Rate	H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps	
Audio		
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]	
Interface	1/1 Channel In/Out	
AVA Analytics & Auto Tracking		
Auto Tracking	Single-Scene, Multiple-Scene, Panoramic Scene	
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Loitering Detection, Missing Object Detection, Illegal Parking, Speed Trigger	
Tracking Trigger Mode	Manual / Auto [alarm triggered]	
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	AC 24V/3A [±16%]	
Power Consumption	20W, 43W [IR on, Heater on]	
Working Environment	-40°C ~ 70°C / Less than 90% RH	
Ingress Protection	IP66	
Weight	6.75kg	

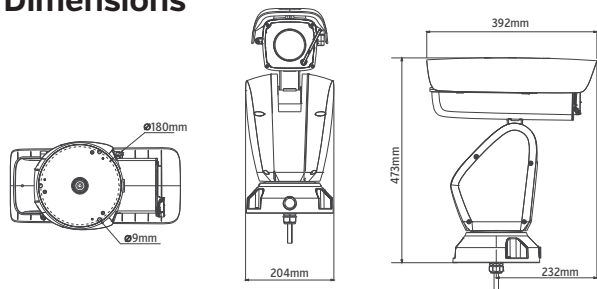


2 Megapixel 39X IR PTZ IP Camera

Features

- 1/2.8" HD CMOS Progressive Scan Sensor
- Powerful 39X Optical Zoom, 16X Digital Zoom (640X)
- 8-315mm IR Corrected Continuous Zoom Lens offering a 41-1° Field of View
- Auto-Tracking and AVA Analytics
- Defog, Wiper, DWDR, DNR, Low Bitrate, EIS, ROI, Day/Night (ICR), Auto Iris, Auto Focus
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Up to 300 Presets, 8 Tour, 5 Pattern, 5 Auto Scan
- 200m/650ft Adaptive IR Illumination Distance
- Rugged IP66 Housing

Dimensions



Camera		
Image Sensor	1/2.8" Exmor Progressive Scan CMOS	
Effective Pixels	1944 × 1092 [2,122,848 Pixels]	
Shutter Speed	1/1 ~ 1/30,000s	
S/N Ratio	> 55dB	
Video Output	BNC (1V _{pp} /75Ω), PAL / NTSC	
Camera Features		
Day/Night	Auto (ICR) / Color / B/W	
Backlight Compensation	BLC / HLC / DWDR (Digital WDR)	
White Balance	Auto, ATW, Indoor, Outdoor, Manual	
Gain Control	Auto / Manual	
Noise Reduction	DNR [2D/3D]	
Privacy Masking	Up to 24 areas	
Defog	On / Off	
Lens		
Focal Length	8mm ~ 315mm HD Lens (39X Optical Zoom)	
Max Aperture	f1.6 ~ f6.1	
Focus Control	Auto / Manual	
Angle of View	H: 36° ~ 1°	
PTZ		
Pan/Tilt Range	Pan: 0° ~ 360° Endless, Tilt: -90° ~ 45°	
Manual Control Speed	Pan: 0.1° ~ 160°/s, Tilt: 0.1° ~ 60°/s	
Preset Speed	Pan: 0.1° ~ 160°/s, Tilt: 0.1° ~ 60°/s	
PTZ Mode	5 Pattern, 8 Tour, Auto Pan, Auto Scan, 255 presets	
Positioning Accuracy	±0.1°	
Protocol	Pelco-P/D [Auto Recognition]	
IR Illumination Distance	200m/650' Rated [100m/325' Effective]	
Video		
Compression	H.264 / MJPEG	
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×576 / 704×480] / CIF [352×288 / 352×240]	
Frame Rate	Main Stream	1080p [1 ~ 25/30fps] / 720p [1 ~ 50/60fps]
	Sub Stream 1	D1/CIF [1 ~ 25/30fps]
	Sub Stream 2	720p/D1/CIF [1 ~ 25/30fps]
Bit Rate	H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps	
Audio		
Compression	G.711a / G.711μ [32kbps] / PCM [128kbps]	
Interface	1/1 Channel In/Out	
AVA Analytics & Auto Tracking		
Auto Tracking	Single-Scene, Multiple-Scene, Panoramic Scene	
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Loitering Detection, Missing Object Detection, Illegal Parking, Speed Trigger	
Tracking Trigger Mode	Manual / Auto [alarm triggered]	
Tracking Trigger Event	Targeting, Zoom, Tracking, Recording, Snapshot, Alarm	
Network		
Ethernet	RJ-45	
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter	
Compatibility	ONVIF, PSIA, CGI	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
General		
Power Supply	AC 24V/5A	
Power Consumption	100W	
Working Environment	-40°C ~ +70°C / Less than 90% RH	
Ingress Protection	IP66, All-Metal Aluminum Alloy, 6000V Anti-Lightning Surge	
Weight	10kg	



*Standalone
Integrated VMS Platform
Linux OS
Resistant to Malware
Scalable
Efficient Architecture
Full-Spectrum
Cross Compatibility
AVA [Ascendent Video Analytics]
Ultra HD 4K Video
Up to 250 Channel Servers*



NVRs

Network Video Recorders

2MP NVRs

X5S-NVR-Nano-4CH/8CH-2MP

5MP NVRs

X5S-NVR-Mini-8CH/16CH-5MP

X5S-NVR-1U-32CH-5MP

X5S-NVR-1.5U-16CH/32CH-5MP

X5S-NVR-2U-16CH/32CH-5MP

4K NVRs

X5S-NVR-1U-8CH/16CH/32CH-4K

X5S-NVR-1.5U-8CH/16CH/32CH-4K

X5S-NVR-2U-8CH/16CH/32CH-4K

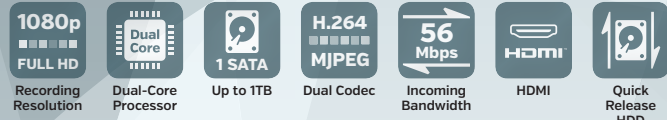
X5S-NVR-2U-64CH/124CH-4K-AVA

X5S-NVR-3U-64CH/124CH-4K-AVA

X5S-NVR-4U-250CH-4K-AVA

Ascendent X5S standalone NVRs run on an embedded Linux OS, offering unparalleled stability, performance, and cutting-edge features. While a conventional CMS solution requires dedicated PC hardware, proprietary VMS software, camera license fees, frequent updates, and maintenance, X5S standalone NVRs offer a superior turn-key solution at lower prices. Full spectrum cross compatibility with our IP cameras, DVRs, HDX DVRs, NVRs, and video encoders make the X5S platform a completely integrated VMS solution.

Choose from models featuring integrated AVA (Ascendent Video Analytics), Ultra HD 4K video, 360° Panoramic Fisheye support with dewarping, hot-swappable RAID arrays, up to 250 channels per server, and virtually unlimited storage. While X5S NVRs operate autonomously and independently from each other, any NVR can record video feeds from any other NVRs, DVRs, HDX DVRs, NVRs, IP cameras, or video encoders. This makes our NVRs the most versatile solution on the market; perfect for any application from residential and small businesses to multi-national corporations, airports, casinos, universities, law enforcement, military, and shopping centers.

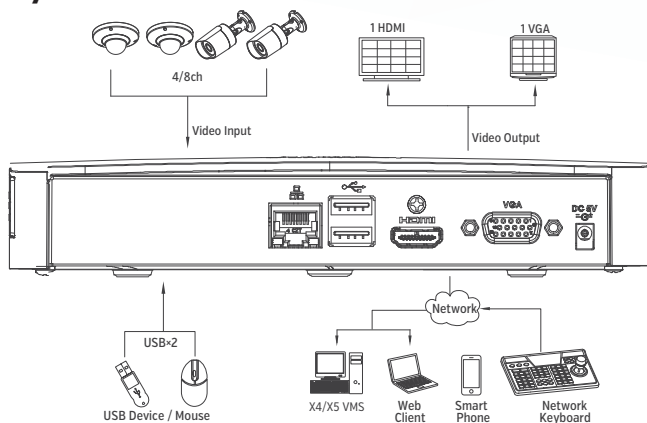


X5S Nano 4/8 Channel Standalone NVR

Features

- 4/8 Camera Channels
- H.264/MJPEG Dual Codec Decoding
- Up to 56Mbps Incoming Bandwidth
- HDMI/VGA Simultaneous Video Output
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.3 Compliance

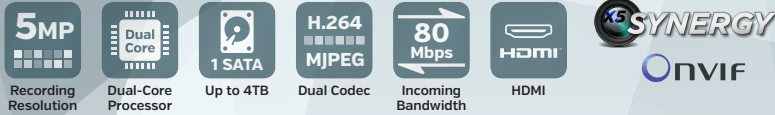
System Connection



	X5S-NVR-Nano-4CH-2MP	X5S-NVR-Nano-8CH-2MP
System		
Main Processor	Dual-Core Embedded Processor	
Operating System	Embedded LINUX	
Video & Audio		
Input	4 Channels	8 Channels
Two-way Talk	1 Ch In / 1 Ch Out, RCA	
Display		
Interface	1 HDMI, 1 VGA	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768	
Display Split	1/4	1/4/8/9
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
Compression	H.264 / MJPEG	
Resolution	1080p [1920×1080] / 720p [1280×720] / D1 [704×480]	
Record Rate	56Mbps	
Bit Rate	48- 8192kbps	
Recording Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Playback & Backup		
Sync Playback	1/4 (limited by resolution and bitrate*)	1/4/9 (limited by resolution and bitrate*)
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Modes	Network / USB / External CD-R & DVD-RW	
Storage		
Internal HDD	1 SATA Port, up to 1TB	
Network		
Ethernet	1 RJ-45 Port (10/100/1000Mbps)	
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, DDNS, Alarm Server, IP Search (Supports IP Cameras and DVRs), SNMP, P2P	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Auxiliary Ports		
USB	2 Ports (2 Rear USB 2.0)	
General		
Power Supply	DC5V/2A	
Power Consumption	<4W (without HDD)	
Working Environment	-10°C ~+55°C / 10%~90% RH / 86~106kpa	
Dimension (W×D×H)	193mm × 129mm × 37mm	
Weight	320g (without HDD)	

*Limited to 2 channels @1080p viewing or playback, >1080p recording only, video must be viewed remotely.

X5S-NVR-Mini-8CH/16CH-5MP

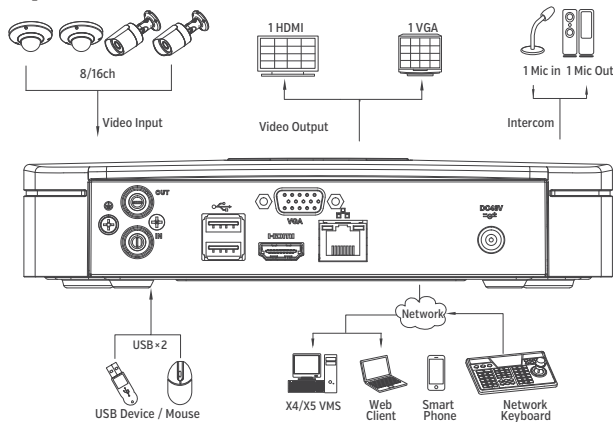


X5S Mini 8/16 Channel Standalone NVR

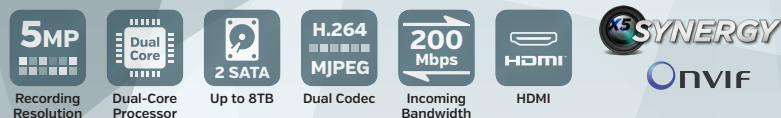
Features

- 8/16 Camera Channels
- H.264/MJPEG Dual Codec Decoding
- Up to 80Mbps Incoming Bandwidth
- Up to 5MP Resolution Preview and Playback
- HDMI/VGA Simultaneous Video Output
- Supports 1 SATA HDD (Up to 4TB)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.3 Compliance

System Connection



	X5S-NVR-Mini-8CH-5MP	X5S-NVR-Mini-16CH-5MP
System		
Main Processor	Dual-Core Embedded Processor	
Operating System	Embedded LINUX	
Video & Audio		
Input	8 Channels	16 Channels
Two-way Talk	1 Ch In / 1 Ch Out, RCA	
Display		
Interface	1 HDMI, 1 VGA	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768	
Display Split	1/4/8/9	1/4/8/9/16
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
Compression	H.264 / MJPEG	
Resolution	5MP [2560×1920] / 3MP [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×480]	
Record Rate	80Mbps	
Bit Rate	48- 8192kbps	
Recording Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Playback & Backup		
Sync Playback	1/4/9 [limited by resolution and bitrate]	1/4/9/16 [limited by resolution and bitrate]
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Modes	Network / USB / External CD-R & DVD-RW	
Storage		
Internal HDD	1 SATA Port, up to 4TB	
Network		
Ethernet	1 RJ-45 Port (10/100/1000Mbps)	
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, DDNS, Alarm Server, IP Search (Supports IP Cameras and DVRs), SNMP, P2P	
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)	
Auxiliary Ports		
USB	2 Ports (1 Rear USB 3.0, 1 Front USB 2.0)	
General		
Power Supply	DC12V/2A	
Power Consumption	<10W (without HDD)	
Working Environment	-10°C ~ +55°C / 10%~90% RH / 86~106kpa	
Dimension (W×D×H)	205mm × 205mm × 46mm	
Weight	0.5kg (without HDD)	

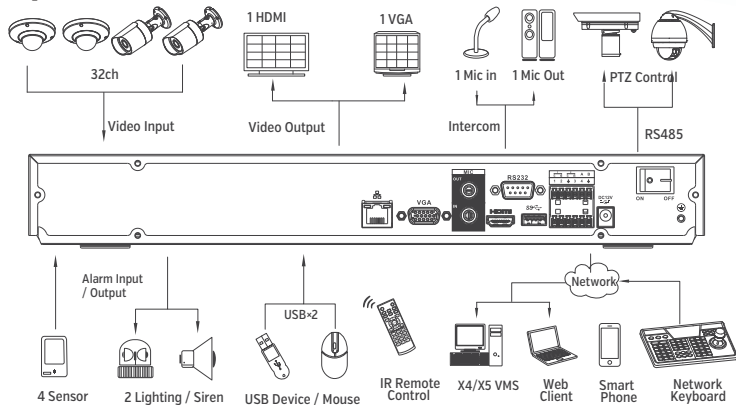


X5S 1U 32 Channel Standalone NVR

Features

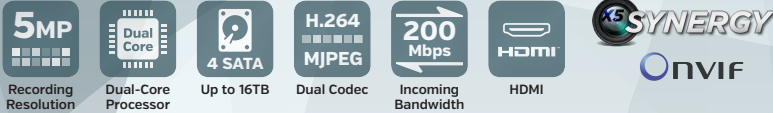
- 32 Camera Channels
- H.264/MJPEG Dual Codec Decoding
- Up to 200Mbps Incoming Bandwidth
- Up to 5MP Resolution Preview and Playback
- HDMI/VGA/TV Simultaneous Video Output
- Supports 2 SATA HDDs (Up to 8TB)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.3 Compliance

System Connection



System	
Main Processor	Dual-Core Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Input	32 Channels
Two-way Talk	1 Ch In / 1 Ch Out, RCA
Display	
Interface	1 HDMI, 1 VGA
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768
Display Split	1/4/8/9/16
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording
Recording	
Compression	H.264 / MJPEG
Resolution	5MP [2560×1920] / 3MP [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×480]
Record Rate	200Mbps
Bit Rate	48~ 8192kbps
Recording Mode	Manual, Continuous, Motion Detection, Alarm
Pre/Post Recording	Pre-record: 1~30 sec, Post-record: 10~300 sec
Video Detection & Alarm	
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup
Video Detection	Motion Detection, Video Loss, Camera Masking
Alarm I/O	4 Channels In, 2 Channels Out
Playback & Backup	
Sync Playback	1/4/9/16 (limited by resolution and bitrate)
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom
Backup Modes	Network / USB / External CD-R & DVD-RW
Storage	
Internal HDD	2 SATA Ports, up to 8TB
Network	
Ethernet	1 RJ-45 Port (10/100/1000Mbps)
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, DDNS, Alarm Server, IP Search (Supports IP Cameras and DVRs), SNMP, P2P
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]
Auxiliary Ports	
USB	2 Ports (1 Rear USB 3.0, 1 Front USB 2.0)
RS232	1 Port (for PC Communication & Keyboard)
RS485	1 Port (for PTZ Control)
General	
Power Supply	DC12V/4A
Power Consumption	<20W (without HDDs)
Working Environment	-10°C ~+55°C / 10%~90% RH / 86~106kpa
Dimension (W×D×H)	1U, 375mm × 285mm × 56mm
Weight	2kg (without HDDs)

X5S-NVR-1.5U-16CH/32CH-5MP

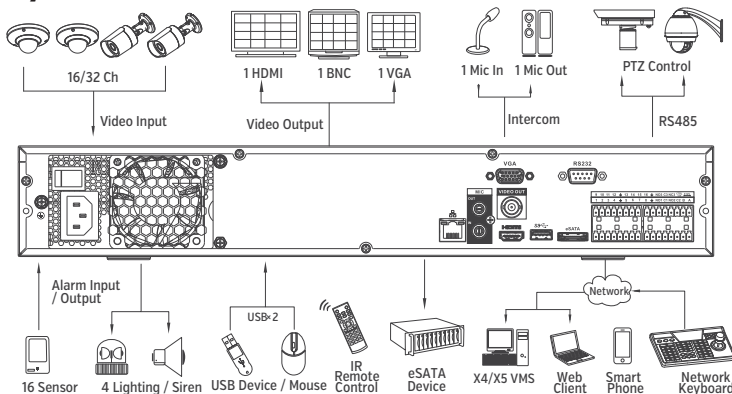


X5S 1.5U 16/32 Channel Standalone NVR

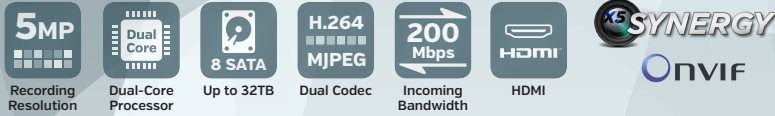
Features

- 16/32 Camera Channels
- H.264/MJPEG Dual Codec Encoding
- Up to 200Mbps Incoming Bandwidth
- Up to 5MP Resolution Preview and Playback
- HDMI/VGA/TV Simultaneous Video Output
- Supports 4 SATA HDDs [Up to 16TB]
- Supports eSATA & USB 3.0 for Expandable Storage
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.3 Compliance

System Connection



	X5S-NVR-1.5U-16CH-5MP	X5S-NVR-1.5U-32CH-5MP
System		
Main Processor	Dual-Core Embedded Processor	
Operating System	Embedded LINUX	
Video & Audio		
Input	16 Channels	32 Channels
Two-way Talk	1 Ch In / 1 Ch Out, RCA	
Display		
Interface	1 HDMI, 1 VGA, 1 TV	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768	
Display Split	1/4/8/9/16	
OSD	Camera Title, Time, Video Loss, Motion Detection, Recording Status	
Recording		
Compression	H.264 / MJPEG	
Resolution	5MP [2560×1920] / 3MP [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×480]	
Record Rate	200Mbps	
Bit Rate	48 - 8192kbps	
Recording Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	16 Channels In, 4 Channels Out	
Playback & Backup		
Sync Playback	1/4/9/16 (limited by resolution and bitrate)	
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Modes	Network / USB / Internal CD-R & DVD-RW / eSATA	
Storage		
Internal HDD	4 SATA Ports, up to 16TB	
External HDD	1 eSATA Port	
Network		
Ethernet	1 RJ-45 Port (10/100/1000Mbps)	
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, DDNS, Alarm Server, IP Search (Supports IP Cameras and DVRs), SNMP, P2P	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Auxiliary Ports		
USB	2 Ports (1 Rear USB 3.0, 1 Front USB 2.0)	
RS232	1 Port (for PC Communication & Keyboard)	
RS485	1 Port (for PTZ Control)	
General		
Power Supply	AC 100V~240V, 50~60Hz	
Power Consumption	<40W (without HDDs)	
Working Environment	-10°C ~ +55°C / 10%~90% RH / 86~106kpa	
Dimension (W×D×H)	1.5U, 440mm × 416mm × 69mm	
Weight	6kg (without HDDs)	

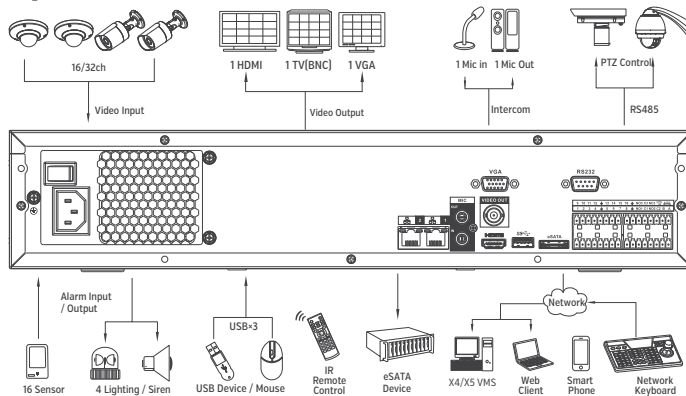


X5S 2U 16/32 Channel Standalone NVR

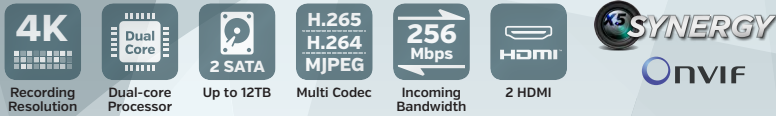
Features

- 16/32 Camera Channels
- H.264/MJPEG Dual Codec Decoding
- Up to 200Mbps Incoming Bandwidth
- Up to 5MP Resolution Preview and Playback
- HDMI/VGA/TV Simultaneous Video Output
- Supports 8 HDDs (Up to 32TB)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.3 Compliance

System Connection



	X5S-NVR-2U-16CH-5MP	X5S-NVR-2U-32CH-5MP
System		
Main Processor	Dual-Core Embedded Processor	
Operating System	Embedded LINUX	
Video & Audio		
Input	16 Channels	32 Channels
Two-way Talk	1 Ch In / 1 Ch Out, RCA	
Display		
Interface	1 HDMI, 1 VGA, 1 TV	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768	
Display Split	1/4/8/9/16	
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
Compression	H.264 / MJPEG	
Resolution	5MP [2560×1920] / 3MP [2048×1536] / 1080p [1920×1080] / 720p [1280×720] / D1 [704×480]	
Record Rate	200Mbps	
Bit Rate	48- 8192kbps	
Recording Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	16 Channels In, 4 Channels Out	
Playback & Backup		
Sync Playback	1/4/9/16 (limited by resolution and bitrate)	
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Modes	Network / USB / Internal CD-R & DVD-RW / eSATA	
Storage		
Internal HDD	8 SATA Ports (8HDDs or 6HDDs + 1CD/DVD-RW)	
External HDD	1 eSATA Port	
Network		
Ethernet	2 RJ-45 Ports [10/100/1000Mbps]	
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPNP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, DDNS, Alarm Server, IP Search [Supports IP Cameras and DVRs], SNMP, P2P	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Auxiliary Ports		
USB	3 Ports (1 Rear USB 3.0, 2 Front USB 2.0)	
RS232	1 Port [for PC Communication & Keyboard]	
RS485	1 Port [for PTZ Control]	
General		
Power Supply	AC 110V~240V, 50~60Hz	
Power Consumption	<40W [without HDDs]	
Working Environment	-10° C ~+55° C / 10%~90% RH / 86~106kpa	
Dimension (W×D×H)	2U, 440mm × 460mm × 89mm	
Weight	6.5kg [without HDDs]	

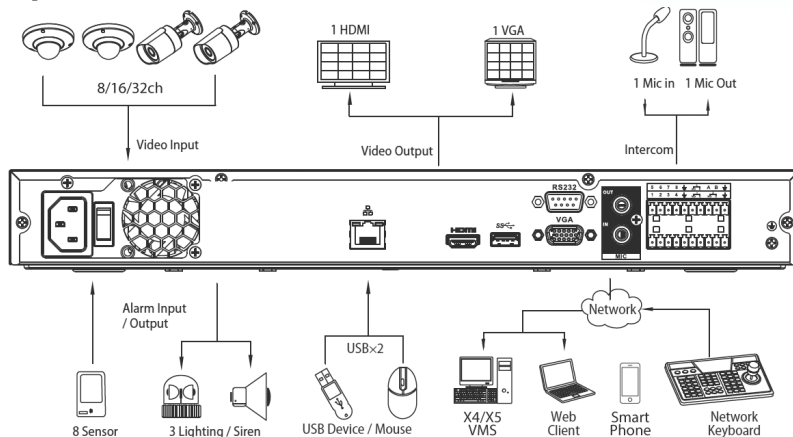


X5S 1U 8/16/32 Channel Standalone NVR

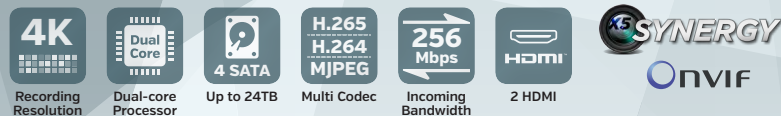
Features

- 8/16/32 IP Camera Channels
- H.265/H.264/MJPEG
- Up to 256Mbps Incoming Bandwidth
- Up to 12MP Resolution Preview & Playback
- HDMI/VGA Simultaneous Video Output
- Supports 2 SATA HDDs (up to 12TB)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.4 Compliance

System Connection



	X5S-NVR-1U-8CH-4K	X5S-NVR-1U-16CH-4K	X5S-NVR-1U-32CH-4K
System			
Processor	Dual-core Embedded Processor		
Operating System	Embedded LINUX		
Video & Audio			
Input	8 Channels	16 Channels	32 Channels
Two-way Talk	1 Channel In, 1 Channel Out, RCA		
Display			
Interface	1 HDMI, 1 VGA		
Resolution	3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4/8/9	1/4/8/9/16	1/4/8/9/16
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
Compression	H.265/H.264/MJPEG		
Resolution	12MP, 8MP, 6MP, 5MP, 3MP, 1080p, 1.3MP, 720p, etc		
Record Rate	192Mbps		
Bit Rate	1-20Mbps		
Recording Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Alarm I/O	8 Channels In, 3 Channels Out		
Playback & Backup			
Sync Playback	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Modes	Network / USB / Internal CD-R & DVD-RW		
Network			
Interface	1 RJ-45 ports [10/100/1000Mbps]		
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, Alarm Server, IP Search		
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]		
Storage			
Internal HDD	2 SATA III Ports, up to 12TB		
Auxiliary Ports			
USB	2 USB Ports [1 Rear USB 3.0, 1 Front USB 2.0]		
RS232	1 Port [for PC Communication & Keyboard]		
RS485	1 Port [for PTZ Control]		
General			
Power Supply	Single, DC12V/4A		
Power Consumption	8.7W		
Working Environment	-10°C ~ +55°C, 10%~90%RH, 86~106kpa		
Dimensions [W×D×H]	1U, 375mm×275mm×56mm		
Weight	1.65kg [without HDDs]		

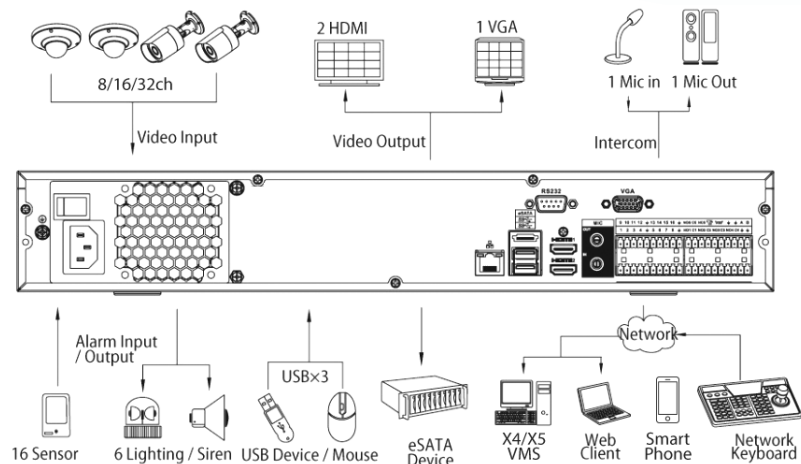


X5S 1.5U 8/16/32 Channel Standalone NVR

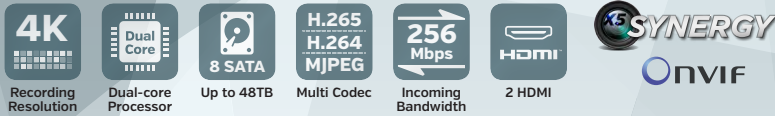
Features

- 8/16/32 IP Camera Channels
- H.265/H.264/MJPEG
- Up to 256Mbps Incoming Bandwidth
- Up to 12MP Resolution Preview & Playback
- 2 HDMI / 1 VGA Simultaneous Video Output
- Supports 4 SATA HDDs (up to 24TB)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.4 Compliance

System Connection



	X5S-NVR-1.5U-8CH-4K	X5S-NVR-1.5U-16CH-4K	X5S-NVR-1.5U-32CH-4K
System			
Processor	Dual-core Embedded Processor		
Operating System	Embedded LINUX		
Video & Audio			
Input	8 Channels	16 Channels	32 Channels
Two-way Talk	1 Channel In, 1 Channel Out, RCA		
Display			
Interface	2 HDMI, 1 VGA		
Resolution	3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4/8/9	1/4/8/9/16	1/4/8/9/16
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
Compression	H.265/H.264/MJPEG		
Resolution	12MP, 8MP, 6MP, 5MP, 3MP, 1080p, 1.3MP, 720p, etc		
Record Rate	192Mbps		
Bit Rate	1-20Mbps		
Recording Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Alarm I/O	16 Channels In, 6 Channels Out		
Playback & Backup			
Sync Playback	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Modes	Network / USB / Internal CD-R & DVD-RW / eSATA		
Network			
Interface	2 RJ-45 ports (10/100/1000Mbps)		
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, Alarm Server, IP Search		
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)		
Storage			
Internal HDD	4 SATA III Ports, up to 24TB		
External HDD	1 eSATA Port		
Auxiliary Ports			
USB	3 USB Ports (2 Rear USB 3.0, 1 Front USB 2.0)		
RS232	1 Port (for PC Communication & Keyboard)		
RS485	1 Port (for PTZ Control)		
General			
Power Supply	Single, AC 100-240V, 50/60 Hz		
Power Consumption	17W (without HDDs)		
Working Environment	-10°C--+55°C, 10%~90%RH, 86-106kpa		
Dimensions (W×D×H)	1.5U, 440mm×405mm×76mm		
Weight	4.35kg (without HDDs)		

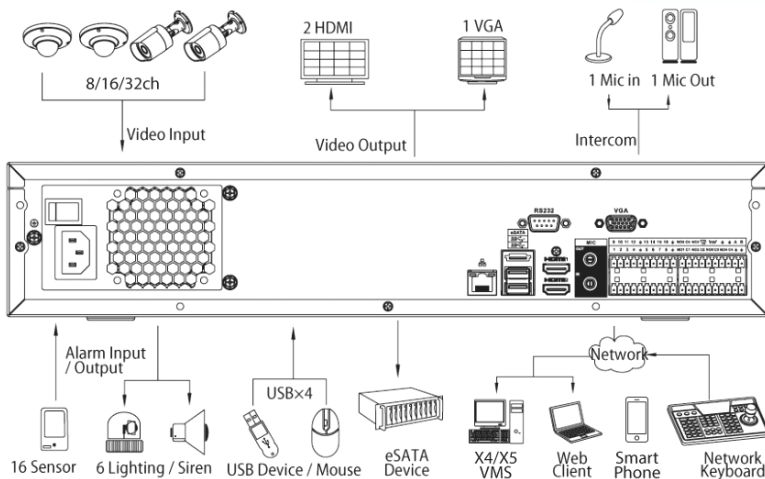


X5S 2U 8/16/32 Channel Standalone NVR

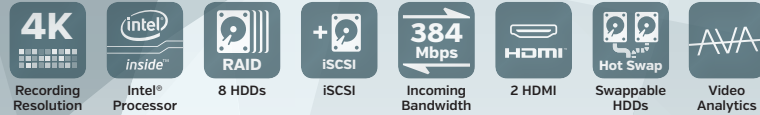
Features

- 8/16/32 IP Camera Channels
- H.265/H.264/MJPEG
- Up to 256Mbps Incoming Bandwidth
- Up to 12MP Resolution Preview & Playback
- 2 HDMI / 1 VGA Simultaneous Video Output
- Supports 8 SATA HDDs (up to 48TB)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.4 Compliance

System Connection



	X5S-NVR-2U-8CH-4K	X5S-NVR-2U-16CH-4K	X5S-NVR-2U-32CH-4K
System			
Processor	Dual-core Embedded Processor		
Operating System	Embedded LINUX		
Video & Audio			
Input	8 Channels	16 Channels	32 Channels
Two-way Talk	1 Channel In, 1 Channel Out, RCA		
Display			
Interface	2 HDMI, 1 VGA		
Resolution	3840×2160, 1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4/8/9	1/4/8/9/16	1/4/8/9/16
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
Compression	H.265/H.264/MJPEG		
Resolution	12MP, 8MP, 6MP, 5MP, 3MP, 1080p, 1.3MP, 720p, etc		
Record Rate	192Mbps		
Bit Rate	1-20Mbps		
Recording Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Recording	Pre-record: 1-30 sec, Post-record: 10-300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Alarm I/O	16 Channels In, 6 Channels Out		
Playback & Backup			
Sync Playback	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Modes	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Modes	Network / USB / Internal CD-R & DVD-RW / eSATA		
Network			
Interface	2 RJ-45 ports (10/100/1000Mbps)		
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, Alarm Server, IP Search		
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)		
Storage			
Internal HDD	8 SATA III Ports, up to 48TB		
External HDD	1 eSATA Port		
Auxiliary Ports			
USB	4 USB Ports (2 Rear USB 3.0, 2 Front USB 2.0)		
RS232	1 Port (for PC Communication & Keyboard)		
RS485	1 Port (for PTZ Control)		
General			
Power Supply	Single, AC 100-240V, 50/60 Hz		
Power Consumption	18.8W (without HDDs)		
Working Environment	-10°C--+55°C, 10%~90%RH, 86~106kpa		
Dimensions (W×D×H)	2U, 445mm×440mm×95mm		
Weight	6.6kg (without HDDs)		

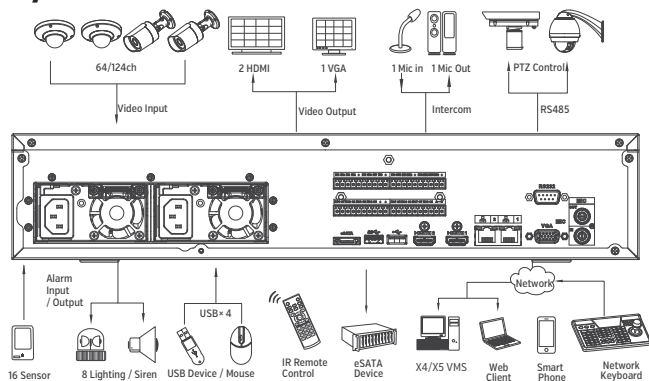


X5S 2U 64/124 Channel Standalone NVR w/AVA

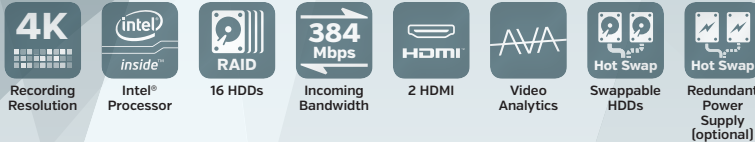
Features

- 64/124 Camera Channels
- Up to 384Mbps Incoming Bandwidth
- Up to 8MP Resolution Preview and Playback
- 1 VGA + 2 HDMI
- Supports 8 Hot-Swappable HDDs (Up to 32TB)
- Support for RAID 0/1/5/6/10/50/60
- Supports AVA Analytics: Face Detection, Bi-Directional Tripwire, Perimeter Intrusion Detection (Limited to 1 Channel)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.4 Compatible
- Optional Redundant Power Supply Module

System Connection



	X5S-NVR-2U-64CH-4K	X5S-NVR-2U-120CH-4K
System		
Main Processor	Intel® Processor	
Operating System	Embedded LINUX	
Memory	4GB DDR3	
Video & Audio		
Recording	64ch@1080p/720p/D1	124ch@1080p/720p/D1
Preview	8ch@1080p / 16ch@720p / 32ch@D1	
Playback	128Mbps in RAID 5 mode 64Mbps in Independent HDD mode	
Recording Resolution	8MP, 6MP, 5MP, 3MP, 1080p, 720p, 960H, D1, CIF, QCIF, VGA	
Audio	1 Ch In / 1 Ch Out, RCA	
Recording		
Recording Mode	Manual, Continuous, Motion Detection, Alarm	
Alarm Recording	Video Loss, Camera Tampering, Motion Detection, External Alarm	
Backup Mode	Network / USB / External CD & DVD-RW / eSATA	
Display		
Video Output	HDMI 1 + HDMI 2 + VGA	
Multi-Screen Display	1st screen: 1/4/8/9/16/25/36 Views 2nd screen: 1/4/8/9/16 Views	
Privacy Masking	4 Custom Zones Per Camera	
Storage		
Internal HDD	8 SATA III Ports	
HDD Mode	Independent, RAID 0/1/5/6/10/50/60 (Supports Global Hot-Standby)	
Network		
Interface	2 RJ-45 ports (10/100/1000Mbps)	
Ethernet Mode	Teaming or Independent	
MD & Alarm		
Motion Detection	User Defined Zones, Sensitivity: 1-100	
Alarm Input	16 Channel	
Relay Output	8 Channel, NO/NC Programmable	
AVA Analytics		
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Scene Change, Camera Tampering, Audio Detection, Face Detection (Limited to 1 Channel)	
Auxiliary Ports		
USB	4 USB Ports (3 USB 2.0, 1 USB 3.0)	
eSATA	1 eSATA Port	
RS232	1 Port (for PC Communication & Keyboard)	
RS485	1 Port (for PTZ Control)	
General		
Power Supply	AC 110V~240V, 50~60Hz	
Power Consumption	<40W (without HDDs)	
Working Environment	-10° C ~ 55° C	
Working Humidity	10% ~ 90% (non-condensation)	
Dimension (W×D×H)	455mm × 455mm × 91mm	
Weight	9kg (without HDDs)	

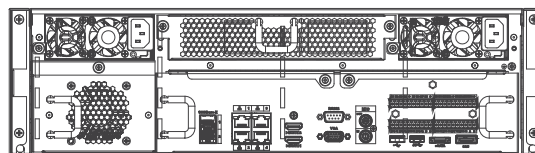
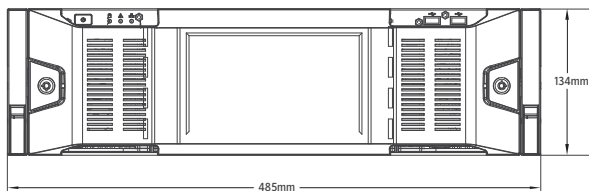


X5S 3U 64/124 Channel Standalone NVR

Features

- Up to 64/124 IP Camera Channels
- Up to 384Mbps Incoming Bandwidth
- Up to 8MP Resolution Preview and Playback
- 1 VGA + 2 HDMI
- Supports 16 Hot-Swappable HDDs (Up to 64GB)
- Support for RAID 0/1/5/6/10/50/60
- Supports iSCSI & Mini SAS for Expandable Storage
- Supports AVA Analytics: Face Detection, Bi-Directional Tripwire, Perimeter Intrusion Detection (Limited to 1 Channel)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.4 Compliance
- Optional Redundant Power Supply Module
- Optional LCD Display

Dimensions



	X5S-NVR-3U-64CH-4K	X5S-NVR-3U-124CH-4K
System		
Main Processor	Intel® Processor	
Operating System	Embedded LINUX	
Memory	4GB DDR3	
Case	Hot-Dipped Galvanized Sheet Steel [1.2mm thickened]	
Video & Audio		
Recording	64ch@1080p/720p/D1	124ch@1080p/720p/D1
Preview	8ch@1080p / 16ch@720p / 32ch@D1	
Playback	128Mbps in RAID 5 Mode	
	64Mbps in Independent HDD Mode	
Recording Resolutions	8MP, 6MP, 5MP, 3MP, 1080p, 720p, 960H, D1, CIF, QCIF, VGA	
Audio	1 Ch In / 1 Ch Out, RCA	
Recording		
Recording Mode	Manual, Continuous, Motion Detection, Alarm	
Alarm Recording	Video Loss, Camera Tampering, Motion Detection, External Alarm	
Backup Mode	Network / USB / External CD & DVD-RW / eSATA	
Display		
Video Output	HDMI 1 + HDMI 2 + VGA	
Multi-Screen Display	1st screen: 1/4/8/9/16/25/36 Views	
	2nd screen: 1/4/8/9/16 Views	
Privacy Masking	4 Custom Zones Per Camera	
Storage		
Internal HDD	16 SATA III Ports, Up to 64TB	
HDD Mode	Independent, RAID 0/1/5/6/10/50/60 (Supports Global Hot-Standby)	
Network		
Interface	4 RJ-45 Ports [10/100/1000Mbps]	
Ethernet Modes	Teaming or Independent	
Optical Fiber Interface	2 Gigabit Optical Fiber Interface	
MD & Alarm		
Motion Detection	User Defined Zones, Sensitivity: 1-100	
Alarm Input	16 Channel	
Relay Output	8 Channel, NO/NC Programmable	
AVA Analytics		
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Scene Change, Camera Tampering, Audio Detection, Face Detection (Limited to 1 Channel)	
Auxiliary Interface		
USB	4 USB Ports (3 USB 2.0, 1 USB 3.0)	
eSATA	1 eSATA Port	
SAS	1 Mini SAS Port	
RS232	1 Port, for PC communication & keyboard	
RS485	1 Port, for PTZ control	
General		
Power Supply	AC 100V ~ 240V, 50 ~ 60Hz	
Power Consumption	<40W (without HDDs)	
Working Environment	-10°C ~ 55°C	
Working Humidity	10% ~ 90% [non-condensation]	
Dimension [W×D×H]	3U, 485mm × 532mm × 134mm	
Weight	17.45kg (without HDDs)	



Recording Resolution



Intel® Core™ i7 Processor



24 HDDs



Incoming Bandwidth



2 HDMI (6 Optional)



Video Analytics



Swappable HDDs



Redundant Power Supply (optional)

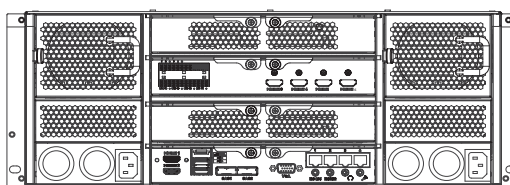
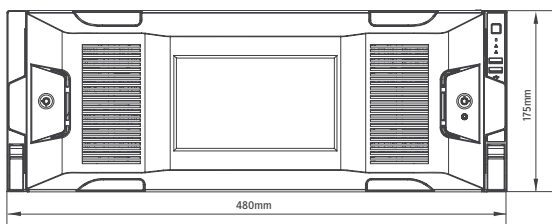
X5S 4U 250 Channel Standalone NVR

Features

- Up to 250 IP Camera Channels
- Up to 512Mbps Incoming Bandwidth
- Up to 125ch@1080p, 250ch@720p Realtime Recording
- 2 HDMI or 1 HDMI + 1 VGA [Optional: 6 HDMI outputs]
- Supports 24 Hot-Swappable HDDs (Up to 96TB)
- Support for RAID 0/1/5/6/10/50/60
- Supports iSCSI & Mini SAS for Expandable Storage
- Supports AVA Analytics: Face Detection, Bi-Directional Tripwire, Perimeter Intrusion Detection (Limited to 1 Channel)
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- C-Series & ONVIF Version 2.4 Compliance
- Optional Redundant Power Supply Module
- Optional LCD Display

System	
Processor	Intel® Core™ i7 Processor
Operating System	Embedded LINUX
Memory	8GB DDR3
Case	Hot-Dipped Galvanized Sheet Steel [1.2mm thickened]
Video & Audio	
Recording	125ch@1080p / 250ch@720p
Preview	20ch@1080p / 40ch@720p / 68ch@D1 [Screens 1-2] Optional: 16ch@1080p / 16ch@720p / 16ch@D1 [Screens 3-6]
Playback	16ch@1080p / 16ch@720p / 16ch@D1 [RAID 5] 8ch@1080p / 16ch@720p / 16ch@D1 [Single HDD]
Recording Resolutions	8MP, 5MP, 3MP, 1080p, 720p, 960H, D1, CIF, QCIF, VGA
Audio	1 Ch In, 1 Ch Out
Recording	
Recording Mode	Manual, Continuous, Motion Detection, Alarm
Alarm Recording	Video Loss, Camera Tampering, Motion Detection, External Alarm
Backup Mode	Network / USB / External CD & DVD-RW / eSATA
Display	
Video Output	2 HDMI or 1 HDMI + 1 VGA [Optional: 6 HDMI outputs]
Multi-Screen Display	1st Screen: 1 / 4 / 8 / 9 / 16 / 25 / 36 / 64 Views 2nd Screen: 4 Views [Optional: 3-6 Screens: 4 Views]
Privacy Masking	4 Custom Zones Per Camera
Storage	
Internal HDD	24 Hot-Swappable HDDs
HDD Mode	Independent, RAID 0/1/5/6/10/50/60 [Supports Global Hot-Standby]
Network	
Interface	4 RJ-45 Ports [10/100/1000Mbps]
Ethernet Mode	Teaming or Independent
MD & Alarm	
Motion Detection	User Defined Zones, Sensitivity: 1-6
Alarm Input	4 Channel
Relay Output	4 Channel, NO/NC Programmable
AVA Analytics	
Detection Types	Bi-Directional Tripwire, Perimeter Intrusion Detection, Scene Change, Camera Tampering, Audio Detection, Face Detection [Limited to 1 Channel]
Auxiliary Ports	
USB	4 USB Ports [2 Front, 2 Rear], [2 USB 3.0, 2 USB 2.0]
eSATA	1 eSATA Port
SAS	2 Mini SAS Ports
General	
Power Supply	AC 100V ~ 240V, 47 ~ 63Hz
Power Consumption	200W ~ 400W [with HDDs]
Working Environment	0°C ~ 40°C
Working Humidity	10% ~ 80% [non-condensation]
Weight	29kg (without HDDs)

Dimensions









DVRs

Digital Video Recorders

Our DVR Lineup

X5S-DVR-Mini-4CH/8CH/16CH

X5S-DVR-1U-4CH/8CH/16CH

X5S-DVR-1.5U-24CH/32CH

X5S-DVR-2U-4CH/8CH/16CH

X5S-DVR-2U-24CH/32CH

Analog video surveillance systems were introduced about 30 years ago. Cameras were fed into CCTV VCRs using coax cabling. As the surveillance market has evolved from a niche industry to mainstream use, the technology has evolved. These VCRs have been replaced with DVRs (Digital Video Recorders) and in the last few years, high resolution IP and HDX cameras have made analog cameras obsolete. While there is no debate that IP cameras are superior to analog cameras, most sites still use traditional analog cameras and coax wiring infrastructure.

Analog cameras present a problem when a customer wants to upgrade to the latest HD cameras but can't afford to replace their existing coax wiring infrastructure. To solve this issue, many manufacturers require customers to purchase video encoders (Network Video Servers). These typically come in 1-4 channel models and convert the analog cameras into IP video streams. Ascendent has designed our Analog and HDX DVRs to simultaneously function as a DVR and a video encoder. This gives you standard DVR operations (local recording, display, playback and backup) as well as converting the analog cameras to IP video streams, which can then be recorded with an X5S NVR. Available with up to 32 channels, our X5S DVRs offer a much more cost-effective method for integrating existing analog cameras into a digital system.

This video encoder technology, along with our hybrid DVR/NVR options make Ascendent's X5S platform the most powerful solution for merging existing analog cameras with the latest HD IP/HDX cameras into one integrated turnkey solution.

Our HDX DVR Lineup

X5S-HDX-Mini-4CH-1MP

X5S-HDX-1U-8CH-2MP

X5S-HVR-1.5U-4CH/8CH/16CH-2MP

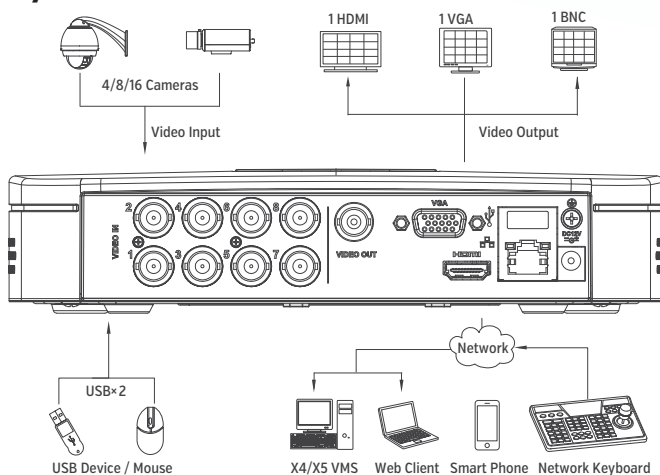


X5S Mini 4/8/16 Channel Standalone Hybrid DVR & Video Encoder

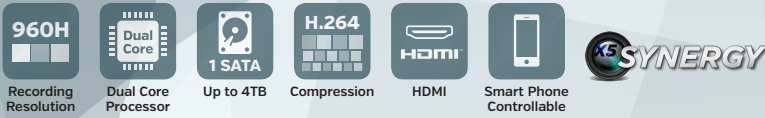
Features

- 4/8/16 Channels
- H.264 Dual-Stream Video Compression
- 960H Realtime Recording
- HDMI/VGA/BNC Video Outputs
- Supports 1 SATA HDD up to 4TB
- Hybrid DVR/Video Server Capability
- High Definition Video Over Coax (HDX/SDI)
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



	X5S-DVR-Mini-4CH	X5S-DVR-Mini-8CH	X5S-DVR-Mini-16CH
System			
Main Processor	Embedded Processor		
Operating System	Embedded LINUX		
Video			
Input	4 Channels, BNC	8 Channels, BNC	16 Ch, BNC
Standard	NTSC/PAL		
Audio			
Input	1 Channels, RCA	N/A	N/A
Output	1 Channels, RCA	N/A	N/A
Two-way Talk	Reuse Audio In/Out Channel 1	N/A	N/A
Display			
Interface	1 HDMI, 1 VGA, 1 TV		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 Rectangular Zones per Camera		
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
A/V Compression	H.264/G.711		
Resolution	960H (960×480) ~ QCIF (176×120)		
Record Rate	Main Stream	960H/D1/HDI/2CIF/CIF (1-25/30fps)	
	Extra Stream	QCIF (1-25/30fps)/CIF (1-6/7fps)	
Bit Rate	48-3072Kbps		
Record Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Record	Pre-record: 1-30 sec, Post-record: 10-300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Playback & Backup			
Sync Playback	1/4 (limited by resolution and bitrate)	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Mode	Network / USB / External CD-R & DVD-RW		
Network			
Ethernet	RJ-45 port (10/100M)		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter, SNMP, P2P		
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)		
Storage			
Internal HDD	1 SATA Port (up to 4TB)		
Auxiliary Ports			
USB	2 Ports (1 Rear USB 2.0, 1 Front USB 2.0)		
General			
Power Supply	DC12V/2A		
Power Consumption	10W (without HDD)		
Working Environment	-10°C ~ +55°C / 10%~90% RH / 86-106kpa		
Dimension (W×D×H)	205mm × 205mm × 40mm	205mm × 205mm × 40mm	270mm × 205mm × 40mm
Weight	0.5kg	0.5kg	0.75kg

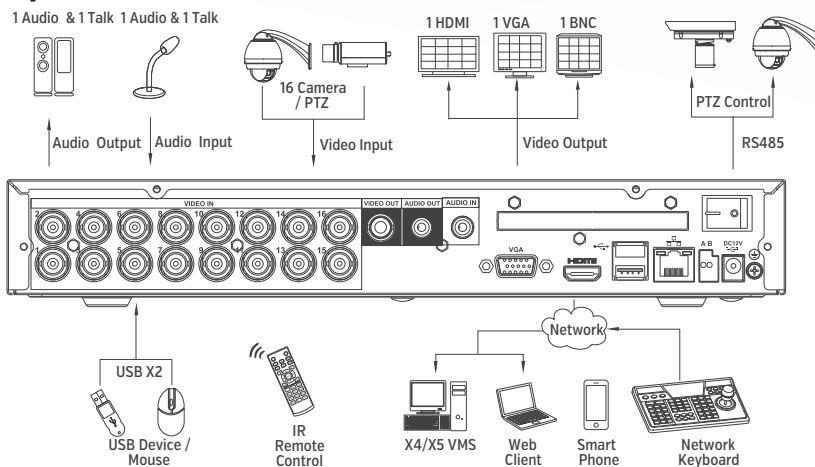


X5S 1U 4/8/16 Channel Standalone Hybrid DVR & Video Encoder

Features

- 4/8/16 Channels
- H.264 Dual-Stream Video Compression
- 960H Realtime Recording
- HDMI/VGA/BNC Video Outputs
- Supports 1 SATA HDD up to 4TB
- Hybrid DVR/Video Server Capability
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]

System Connection



	X5S-DVR-1U-4CH	X5S-DVR-1U-8CH	X5S-DVR-1U-16CH
System			
Main Processor	Embedded Processor		
Operating System	Embedded LINUX		
Video			
Input	4 Channels, BNC	8 Channels, BNC	16 Ch, BNC
Standard	NTSC/PAL		
Audio			
Input	1 Channel, RCA		
Output	1 Channel, RCA		
Two-way Talk	Reuse Audio Input/Output Channel 1		
Display			
Interface	1 HDMI, 1 VGA, 1 TV		
Resolution	1920x1080, 1280x1024, 1280x720, 1024x768, 800x600		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 Rectangular Zones per Camera		
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
A/V Compression	H.264/G.711		
Resolution	960H [960x480] ~ QCIF [176x120]		
Record Rate	Main Stream	960H/D1/HDI/2CIF/CIF [1-25/30fps]	
	Extra Stream	QCIF [1-25/30fps]/CIF [1-6/7fps]	
Bit Rate	48-3072Kbps		
Record Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Record	Pre-record: 1-30 sec, Post-record: 10-300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Playback & Backup			
Sync Playback	1/4 (limited by resolution and bitrate)	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Mode	Network / USB / External CD-R & DVD-RW		
Network			
Ethernet	RJ-45 port [10/100M]		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter, SNMP, P2P		
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]		
Storage			
Internal HDD	1 SATA Port (up to 4TB)		
Auxiliary Ports			
USB	2 Ports (1 Rear USB 2.0, 1 Front USB 2.0)		
RS485	1 Port (for PTZ Control)		
General			
Power Supply	DC12V/2A		
Power Consumption	10W(without HDD)		
Working Environment	-10°C ~+55°C / 10%~90% RH / 86~106kpa		
Dimension (W×D×H)	Mini 1U, 325mm×255mm×45mm		
Weight	1.5kg (without HDD)		

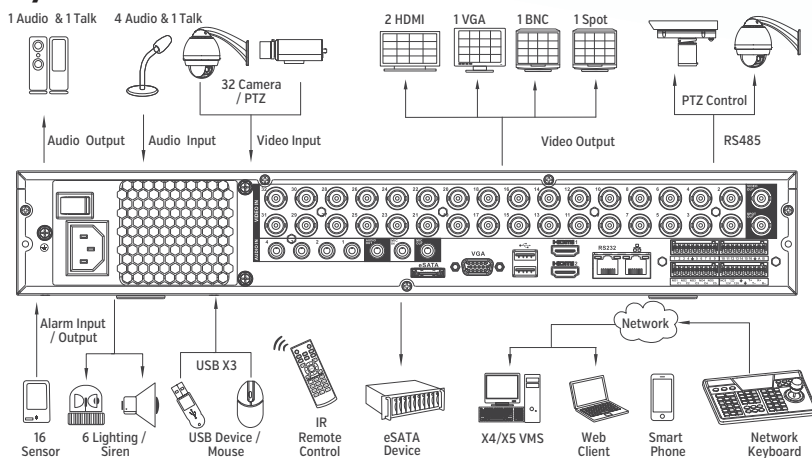


X5S 1.5U 24/32 Channel Standalone Hybrid DVR & Video Encoder

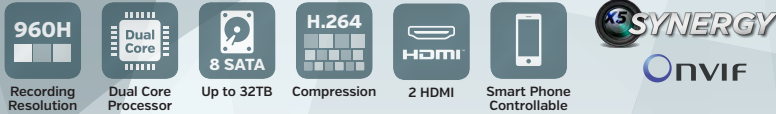
Features

- 24/32 Channels
- H.264 Dual-Stream Video Compression
- 960H Realtime Recording
- 2 HDMI + VGA/BNC/Spot Video Outputs
- Supports 4 SATA HDDs up to 16TB
- Hybrid DVR/Video Server Capability
- High Definition Video Over Coax (HDX/SDI)
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



	X5S-DVR-1.5U-24CH	X5S-DVR-1.5U-32CH
System		
Main Processor	Embedded Processor	
Operating System	Embedded LINUX	
Video		
Input	24 Channels, BNC	32 Channels, BNC
Standard	NTSC/PAL	
Audio		
Input	4 Channels, RCA	
Output	1 Channel, RCA	
Two-way Talk	1 Channel In, 1 Channel Out, RCA	
Display		
Interface	2 HDMI, 1 VGA, 1 BNC, 1 Spot	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768	
Display Split	1/4/8/9/16/25	1/4/8/9/16/25/36
Privacy Masking	4 Rectangular Zones per Camera	
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
A/V Compression	H.264/G.711	
Resolution	960H [960×480] ~ QCIF [176×120]	
Record Rate	Main Stream	960H/D1/HDI/2CIF/CIF [1~25/30fps]
	Extra Stream	CIF/QCIF [1~25/30fps]
Bit Rate	48~3072Kb/s	
Record Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Record	Pre-record: 1~30 sec, Post-record: 10~300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	16 Channels In, 6 Channels Out	
Playback & Backup		
Sync Playback	1/4/9/16 [limited by resolution and bitrate]	
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Mode	Network / USB / Internal CD-R & DVD-RW / eSATA	
Network		
Ethernet	RJ-45 Port [10/100/1000M]	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter, Alarm Server, SNMP, P2P	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Storage		
Internal HDD	4 SATA Ports [4HDDs or 3HDDs + 1CD/DVD-RW]	
External HDD	1 eSATA Port, up to 16TB	
Auxiliary Ports		
USB	3 Ports [2 Rear USB 2.0, 1 Front USB 2.0]	
RS232	1 Port [for PC Communication & Keyboard]	
RS485	1 Port [for PTZ Control]	
General		
Power Supply	AC100 ~ 240V, 50/60Hz	
Power Consumption	25W [without HDDs]	
Working Environment	-10°C ~ +55°C / 10 ~ 90% RH / 86 ~ 106kpa	
Dimension [W×D×H]	1.5U, 440mm × 417mm × 68mm	
Weight	6 kg [without HDDs]	

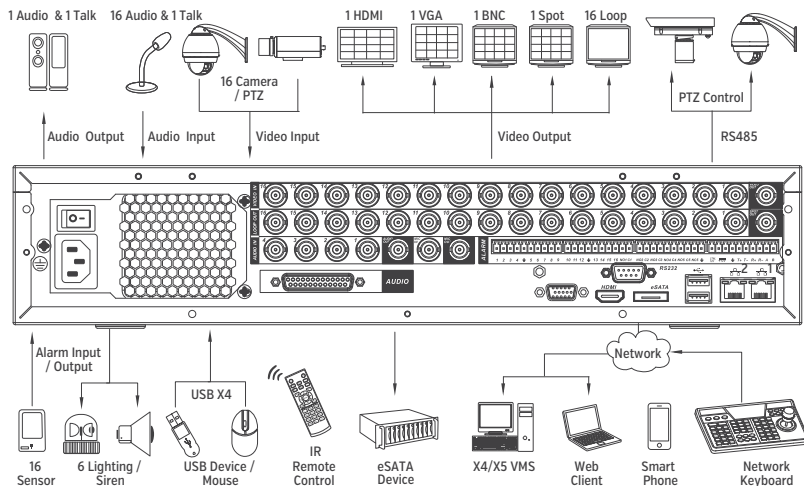


X5S 2U 4/8/16 Channel Standalone Hybrid DVR & Video Encoder

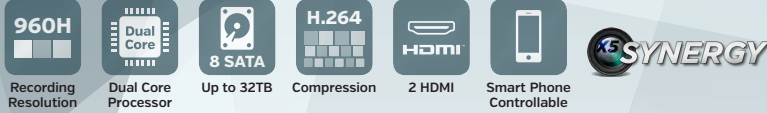
Features

- 4/8/16 Channels
- H.264 Dual-Stream Video Compression
- IP: 50Mbps Incoming Bandwidth, Analog: 4/8/16 Channels at 960H
- 2 HDMI + VGA/BNC/Spot & Loop Video Outputs
- Supports 8 SATA HDDs up to 32TB
- Hybrid DVR/Video Server Capability
- Supported IP Camera Brands: Ascendent, Arecont Vision, AXIS, Bosch, Canon, Dynacolor, Honeywell, ONVIF, Panasonic, Pelco, Samsung, Sanyo, Sony, Vivotek
- Remote Monitoring with iPhone, iPad or PC [Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS]
- ONVIF Version 2.3 Compliance

System Connection



	X5S-DVR-2U-4CH	X5S-DVR-2U-8CH	X5S-DVR-2U-16CH
System			
Main Processor	Dual-Core Embedded Processor		
Operating System	Embedded LINUX		
Video			
IP Video Input	4 Channels	8 Channels	16 Channels
Analog Input	4 Channels, BNC	8 Channels, BNC	16 Ch, BNC
Standard	NTSC/PAL		
Loop Output	4 Channels, BNC	8 Channels, BNC	16 Ch, BNC
Audio			
Input	4 Channels, BNC	8 Channels, BNC	16 Ch, BNC
Output	1 Channel, BNC		
Two-way Talk	1 Channel In, 1 Channel Out, BNC		
Display			
Interface	1 HDMI, 1 VGA, 1 TV, 1 Spot, BNC [1.0Vp-p, 75Ω]		
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768		
Display Split	1/4	1/4/8/9	1/4/8/9/16
Privacy Masking	4 Rectangular Zones per Camera		
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording		
Recording			
A/V Compression	H.264/G.711		
Resolution	1080p [1920×1080] ~ QCIF [176×120]		
Record Rate	IP	Max 50Mbps Bandwidth Incoming	
	Analog	All Channels 960H [25/30fps]	
Bit Rate	IP: 48~8192 Kbps, Analog: 48~3072Kbps		
Record Mode	Manual, Continuous, Motion Detection, Alarm		
Pre/Post Record	Pre-record: 1~30 sec, Post-record: 10~300 sec		
Video Detection & Alarm			
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup		
Video Detection	Motion Detection, Video Loss, Camera Masking		
Alarm Input	4 Channels	8 Channels	16 Channels
Relay Output	6 Channels		
Playback & Backup			
Sync Playback	1/4 (limited by resolution and bitrate)	1/4/9 (limited by resolution and bitrate)	1/4/9/16 (limited by resolution and bitrate)
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection		
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom		
Backup Mode	Network / USB / Internal CD-R & DVD-RW / eSATA		
Network			
Ethernet	2 RJ-45 Ports [10/100/1000M]		
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter, Alarm Server, SNMP, P2P		
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]		
Storage			
Internal HDD	8 SATA Ports [8HDDs or 6HDDs + 1CD/DVD-RW]		
External HDD	1 eSATA Port, up to 16TB		
Auxiliary Ports			
USB	4 Ports [2 Rear USB 2.0, 2 Front USB 2.0]		
RS232	1 Port [for PC Communication & Keyboard]		
RS485	1 Port [for PTZ Control]		
General			
Power Supply	AC100 ~ 240V, 50/60Hz		
Power Consumption	40W		
Working Environment	-10°C ~ +55°C / 10 ~ 90% RH / 86 ~ 106kpa		
Dimension (W×D×H)	2U, 440mm × 460mm × 89mm		
Weight	6.5kg (without HDDs)		

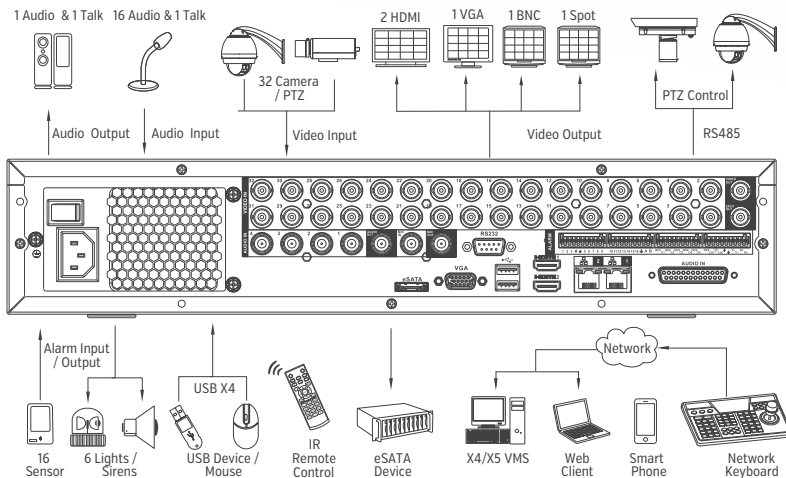


X5S 2U 24/32 Channel Standalone Hybrid DVR & Video Encoder

Features

- 24/32 Channels
- H.264 Video Compression
- 960H Realtime Recording
- 2 HDMI + VGA/BNC/Spot Video Outputs
- Supports 8 SATA HDDs up to 32TB
- Hybrid DVR/Video Server Capability
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



	X5S-DVR-2U-24CH	X5S-DVR-2U-32CH
System		
Main Processor	Embedded Processor	
Operating System	Embedded LINUX	
Video		
Input	24 Channels, BNC	32 Channels, BNC
Standard	NTSC/PAL	
Audio		
Input	16 Channels, BNC	
Output	1 Channel, BNC	
Two-way Talk	1 Channel In, 1 Channel Out, BNC	
Display		
Interface	2 HDMI, 1 VGA, 1 BNC, 1 Spot	
Resolution	1920×1080, 1280×1024, 1280×720, 1024×768	
Display Split	1/4/8/9/16/25	1/4/8/9/16/25/36
Privacy Masking	4 Rectangular Zones per Camera	
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
A/V Compression	H.264/G.711	
Resolution	960H [960×480] ~ QCIF [176×120]	
Record Rate	Main Stream	960H/D1/HD1/2CIF/CIF [1-25/30fps]
	Extra Stream	CIF/QCIF [1-25/30fps]
Bit Rate	48-3072Kb/s (VBR & CBR Throttling)	
Record Mode	Manual, Continuous, Motion Detection, Alarm	
Pre/Post Record	Pre-record: 1-30 sec, Post-record: 10-300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	16 Channels In, 6 Channels Out	
Playback & Backup		
Sync Playback	1/4/9/16 (limited by resolution and bitrate)	
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Mode	Network / USB / Internal CD-R & DVD-RW / eSATA	
Network		
Ethernet	2 RJ-45 Ports [10/100/1000M]	
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, NTP, DHCP, DNS, PPPoE, DDNS, IP Filter, Alarm Server, SNMP, P2P	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Storage		
Internal HDD	8 SATA Ports (8HDDs or 6HDDs + 1CD/DVD-RW)	
External HDD	1 eSATA Port, up to 16TB	
Auxiliary Ports		
USB	4 Ports [2 Rear USB 2.0, 2 Front USB 2.0]	
RS232	1 Port [for PC Communication & Keyboard]	
RS485	1 Port [for PTZ Control]	
General		
Power Supply	AC100 ~ 240V, 50/60Hz	
Power Consumption	40W [without HDDs]	
Working Environment	-10°C ~ +55°C / 10 ~ 90% RH / 86 ~ 106kpa	
Dimension (W×D×H)	2U, 440mm × 461mm × 89mm	
Weight	6.5kg [without HDDs]	





X5 VMS Software

Enterprise CMS Station

Ascendent's 5th generation X5 Synergy VMS platform provides complete control of your surveillance system including Cameras, Digital Matrix, Alarms, Fire, and Access Control.

The CMS software acts as the primary control for the X5 Synergy VMS platform, interfacing with the DCS, Matrix, NVR, and Proxy Servers. Featuring advanced Live View, Playback, Backup, E-Map, GPS Tracking, and Digital Matrix controls; the X5 Synergy VMS should be at the center of any enterprise surveillance system.

System Configuration

- Intuitive video device configuration
- Camera grouping, multiple cameras from any site
- Remote configuration of server settings

Global User Manager

- Rapidly deploy new users by copying user permissions
- Global users function independently of local system authorities
- Extensive hierarchy authoritative access rights down to an individual channel level

Log Viewing

- View and track OS system log events
- View DVR/NVR log events

Device Status

- Real-time system health monitoring
- Built-in filters display selected sort status

Node Tree Navigation Structure

- Searchable tree structure decreases response time
- Complete multi-layer E-Map functions

E-Map Interface

- Provides a graphical navigation interface for the system
- Multi-level in-depth mapping layers
- Unique Object Icons for each sensor, alarm, camera and camera group
- Color coded live object status
- Drag and drop live video and audio overlay on map

Live View

- Full PTZ control including tours and presets
- Digital zoom feature with PIP
- Up to 64 channels per monitor

Snapshot Management

- Save multiple snapshots at once to the Data Center Server
- Searchable database retains group snapshots

Playback

- Instant Playback quickly displays recently recorded video without entering playback mode
- Local recording on CMS with parallel recording on DVR/NVR
- Playback from multiple channels and sites simultaneously

Backup

- Single file clip creation for easy evidence retrieval
- Multi-channel backup with integrated playback software
- Backup to USB, DVD, network drives and cloud storage

Alarm Notification System

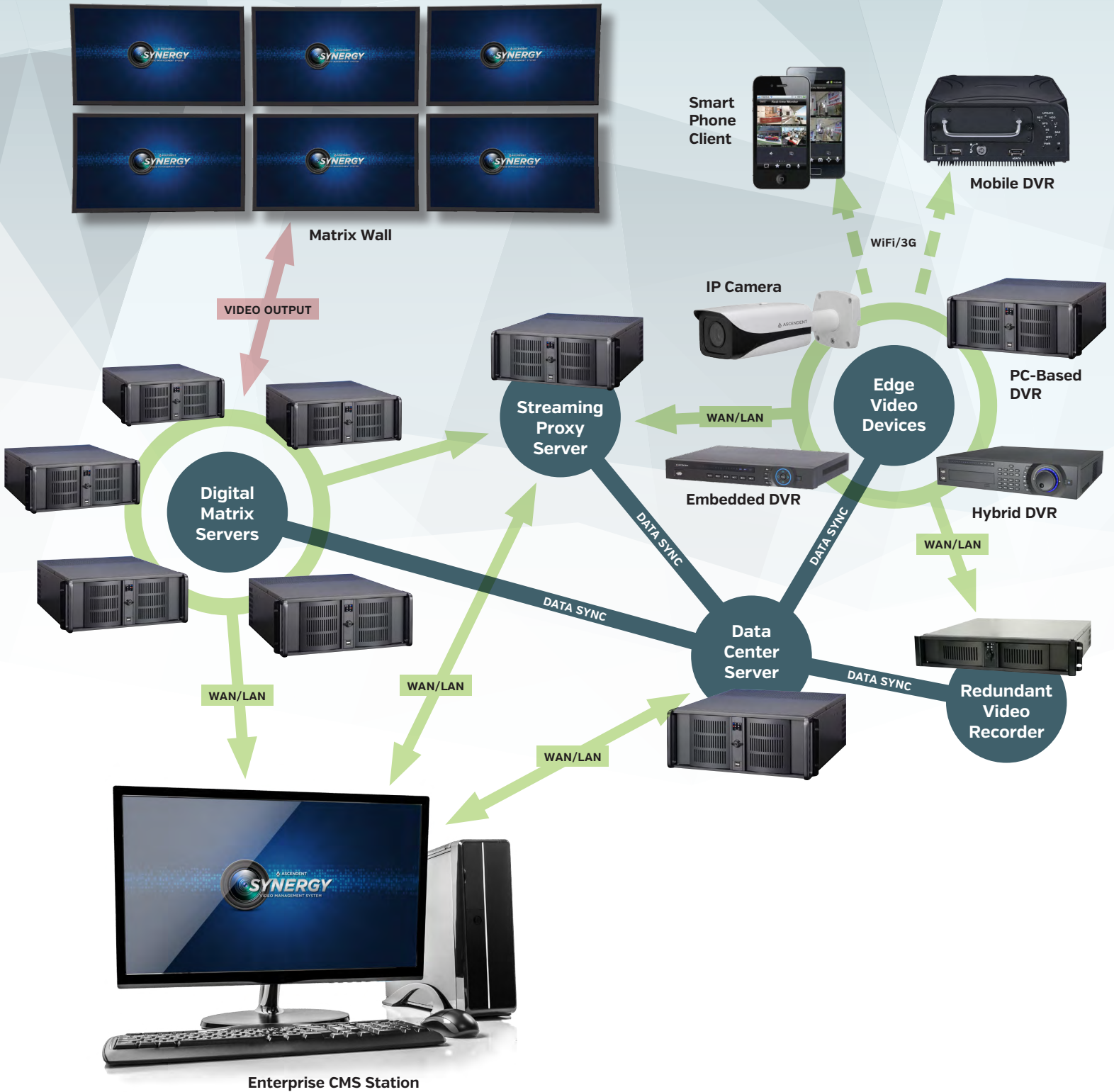
- Email alerts directly to your smart phone
- Customizable audio alerts for specific alarm conditions
- E-Map alerts to assist operators in determining alarm locations

Chat Functionality

- Two-way voice communication between Client & Server
- Text chat capability between Client & Server

X5 VMS Software

System Overview



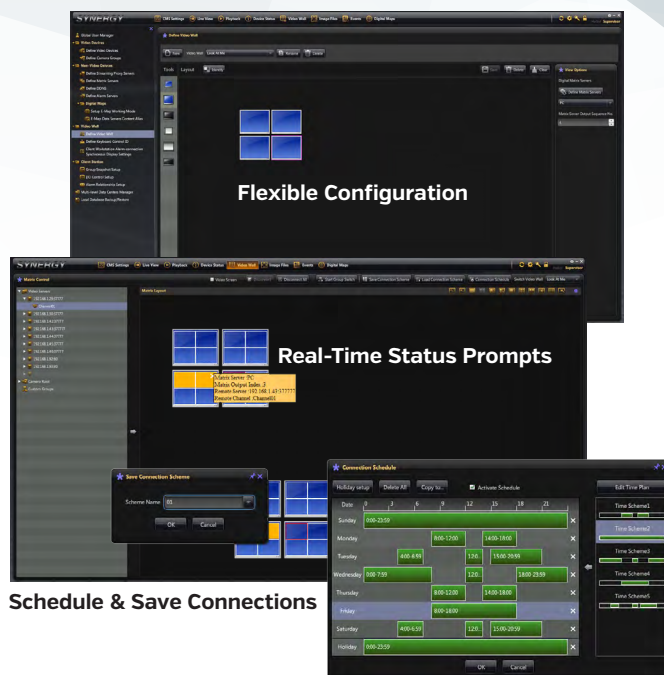


The Ascendent Digital Matrix is a powerful and versatile video wall solution. It utilizes Digital Matrix Servers which connect to all of your surveillance and display devices.

The virtual display wall is easily managed and controlled through the CMS software. Choose from multiple grid configurations on each monitor, personalize channel schemes for manual or scheduled loading, customize channel rotation on each monitor or dynamically display channels based on alarm events.

Features

- Combine multiple matrix servers to create scalable video wall solutions
- Decode any supported video devices including IP cameras, standalone DVRs/NVRs and encoders
- Display real time digital video from multiple locations on the same video wall
- Support for up to 8 monitors on each matrix server
- Intuitive GUI is designed to mirror the physical layout of the video wall
- User-friendly interface with Drag-n-Drop functionality
- Display live video events as they occur
- Dynamic matrix scheme loading and saving
- Multiple channel group switching modes
- Channel group switching within the same matrix grid or across all matrix grids
- Global display wall control of local and remote video walls





Mobile Solutions

Mobile Cameras

PHX-30X-ZLID-450M/750M/1000M

Ascendent's mobile DVRs/NVRs and rugged PTZ cameras are designed specifically for 24/7 operation in mobile applications, from industrial, municipal and military vehicles to marine vessels. They are built to withstand shock, vibration, and voltage fluctuations. IP 66-68 certification allows for outdoor installations where zero dust or water ingress is required. Ascendent's mobile products are military grade and will meet or exceed any commercial or industrial requirements.

These products are not only rugged but also include a host of features and capabilities such as real time remote accessibility, GPS positioning, WiFi/3G connectivity, solid state drives, and H.264 compression.

Ascendent's full spectrum of mobile camera options include HD, multi-sensor, gyro-stabilized, thermal, optical, and ZLID illuminated PTZ cameras. We also boast a complete range of mobile recording solutions from embedded mobile DVRs to hybrid PC NVRs. Ascendent's mobile products are designed to run autonomously. They can also be integrated into our NVRs, video matrix and VMS systems, creating an ideal solution for monitoring entire fleets of vehicles or remote sites from a single command center.

First and foremost, Ascendent is a solutions provider. We have a long, proud history of providing application specific solutions for military, governments, corporate enterprises and law enforcement. Clients include the US Military and Navy, Shell Oil, and RCMP. Ascendent consults and designs solutions that are tailored to the customer's requirements ensuring seamless integration and excellent ROI.

PHX-37X-TI-35/50/100

Mobile Recorders

X5S-DVR-Mobile-4CH

X5S-DVR-Mobile-4CH/8CH-Pro

X5S-NVR-Mobile-4CH-2MP

X5S-NVR-Portable-4CH-2MP

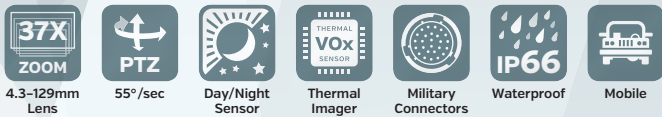


30X Laser Illuminated PTZ IP Camera

Features

- Powerful 30X Optical Zoom, 16X Digital Zoom (480X total)
- 1/3" HD CMOS Day/Night Progressive Scan Sensor
- Up to 1km of ZLID (Zoom Lazier IR Diode) Illumination
- 4.3-129mm Lens offering a 40-1° Field of View
- User Defined WDR, HLC, BLC, AWB, etc. via OSD
- Integrated Mechanical Infrared Cut Filter for absolute clarity
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Military Connector: video, power and telemetry over 1 cable
- Flat Viewing Window w/Wiper eliminates dithering and distortion
- Micro-Step Technology for quick, accurate pan/tilt > 0.1°
- Multi-Protocol Communications for Integration with 3rd Party Systems
- 1 km/2400ft Adaptive IR Illumination Distance
- Rugged IP66 Housing

	PHX-30X-ZLID-450M	PHX-30X-ZLID-750M	PHX-30X-ZLID-1000M
Camera			
Image Sensor	1/3" Progressive Scan CMOS		
Resolution	1080p Full HD		
Shutter Speed	Auto: 1/50 ~ 1/10,000s		
Lens			
Focal Length	4.3mm-129.5mm IR Corrected Continuous Zoom Lens		
Angle of View	H: 40° ~ 1°		
IR Filter	Dual Mechanical IR Cut Filter (MICF)		
IR Illuminator			
ZLID	Zoom Laser IR Diode		
Illumination Distance	450m/1480ft	750m/2400ft	1000m/3280ft
Angle	1° ~ 40° [syncs with zoom lens]		
Wavelength	810nm [940nm Stealth optional] [13M NOHD]		
Control Protocol	Pelco-P/D standard		
PTZ			
Drive Unit	Integral Pan/Tilt Brushless Motor Drive		
Pan/Tilt Range	Pan: 0° ~ 360° Continuous Pan, Tilt: 40°		
Manual Control Speed	Pan: ≤ 55°/s; Tilt: 1.2° ~ 80°/s		
Preset Accuracy	0.01° [Micro-Step]		
PTZ Modes	4 Tours, up to 128 presets		
Video			
Compression	H.264 / MJPEG		
Resolution	1080p [1920x1080] / 720p [1280x720] / D1 [704x576] / CIF [352x288]		
Frame Rate	Main Stream	1080p (1 ~ 25/30fps) / 720p (1~50/60fps)	
	Sub Stream 1	D1/CIF (1 ~ 25/30fps)	
	Sub Stream 2	720p/D1/CIF (1 ~ 25/30fps)	
Bit Rate	H.264: 56K ~ 8192Kbps, MJPEG: 56K ~ 20480Kbps		
General			
Power Supply	18VAC-24VAC, 18VDC-24VDC [optional] [CE, ROHS, FCC]		
Power Consumption	Max 60W [heater on], 30W [without heater]		
Working Environment	-45°C ~ +60°C / Less than 90% RH		
Ingress Protection	IP66, NEMA 4X outdoor weather ring		
Weight	6.7kg		
Available Options			
Mounting	Upright Mount or Inverted Mount		
Vibration Damper	Reduces Shock and Camera Shake		
Image Stabilization	Available		

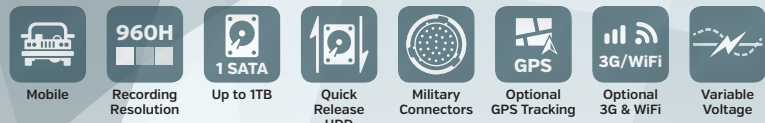


37X Thermal/Optical Integrated PTZ Camera

Features

- Dual Sensor Optical and Thermal Integrated PTZ System
- High Resolution 37X Optical Zoom CCD Camera
- Thermal Camera for 2.9km Human and 8.8km Vehicle Detection
- Extreme Heater/Blower for Operation in -45°C to 60°C
- User Defined WDR, HLC, BLC, AWB, etc. via OSD
- Integrated Mechanical Infrared Cut Filter for absolute clarity
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Military Connector: video, power and telemetry over 1 cable
- Flat Viewing Window w/Wiper eliminates dithering and distortion
- Micro-Step Technology for quick, accurate pan/tilt > 0.1°
- Multi-Protocol Communications for Integration with 3rd Party Systems
- Rugged IP66/NEMA 4X Weather & Vandal Proof Housing

	PHX-37X-TI-35	PHX-37X-TI-50	PHX-37X-TI-100
Camera			
Image Sensor	1/4" Ex-View HAD II CCD		
Resolution	600TVL [day] / 700TVL [night]		
Shutter Speed	Auto: 1/50 ~ 1/10,000s		
Lens			
Focal Length	3.5mm-129.5mm IR Corrected Continuous Zoom Lens		
Angle of View	H: 54.4°~ 1.6° (our site) H: 49.1°~ 1.4° (scantips.com)		
IR Filter	Dual Mechanical IR Cut Filter [MICF]		
336 V2 FLIR Thermal Imager [640 Optional]			
Lens	35mm	50mm	100mm
	Optional 3X Thermal Zoom Lens, 26-75.5mm		
Image Sensor	FPA, Uncooled Vanadium Oxide Micro-Bolometer 7.5Hz NTSC, 8.3Hz PAL CMOS 8-14 Bit		
Picture Elements	324[H] x 256[V] pixels (640x480 optional with 8X zoom)		
Scene Temperature	-40°C to +160°C (High and Low Gain)		
Pixel Pitch	17µm [25% sharper fimage over 25 µm sensors] FLIR's proprietary noise reduction		
Image Optimizations	BPR, NUC, & AGC'd user configurability via SDK, GUI		
Digital Zoom	2X & 4X dynamic zoom/pan with dynamic range switching		
Thermal Sensitivity	50 mk		
Image Display Modes	White Hot, Black Hot, False Color, and Color & Monochrome Palettes [LUTs]		
PTZ			
Drive Unit	Integral Pan/Tilt Brushless Motor Drive		
Pan/Tilt Range	Pan: 0° ~ 360° Continuous Pan, Tilt: 40°		
Manual Control Speed	Pan: ≤ 55°/s; Tilt: 1.2° ~ 80°/s		
Preset Accuracy	0.01° [Micro-Step]		
PTZ Modes	4 Tours, up to 128 presets		
General			
Power Supply	18VAC-24VAC, 18VDC-24VDC [optional] [CE, ROHS, FCC]		
Power Consumption	Max 60W [heater on], 30W [without heater]		
Working Environment	-45°C ~ +60°C / Less than 90% RH		
Ingress Protection	IP66, NEMA 4X outdoor weather ring		
Weight	6.7kg		
Available Options			
Mounting	Upright Mount or Inverted Mount		
Vibration Damper	Reduces Shock and Camera Shake		
Image Stabilization	Available		

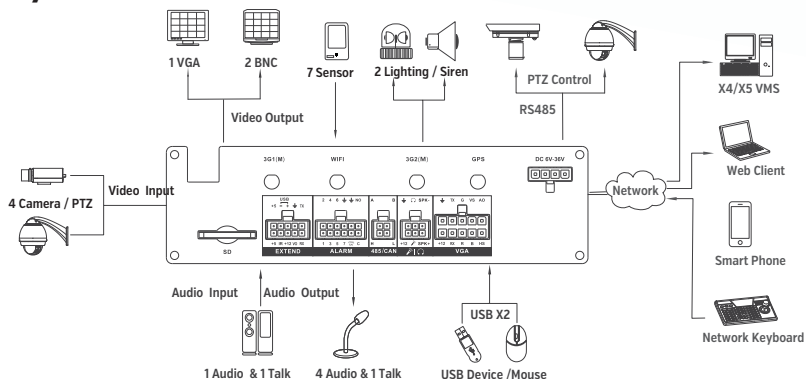


X5S Mobile 4 Channel Standalone DVR

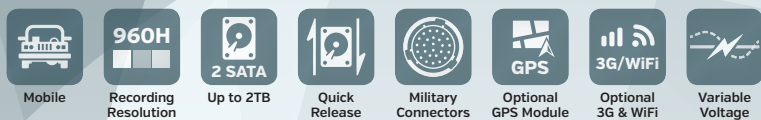
Features

- Up to 4 Cameras with 1280×1024 Realtime Live View
- H.264 Dual-Stream Video Compression
- Full Channel @960H Realtime Recording
- VGA/BNC Simultaneous Video Output
- All Channel Synchronous Realtime Playback
- Supports 1 SATA HDD, 2 USB 2.0
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Military Style Quick Connectors
- Google Maps GPS Tracking via X5 Synergy VMS
- CBR/VBR Bandwidth Throttling

System Connection



System		
Main Processor	Embedded Processor	
Operating System	Embedded LINUX	
Video		
Input	4 Channels	
Standard	NTSC (525 Line, 60fps), PAL (625 Line, 50fps)	
Audio		
Input	4 Channels	
Output	1 Channel	
Two-way Talk	1 Channel In, 1 Channel Out	
Display		
Interface	1 VGA, 2 BNC	
Resolution	1280×1024, 1280×720, 1024×768, 800×600	
Display Split	1/4	
Privacy Masking	4 Rectangular Zones per Camera	
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording	
Recording		
A/V Compression	H.264/G.711	
Resolution	960H (960×480) ~ QCIF (176×120)	
Record Rate	Main Stream	Full Channel @ 960H/D1 [1~25/30fps]
	Extra Stream	CIF/QCIF [1~25/30fps]
Bit Rate	48~4096Kb/s	
Image Quality	1~6 Level [level 6 is the best, VBR effectively]	
Record Mode	Manual, Continuous, Motion Detection, Alarm	
Record Interval	Pre-record: 1~30 sec, Post-record: 10~300 sec	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	7 Channels In, 2 Channels Out	
Playback & Backup		
Sync Playback	1/4	
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Mode	USB / Network	
Network		
Ethernet	RJ-45 Port [10/100/1000M]	
Wireless Network	3G/Wi-Fi Module [optional]	
GPS	High Accuracy GPS Module [optional]	
Network Functions	TCP/IP, UDP, DHCP, DNS, IP Filter, PPPoE, DDNS, Alarm Server	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Storage		
Internal HDD	1 SATA Port	
External HDD	1 SD Card	
Auxiliary Ports		
USB	2 Ports [1 Rear USB 2.0, 1 Front USB 2.0]	
RS232	1 Port [for PC Communication & Keyboard]	
RS485	1 Port [for PTZ Control]	
SSD	Optional	
Heater	Optional	
General		
Power Supply	6V~36V, <15W Power Consumption [with HDD]	
Working Environment	0°C ~ +55°C / 10% ~ 95% RH / 86 ~ 106kpa	
Dimension (W×D×H)	178mm×220mm×50mm	
Weight	2.1kg [with HDD]	
Vibration-Proof	5Hz~300Hz: X/Y/Z each direction 8 hours	
	5Hz~11Hz: Vibration amplitude 10mm 11Hz~300Hz: 50m/s ²	

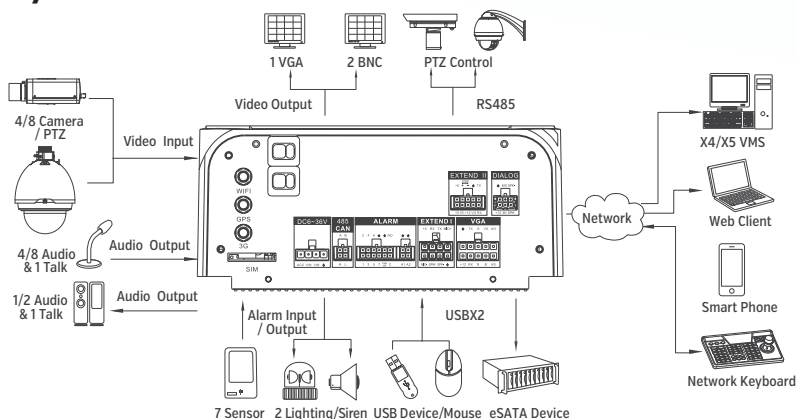


X5S Mobile 4 Channel Standalone DVR

Features

- Up to 4 Cameras with 1280×1024 Realtime Live View
- H.264 Dual-Stream Video Compression
- All Channel @960H Realtime Recording
- VGA/BNC Simultaneous Video Output
- Supports 2 SATA HDDs, 1 eSATA, 2 USB 2.0
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- Military Style Quick Connectors
- Rugged Alluminum Alloy Case
- CBR/VBR Bandwidth Throttling

System Connection



System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video	
Input	4 Channels
Standard	NTSC (525 Line, 60fps), PAL (625 Line, 50fps)
Audio	
Input	4 Channels
Output	1 Channel
Two-way Talk	1 Channel In, 1 Channel Out
Display	
Interface	1 VGA, 2 BNC
Resolution	1280×1024, 1024×768, 800×600
Display Split	1/4
Privacy Masking	4 Rectangular Zones per Camera
OSD	
	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording
Recording	
A/V Compression	H.264/G.711
Resolution	960H (960×480) ~ QCIF (176×120)
Record Rate	Main Stream Full Channel @ 960H/D1 [1~25/30fps] Extra Stream CIF/QCIF [1~25/30fps]
Bit Rate	48~4096Kb/s
Record Mode	Manual, Continuous, Motion Detection, Alarm
Record Interval	Pre-record: 1~30 sec, Post-record: 10~300 sec
Video Detection & Alarm	
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup
Video Detection	Motion Detection, Video Loss, Camera Masking
Alarm I/O	7 Channels In, 2 Channels Out
Playback & Backup	
Sync Playback	1/4
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom
Backup Mode	USB / eSATA / Network
Network	
Ethernet	RJ-45 Port (10/100/1000M)
Wireless Network	Internal 3G/Wi-Fi Module (optional)
GPS	Internal High Accuracy GPS Module (optional)
Network Functions	TCP/IP, UDP, DHCP, DNS, IP Filter, PPPoE, DDNS, Alarm Server
Remote Access	iPhone, iPad, Android, PC (ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS)
Storage	
Internal HDD	2 SATA Ports
External HDD	1 eSATA Port
Auxiliary Ports	
USB	2 Ports (1 Rear USB 2.0, 1 Front USB 2.0)
RS232	1 Port (for PC Communication & Keyboard)
RS485	1 Port (for PTZ Control)
General	
Power Supply	DC 8V~36V, <15W Power Consumption
Working Environment	-20°C~+60°C / 5%~95%RH / 86~106kpa
Dimension (W×D×H)	203mm × 253mm × 92mm
Weight	3.5kg
Vibration-Proof	5Hz~300Hz: X/Y/Z each direction 8 hours 5Hz~11Hz: Vibration amplitude 10mm 11Hz~300Hz: 50m/s ²



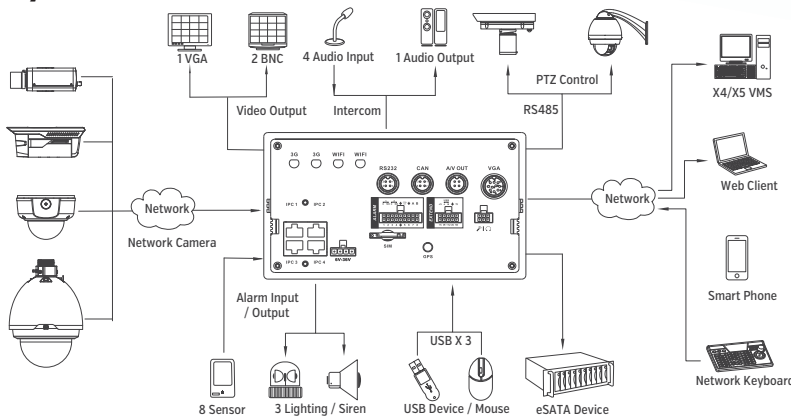
- Mobile
- 1080p FULL HD Recording
- 2 SATA Up to 2TB
- Variable Voltage
- Military Connectors
- Quick Release HDD
- Optional GPS
- Optional 3G & WiFi

X5S Mobile 4 Channel Standalone DVR

Features

- Up to 4 Cameras with 1080p Realtime Live View
- H.264/MJPEG Dual Codec Decoding
- 100/120fps@1080p Preview & Recording
- All Channel Synchronous Realtime Playback
- Supports 2 SATA HDDs, 1 eSATA, 3 USB 2.0
- Multi-Information Display and Recording: Car Number, Time, Channel, GPS, Speed, Overlay and Recording Settings
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- ONVIF Version 2.3 Compliance
- Military Style Quick Connectors
- 4 PoE Ports

System Connection



System	
Main Processor	Dual-Core Embedded Processor
Operating System	Embedded LINUX
Audio/Video	
Video Input	4 Channels @ 1080p
Audio Input	4 Channels
Audio Output	1 Channel
Two-way Talk	1 Channel In, 1 Channel Out
Display	
Interface	1 VGA, 2 BNC
Resolution	1920×1080, 1280×1024, 1024×768, 800×600
Display Split	1/4
Privacy Masking	4 Rectangular Zones per Camera
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording
Recording	
A/V Compression	H.264/G.711
Resolution	1080p [1920×1080] ~ D1 [704×480]
Record Rate	100/120fps@1080p
Bit Rate	48~4096Kb/s
Record Mode	Manual, Continuous, Motion Detection, Alarm
Record Interval	Pre-record: 1~30 sec, Post-record: 10~300 sec
Video Detection & Alarm	
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup
Video Detection	Motion Detection, Video Loss, Camera Masking
Alarm I/O	8 Channels In, 3 Channels Out
Playback & Backup	
Sync Playback	1/4
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom
Backup Mode	USB / eSATA / Network
Network	
Ethernet	RJ-45 Port [10/100/1000M]
3G Wireless	3G Module [optional]
WiFi	WiFi Module [optional]
GPS	High Accuracy GPS Module [optional]
Network Functions	TCP/IP, UDP, DHCP, DNS, IP Filter, PPPoE, DDNS, Alarm Server
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]
Storage	
Internal HDD	2 SATA Ports
External HDD	1 eSATA Port
Auxiliary Ports	
USB	3 Ports [1 Rear USB 2.0, 2 Front USB 2.0]
RS232	1 Port [for PC Communication & Keyboard]
RS485	1 Port [for PTZ Control]
Memory Slot	SD Card [Max 32GB]
General	
Power Supply	DC 8V~36V, <10W Power Consumption
Working Environment	-10°C ~ +55°C / 10%~90%RH / 86~106kpa
Dimension [W×D×H]	180mm × 209mm × 100mm
Weight	3kg [without HDD]

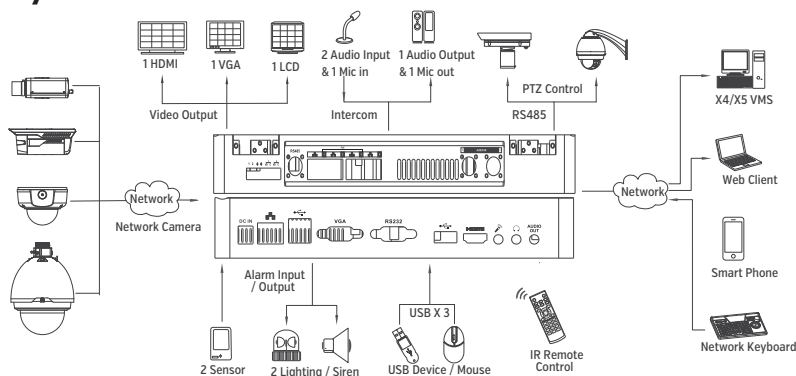


X5S Mobile Portable 4 Channel Standalone NVR

Features

- Up to 4 Cameras with 1080p Realtime Live View
- H.264/MJPEG Compression
- HDMI/VGA/LCD Simultaneous Video Output
- Synchronous Realtime Playback
- Timeline Search
- Supports 1 SATA HDDs, 2 CD-R/DVD-RW, 3 USB 2.0
- Camera, Temperature & Volume Information Overlay, One-Button Recording, PIP Live View
- Seamless CD Swapping
- Live Bookmarking
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)
- ONVIF Version 2.3 Compliance

System Connection



System	
Main Processor	Dual-Core Embedded Processor
Operating System	Embedded LINUX
Audio/Video	
IP Camera Input	4 Channels [Supports PoE]
Audio Input	2 Channels [Aviation Port]
Audio Output	1 Channel [Standard 3.5mm Audio Port]
Two-way Talk	1 Channel In, 1 Channel Out [Standard 3.5mm Audio Port]
Display	
Interface	1 HDMI, 1 VGA, 1 LCD
Resolution	1920×1080, 1280×1024, 1024×768, 800×600
Display Split	1/4 / PIP
OSD	Camera Title, Time, Video Loss, Camera Lock, Motion Detection, Recording
Recording	
A/V Compression	H.264/G.711
Resolution	1080p [1920×1080] ~ D1 [704×480]
Record Rate	100/120fps@1080p
Bit Rate	48 ~ 8192Kbps
Record Mode	Manual, Continuous, Motion Detection, Alarm
Record Interval	Pre-record: 1~30 sec, Post-record: 10~300 sec
Video Detection & Alarm	
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup
Video Detection	Motion Detection, Video Loss, Camera Masking
Alarm I/O	2 Channels In, 2 Channels Out
Playback & Backup	
Sync Playback	1/4
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom
Backup Mode	USB / Network / CD/DVD
Network	
Ethernet	RJ-45 Port [10/100/1000M]
PoE	4 Ports
Network Functions	HTTP, IPv4, TCP/IP, RTSP, UDP, NTP, DHCP, DNS, DDNS, IP Filter
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]
Storage	
Internal HDD	1 HDD [2.5 inch]
Internal DVD	2 DVD Drives
Auxiliary Ports	
USB	3 Ports [USB 2.0]
RS232	1 Port [for PC Communication & Keyboard]
RS485	1 Port [for PTZ Control]
General	
Power Supply	DC 19V/4.74A, <40W Power Consumption [with HDD]
Working Environment	-10°C ~ +55°C / 10%~90%RH / 86~106kpa
Dimension [W×D×H]	340mm × 240mm × 48mm
Weight	5.5kg~6.5kg [with HDD and DVD Drives]



Accessories

Add-ons & Mounts

IP Radios

IPR-3KM-5G-300

IPR-5KM-5G-450

IPR-200KM-5G-500

IPR-100KM-5G-1200

PTZ Keyboards

X5-PTZ-KB

X5S-PTZ-KB-IP

X5S-PTZ-KB-IP-TS

Other Accessories

X5S-VE-1CH/2CH/4CH

KVM-EXT-USB

MON-27-LCD

Mounting Accessories

Wall Mount Brackets	111
Ceiling Mount Brackets	112
Extensions & Adapters	113
Junction Boxes	114
Junction & Power Boxes	115
Pole & Corner Mount Brackets	116



5GHz 300Mbps 13dBi Outdoor CPE

Features

- Built-in 13dBi 2x2 dual-polarized directional MIMO antenna
- Adjustable transmission power from 0 to 27dBm/500mw
- Optimized for more than 15km long range wireless transmission
- TDMA [Time-Division-Multiple-Access] technology improves product performance in throughput, capacity and latency performance, ideal for PTMP applications
- Centralized Management System Software
- AP / Client / Repeater / AP Router / AP Client Router (WISP) operation modes
- Passive PoE Adapter supports up to 60m/200ft Power over Ethernet deployment and allows the device to be reset remotely

System	
Processor	Qualcomm Atheros Enterprise AR9350B 560MHz CPU, MIPS 74Kc
Memory	64MB DDR2 RAM, 8MB Flash
Antenna	
Gain	13 dBi
Beamwidth	45° [H-Plane] / 30° [E-Plane]
Max. VSWR	1.6
Polarity	Horizontal/Vertical
Cross-Polarity Isolation	> 18 dB
Wireless	
Wireless Standards	IEEE 802.11a/n
Proprietary Protocol	TDMA Mode
Frequency Range*	5.15 ~ 5.85GHz
Wireless Speed	Up to 300Mbps [40MHz,Dynamic] Up to 144.4Mbps [20MHz,Dynamic] Up to 72.2Mbps [10MHz,Dynamic] Up to 36.1Mbps [5MHz,Dynamic]
Max Transmit Power*	27dBm/500mw [Adjustable power by 1dBm]
Operation Modes	AP / Client / Bridge / Repeater / AP Router Mode / AP Client Router [WISP Client] Mode
Wireless Security	WPA/WPA2, WPA-PSK/WPA2-PSK [AES/TKIP] Encryption, 64/128/152-bit WEP Encryption
Interfaces	
Ethernet	1 Passive PoE In, 1 Passive PoE Passthrough
Grounding Terminal	Yes
Reset Button	Yes
General	
Power Supply	Passive Power over Ethernet, 16~27VDC
Power Consumption	< 11W
ESD Protection	15KV
Lightning Protection	6000V
Ingress Protection	IPX5 Waterproof Certification
Certification	CE, FCC, RoHS, IPX5
Operating Temperature	-30° C ~ +70° C
Operating Humidity	10% ~ 95% Noncondensing
Dimensions	224mm × 79mm × 60mm
Mount	Pole-Mount [Straps Included]
Weight	860g

*May vary depending on the limitations of the countries in which the device is used.



High-Performance Bridge

Features

- Uniform Beamwidth Maximizes Noise Immunity
- Innovative Mechanical Design
- High-Speed Processor for Superior Performance
- Intelligent QoS
- Scalability
- All-in-one Design
- Quick and Easy Installation
- Convenient Alignment

System & Compliance	
Processor	Atheros MIPS 74Kc, 560 MHz
Memory	64 MB DDR2, 8 MB Flash
Networking Interface	(1) 10/100 Ethernet Port
Wireless Approvals	FCC, IC, CE
RoHS Compliance	Yes
LEDs	Power, LAN, WLAN
Signal Strength LEDs	Software-Adjustable to Correspond to Custom RSSI Levels
Channel Sizes	5/8/10/20/30/40 MHz
Polarization	Dual Linear
Gain	19 dBi
Operating Frequency	Worldwide: 5170 - 5875 MHz USA: 5725 - 5850 MHz
Environmental	
Wind Loading	45.4 N @ 200 km/h [10.2 lbf @ 125 mph]
Wind Survivability	200 km/h [125 mph]
Enclosure Outdoor	UV Stabilized Plastic
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV
Operating Temperature	-40°C ~ +70°C
Operating Humidity	5% - 95% Noncondensing
Salt Fog Test	IEC 68-2-11 [ASTM B117], Equivalent: MIL-STD-810 G Method 509.5
Vibration Test	IEC 68-2-6
Temperature Shock Test	IEC 68-2-14
UV Test	IEC 68-2-5 at 40°C, Equivalent: ETS 300 019-1-4
Wind-Driven Rain Test	ETS 300 019-1-4, Equivalent: MIL-STD-810 G Method 506.5
General	
Power Supply	24V, 0.5A PoE
Power Consumption	8W
Dimensions	Ø189mm × 125mm
Mount	Pole-Mount [Kit Included], Wall-Mount
Weight	530g



5 GHz Carrier Backhaul Radio w/5GHz Slant 45 Antenna

Radio Features

- High-Performance Embedded Processor
- Up to 500+ Mbps Real Throughput, Up to 200+ km Range
- Full-band 5GHz Spectrum Certification with DFS Approval
- Channel Width Flexibility [10/20/30/40/50 MHz] for optimal operation in unlicensed bands
- GPS Synchronization
- Clean Power Output

Antenna Features

- Powerful Performance for Long-Range Links
- Robust Design and Construction for Outdoor Use
- Worldwide License-Free Operation in 5 GHz frequencies

System	
Processor	High-Performance Embedded Processor
Maximum Throughput*	500+ Mbps
Maximum Range*	200+ km
Encryption	128-bit AES
OS	airOS F
Wireless Modes	Master/Slave
Radio	
Operating Frequency	5150-5925 MHz [Dependent on Regulatory Region]
Max. Conducted TX Power	26 dBm [Dependent on Regulatory Region]
Frequency Accuracy	± 2.5 ppm without GPS Synchronization ± 0.2 ppm with GPS Synchronization
Channel Bandwidth	10/20/30/40/50 MHz Selectable Programmable Uplink and Downlink Duty Cycles
Interfaces	
Data Port	10/100/1000 Ethernet Port
Management Port	10/100 Ethernet Port
RF Connectors	[2] RP-SMA Weatherproof [CH0, CH1] [1] SMA Weatherproof [GPS]
GPS Antenna	External, Magnetic Base
General	
Power Supply	24V, 1A PoE Gigabit Adapter (Included)
Power Method	Passive Power over Ethernet
Operating Temperature	-40°C ~ 55°C
Certifications	DFS Certified FCC Part 15.407 CE EN 302502 v1.2.1, EN 301 893 v1.7.1
Dimensions	224mm × 82mm × 48mm
Mount	GPS Pole Mount (Included), Rocket Mount Compatible
Weight	350g

*Throughput and range values may vary depending on the environmental conditions.

Antenna Characteristics	
Frequency Range	5.1 ~ 5.9 GHz
Gain	23 dBi
+ 45° Beamwidth	10° [3 dB]
- 45° Beamwidth	10° [3 dB]
Front-to-Back Ratio	30 dB
Max. VSWR	1.5:1
Polarity	Dual-Linear
Cross-Polarity Isolation	> 35 dB
ETSI Specification	EN 302 326 DN2
Environmental	
Wind Loading	190 N @ 200 km/h [43 lbf @ 125 mph]
Wind Survivability	200 km/h [125 mph]
General	
Voltage Range	42-58VDC
Operating Temperature	-40°C ~ +55°C
Certifications	CE, FCC, IC
Dimensions	ø378mm × 290mm
Mount	Universal Pole Mount, airFiber X Radio Bracket, and Weatherproof RF Connectors (included)
Weight	3.4kg [with mount]

*Throughput and range values may vary depending on the environmental conditions.



Full-Duplex Point-to-Point Gigabit Radio

Features

- High-Performance Embedded Processor
- High Performance Wireless Backhaul
- Extreme Long-Range Links
- Worldwide License-Free Operation in 5 GHz frequencies
- Gigabit Performance at 1.2+ Gbps
- Innovative 2x2 MIMO Dual-Antenna Architecture
- Radio Alignment Display for easy installations

System	
Processor	High-Performance Embedded Processor
Maximum Throughput*	1.2+ Gbps
Maximum Range*	100+ km (Dependent on Regulatory Region)
Packets per Second	1+ Million
Encryption	128-Bit AES
Uplink/Downlink Ratio	50% Fixed
Radio Frame Synchronization	GPS
Dynamic Frequency Selection	CE, FCC/IC
Networking Interface	
Data Port	10/100/1000 Ethernet Port
Management Port	10/100 Ethernet Port
Radio	
Operating Frequency	5470–5950 MHz (Dependent on Regulatory Region)
Frequency Accuracy	±2.5 ppm without GPS Synchronization ±0.2 ppm with GPS Synchronization
Channel Bandwidth	10/20/30/40/50 MHz
Modulation	1024QAM MIMO 256QAM MIMO 64QAM MIMO 16QAM MIMO QPSK MIMO ½ Rate QPSK xRT ¼ Rate QPSK xRT
Integrated Split Antenna	
TX Gain	23 dBi
RX Gain	23 dBi
Beamwidth	6°
Front-to-Back Ratio	70 dB
Polarity	Dual-Slant Polarization
Cross-Polarity Isolation	> 28 dB
Interfaces	
Data Port	10/100/1000 Ethernet Port
Management Port	10/100 Ethernet Port
Auxiliary Port	RJ-12, Alignment Tone Port
General	
Power Supply	50V, 1.2A PoE GigE Adapter (Included)
Power Consumption	<40W
Power Method	Passive Power over Ethernet
Voltage Range	42-58VDC
Operating Temperature	-40°C ~ +55°C
Certifications	CE, FCC, IC
Dimensions	940mm × 470mm × 282mm
Mount	Pole Mount Kit (included)
Weight	16kg [with mount]

*Throughput and range values may vary depending on the environmental conditions.



System	
Joystick	3D
Control Mode	RS-485 Half-duplex Mode, Baud Rate: 1200 ~ 19200bps
Max Cable Length	1200m
Display	
LCD Screen	128mmx64mm
General	
Power Supply	DC12V
Working Temperature	-10°C ~ +55°C
Working Humidity	10% ~ 90%
Dimension (W×D×H)	360mm × 200mm × 108mm
Weight	3.3kg

X5 NVR PTZ Keyboard Controller

Features

- X5 Synergy VMS Compatible
- Control Software and PTZ Functions
- 3D Joystick



General	
Keyboard Panel	Electromechanical
Joystick	3-axis, vector-solving, w/twisting, return to-center head
Connector	RJ-45, RS232, RS485, RS422, USB
Communication	Direct Mode, Network Mode
Control	Direct Mode
	Interface: RS232/RS485
	DVR Protocol: DH2 PTZ Protocol: PELCO-D/PELCO-P/PELCO-D1
Network Mode	Interface: RJ-45
	DVR/NVR/IP Camera
General	
Power Adapter	Input 100V~240V 50Hz/60Hz, Output DC12V/1000mA
Power Consumption	5W
Working Temperature	-10°C ~ +55°C
Working Humidity	10% ~ 90%
Atmosphere Pressure	86kpa ~ 106kpa
Dimension (W×D×H)	330mm × 160mm × 38mm [excluding joystick]
Weight	2.5kg

X5S IP PTZ/DVR/NVR Keyboard Controller

Features

- Control & Display:
 - Standalone NVR/DVR
 - IP PTZ Cameras
 - IP Cameras
- RS232, RS422, RS485, USB & Network Connections
- Three Dimensional Joystick PTZ Control
- Supports Video Matrix Display
- Preset Position, Auto Scan, Auto Pan, Auto Tour & Pattern Control
- On-Screen Menu & User Operation Procedure Tips

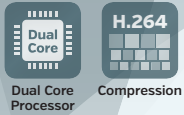


X5S IP PTZ/DVR/NVR Keyboard Controller

Features

- Control & Display:
 - Standalone NVR/DVR
 - IP PTZ Cameras
 - IP Cameras
- RS232, RS485 & Network Connections
- Four Dimensional Joystick PTZ Control
- Full HD 1080p Live View
- HDMI & VGA Sync Output
- Snapshot and Recording to U-Disk
- Supports Video Matrix Display
- Supports Bi-Directional Voice Communication
- Preset Position, Auto Scan, Auto Pan, Auto Tour & Pattern Control
- Touch Screen Operation
- Integrated WiFi

System		
Main Processor	Industrial Embedded Microprocessor	
Operating System	Embedded LINUX	
Audio		
Compression	G.711A	
Output	1 Channel Out	
Voice Communication	1 Channel In, 1 Channel Out	
Display		
Display Split	1/4/8/9/16	
Resolution	1080p/720p/D1/HD1/BC1F/C1F/QC1F	
Screen	10.2" Touch Screen LCD	
General		
Keyboard Panel	Electromechanical	
Joystick	4-axis [Zoom, Focus, Iris]	
Control	Output	Supports Matrix Display, HDMI/VGA output
	Direct Mode	Interface: 1 RS232/ 2 RS485 PTZ Protocol: PELCO-D/PELCO-P/PELCO-D1
	Network Mode	Interface: RJ45 [1 RJ-45 port [10/100/1000M]] / WiFi DVR/NVR/IP Camera
Max Remote Users	20 [each can manage up to 256 unit devices]	
USB Interface	2 Ports [for Mouse Control & Backup]	
General		
Power Supply	DC12V	
Power Consumption	5W	
Working Temperature	-10°C ~ +55°C	
Working Humidity	10% ~ 90%	
Atmosphere Pressure	86kpa ~ 106kpa	
Dimension [W×D×H]	480mm × 240mm × 87mm [excluding joystick]	
Weight	4.5kg	

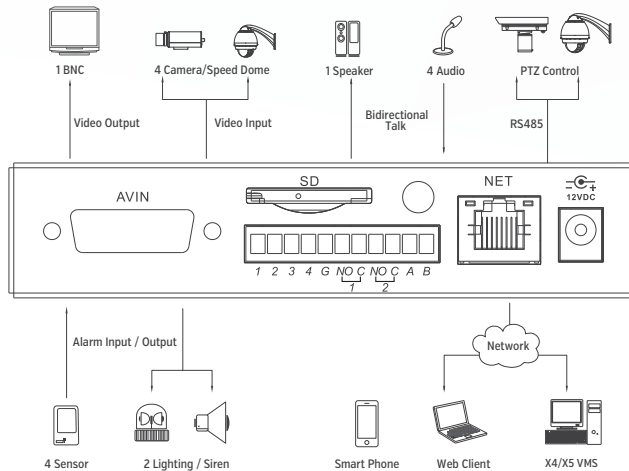


X5S 1/2/4 Channel Video Encoder

Features

- Converts Analog Video Signal to Digital
- 1/2/4 Channel Video And Audio Inputs
- H.264 Video Compression and JPEG Image Capture
- Full Channel@D1 (4CIF) Realtime Encoding
- SD Memory
- Remote Monitoring with iPhone, iPad or PC (Internet Browser, ARMS Pro/HD, X4, X5 Synergy VMS)

System Connection



System		
Main Processor	Dual-Core Embedded Processor	
Operating System	Embedded LINUX	
Video		
Input	1 Channel	
Output	1 TV Output, BNC	
Standards	NTSC/PAL	
Audio		
Input	1 Channel	
Output	1 Channel	
Two-way Talk	1 Channel In, 1 Channel Out	
Display		
Resolution	1280×1024, 1280×720, 1024×768, 800×600	
Display Split	1	
Privacy Masking	4 Rectangular Zones per Camera	
Recording		
A/V Compression	H.264/G.711	
Resolution	D1/CIF/QCIF/VGA/QVGA	
Record Rate	Main Stream	D1/BCIF/CIF/QCIF[1~25/30fps]
	Extra Stream	D1/BCIF/CIF/QCIF
Digital Watermark	Supported	
Video Detection & Alarm		
Event Triggering	Recording, Intelligent PTZ Positioning, Fullscreen Popup, Alarm Out, Push Video, Buzzer, Message Popup	
Video Detection	Motion Detection, Video Loss, Camera Masking	
Alarm I/O	4 Channels In, 2 Channels Out	
Playback & Backup		
Search Mode	Time/Date, Timeline Search, Alarm, Motion Detection	
Playback Functions	Play, Pause, Stop, Rewind, Fast Forward, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Easy Backup, Digital Zoom	
Backup Mode	Network	
Network		
Ethernet	RJ-45 (10/100Base-T)	
Network Functions	TCP/IP, PPPoE, DDNS, IP Filter, DNS, NTP, DHCP	
Remote Access	iPhone, iPad, Android, PC [ARMS Pro/HD, Internet Browser, X4, X5 Synergy VMS]	
Storage		
Memory Slot	SD Card (Max 32GB)	
Auxiliary Ports		
USB	1 Port	
RS485	1 Port (for PTZ Control)	
General		
Power Supply	DC12V / 3A	
Power Consumption	<5W	
Working Environment	-30°C ~ +50°C / 10%~90% / 86kpa~106kpa	
Dimension (W×D×H)	163mm × 137mm × 30mm	
Weight	1.0Kg	



USB VGA KVM Console Extender over CAT5 UTP

Features

- Control a server, computer over CAT5 up to 150m/500ft away
- PS/2 and USB host PCs supported via the appropriate PS2 or USB KVM cable (USB style included)
- Use with a single computer or connect to an existing KVM switch
- Easy Installation using industry-standard UTP network cable
- Supports most combo keyboard and mouse sets (including Wireless)
- Intuitive Hotkey Commands
- Supports auto-switching between host and remote users or dedicated control

System	
Audio	No
KVM Ports	2
Multi-Monitor	No
PC Interface	USB
PC Video Type	VGA
Rack-Mountable	No
IP Control	No
Max Transfer Distance	150 m (492 ft)
Supported Resolutions	1280 x 1024 @ 100m/300' 1024 x 768 @ 150m/500'
Interfaces	
Console Interfaces	1 VGA, 2 USB A
Host Connectors	1 VGA
Other Interfaces	1 RJ-45
Power	
Center Tip Polarity	Positive
Input Current	0.2A
Input Voltage	110 ~ 240 AC
Output Current	0.6A
Output Voltage	9 DC
Plug Type	M
Power Source	AC Adapter Included
General	
Working Temperature	0°C ~ +40°C
Working Humidity	0% ~ 80%
Dimension (W×D×H)	155mm × 75mm × 20mm
Weight	300g



Resolution



HDMI Input

27" Full HD IPS LED Monitor

Features

- IPS Technology
- Full HD 1080p
- HDMI Input
- Energy Star® Qualified

Panel Specifications	
Screen Size	27" diagonal
Panel Type	IPS
Aspect Ratio	16:9
Resolution	1920×1080
Color Gamut	68% (CIE1976)
Brightness	200 cd/m2 (typical)
Contrast Ratio	1000:1 (original)
Response Time	5ms (typical)
Viewing Angle	170/160 (CR≥10)
Surface Treatment	AG, 3H
Inputs/Outputs	
HDMI	1 Port
VGA	1 Port
General	
Power Supply	100~240V, 50/60Hz
Power Consumption	27W
Dimensions (W×D×H)	642mm × 47mm × 390mm without stand, 642mm × 254mm × 485mm with stand
Weight	4.2kg without stand, 4.8kg with stand



ARMS PRO/HD iPhone, iPad, Android Remote Surveillance Apps

Features

- Live preview with main stream and extra stream
- Remote Color Setting adjustments
- Alarm Output Control allows for remote control of alarms, home appliances, lights, doors, thermostats, etc.
- Instant video recording to your phone or tablet
- HDD status shows DVR/NVR HDD usage
- Import custom E-map images for easy camera organization
- Push alerts for motion detection, sensors and alarm events
- QR Code scanning for easy device configuration



Wall Mount Brackets

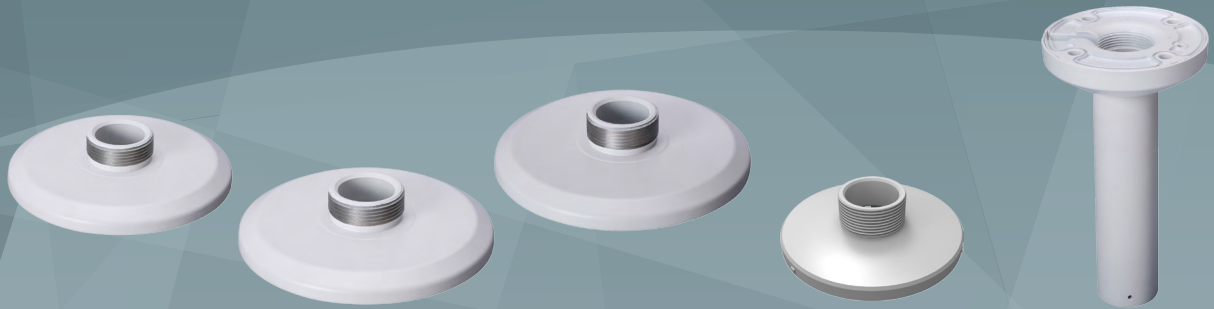


Model	WM-200	WM-201	WM-300	WM-302	WM-303
Material	Aluminum & ABS	Aluminum	Aluminum	Aluminum	Aluminum
Dimension	120mm×74mm×160mm	155mm×160mm×251mm	160mm×160mm×228mm	134mm×134mm×188mm	115mm×160mm×255mm
Pipe Thread	N/A	N/A	G 1½"	G 1½" M20(G ½")	G 1½"
Weight	0.35kg	0.65kg	0.5kg	0.7kg	0.7kg
Load Bearing	1.0kg	2.0kg	4.0kg	3.0kg	7.0kg
Operating Temperature	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C
Humidity	0~90% RH	0~90% RH	0~90% RH	0~90% RH	0~90% RH
Color	White	White	White	White	White

Dimensions	WM-200	WM-201	WM-300	WM-302	WM-303

Application	WM-200	WM-201	WM-300	WM-302	WM-303

Ceiling Mount Brackets



Model	CLM-100	CLM-101	CLM-102	CLM-103	CLM-300
Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum & PC
Dimension	Ø151mm×37mm	Ø159mm×35mm	Ø169mm×37mm	Ø133mm×37mm	Ø134mm×236mm
Pipe Thread	G 1½"	G 1½"	G 1½"	G 1½"	G 1½"
Weight	0.2kg	0.23kg	0.25kg	0.13kg	0.75kg
Load Bearing	N/A	N/A	N/A	N/A	7.0kg
Operating Temperature	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C
Humidity	0~90% RH	0~90% RH	0~90% RH	0~90% RH	0~90% RH
Color	White	White	White	White	White
Dimensions					
Application					

Extensions & Adapters



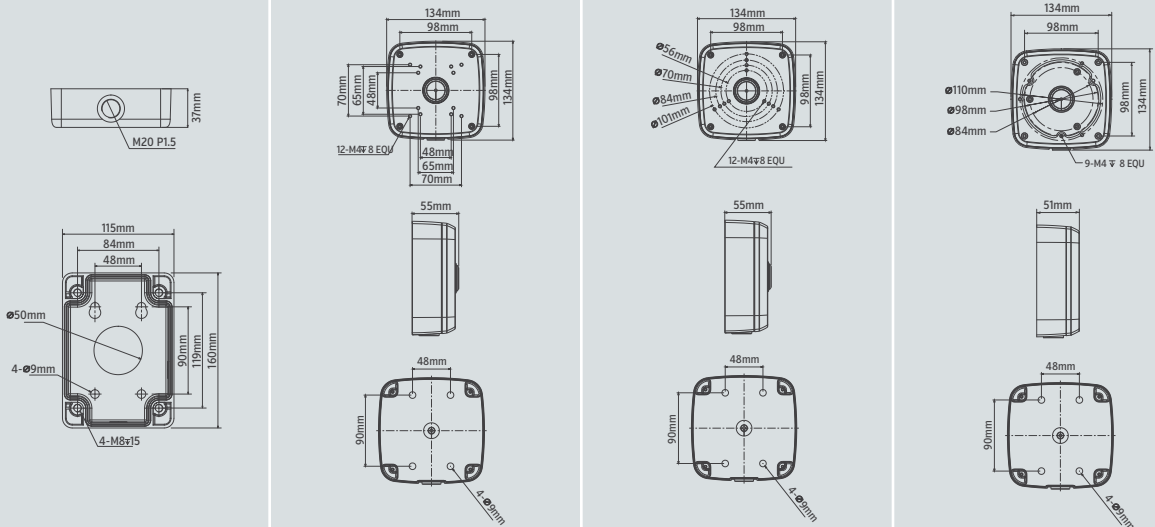
Model	EP-112	EP-113	ADP-110	ADP-111	ADP-114
Material	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Dimension	ø53mm×220mm	ø53mm×420mm	ø59mm×53mm	ø60mm×48mm	ø60mm×50mm
Pipe Thread	G 1½"	G 1½"	G 1½"	G 1½"	G 1½"
Weight	0.5kg	1.0kg	0.2kg	0.23kg	0.25kg
Operating Temperature	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C
Humidity	0~90% RH	0~90% RH	0~90% RH	0~90% RH	0~90% RH
Color	White	White	White	White	White
Dimensions					
Application					

Junction Boxes

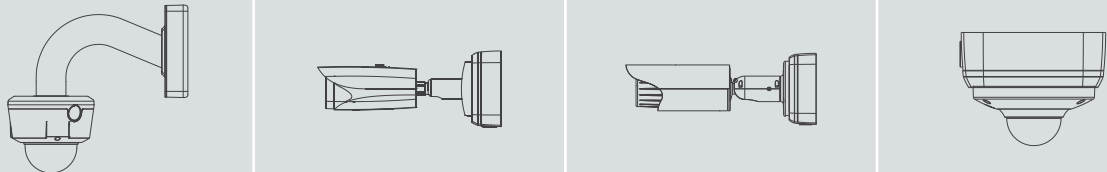


Model	JB-120	JB-121	JB-122	JB-123
Material	Aluminum	Aluminum	Aluminum	Aluminum
Dimension	115mm×160mm×37mm	134mm×134mm×55mm	134mm×134mm×55mm	134mm×134mm×51mm
Pipe Thread	M20 (G ½")	M20 (G ½")	M20 (G ½")	M20 (G ½")
Weight	0.5kg	0.5kg	0.5kg	0.6kg
Load Bearing	7.0kg	3.0kg	3.0kg	3.0kg
Operating Temperature	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C
Humidity	0~90% RH	0~90% RH	0~90% RH	0~90% RH
Color	White	White	White	White

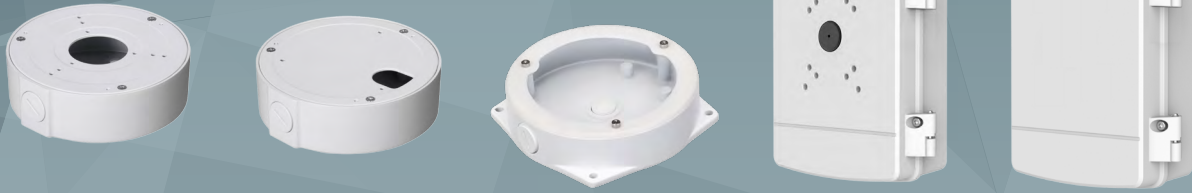
Dimensions



Application

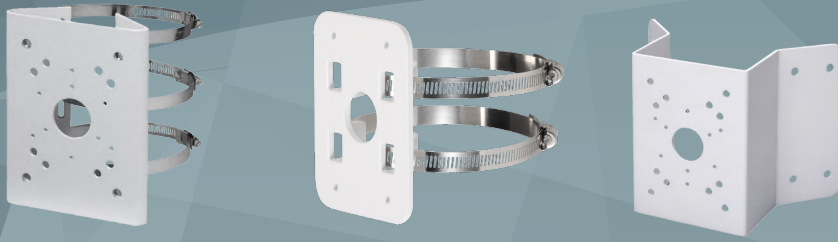


Junction & Power Boxes



Model	JB-130	JB-131	JB-132	JB-140	JB-141
Material	Aluminum & SECC	Aluminum & SECC	Aluminum	Aluminum	Aluminum
Dimension	Ø138mm×42mm	Ø138mm×42mm	155mm×155mm×39mm	297mm×248mm×107mm	297mm×248mm×107mm
Pipe Thread	M20 (G ½")	M20 (G ½")	M20 (G ½")	M20 (G ½")	M20 (G ½")
Weight	0.4kg	0.4kg	0.6kg	1.7kg	1.7kg
Load Bearing	3.0kg	3.0kg	3.0kg	8.0kg	8.0kg
Operating Temperature	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C
Humidity	0~90% RH	0~90% RH	0~90% RH	0~90% RH	0~90% RH
Color	White	White	White	White	White
Dimensions					
Application					

Pole & Corner Mount Brackets



Model	PM-150	PM-152	CM-151
Material	Aluminum	Aluminum	Aluminum
Dimension	131mm×170mm×45mm	118mm×87mm×21mm	243mm×170mm×138mm
Mast Diameter	∅80-130mm	∅80-130mm	N/A
Weight	1.0kg	0.2kg	1.7 kg
Load Bearing	10.0kg	3.0kg	10.0kg
Operating Temperature	-40°C ~60°C	-40°C ~60°C	-40°C ~60°C
Humidity	0~90% RH	0~90% RH	0~90% RH
Color	White	White	White
Dimensions			
Application			