



ASCENDENT
TECHNOLOGY GROUP



Rapid Eye V550

Active Tracking Surveillance System

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What is Rapid Eye?

Rapid Eye is a tracking surveillance system with two cameras and a mirror mechanism design. The camera can cover a very large area ($75^{\circ} \times 110$ meters) and provide crystal clear images (160 pixel/meter) at the same time, making it equivalent to a 470 Mega Pixel camera.

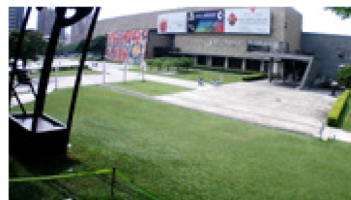
How Rapid Eye Works

(a) There are two cameras inside each Rapid Eye, a wide angle camera and a telescopic camera

(b) The wide angle camera first takes the panoramic image.

(c) Built-in DSP then analyzes the image and locates the targets.

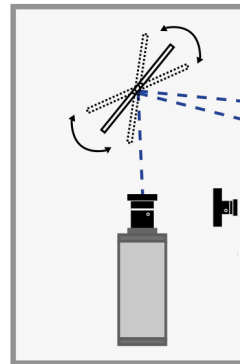
(d) The mirror rotates the telescopic camera to acquire detailed view of the target.



Wide angle lens



Telescopic lens

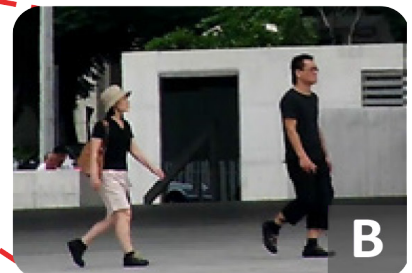
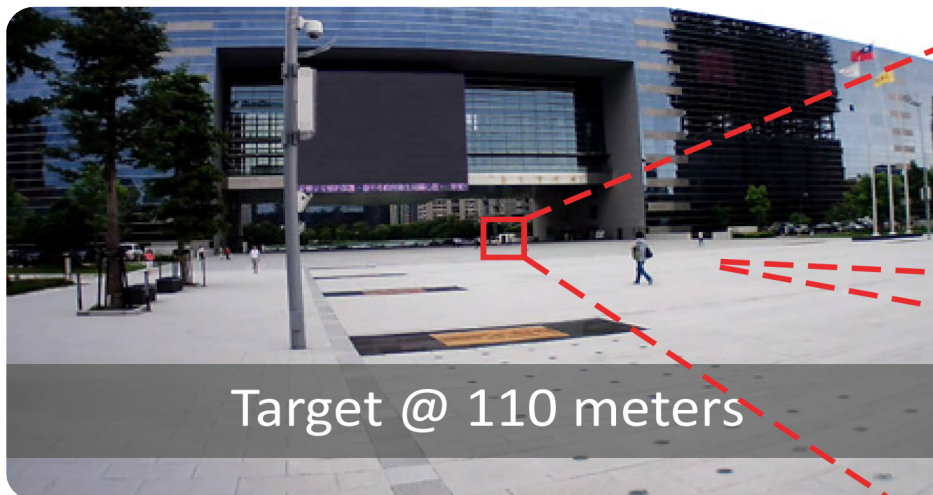


Mirror Mechanism

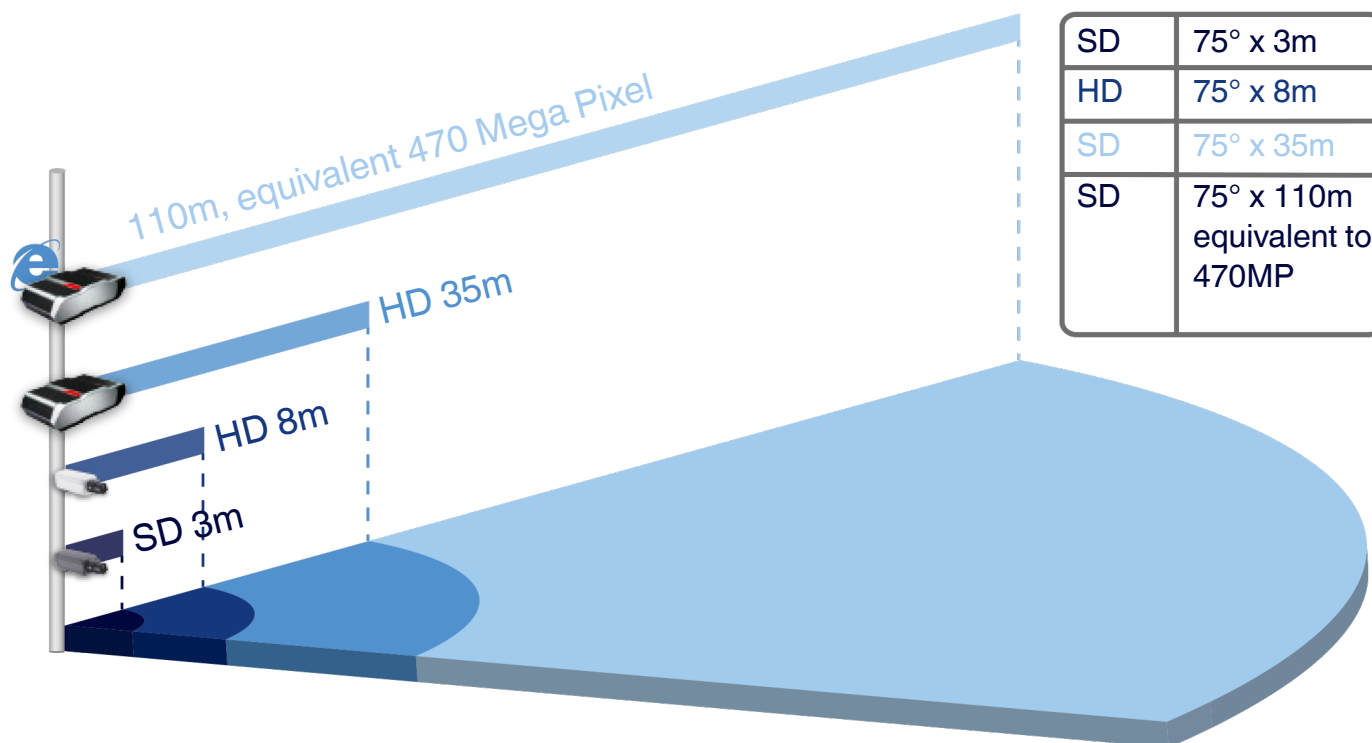


The panoramic process takes only 0.12 of a second.

Resolution Comparison



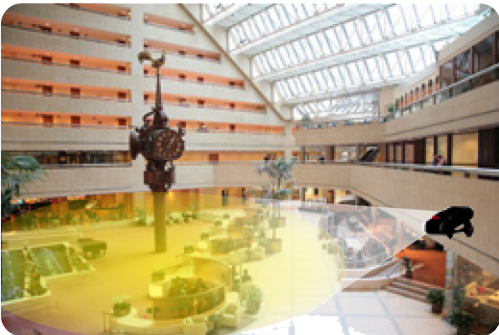
Covered Area



Cover 75° x 110m with 160 pixel/meter resolution
Equivalent to 470 Mega Pixel

Application Cases

- Airport
- Luxury Hotel
- Railway Station
- School
- Shopping Center
- Town Square



Specifications



Rapid Eye

- Full HD resolution
- Covers 75°x110m with 160 pixels/meter
- Equivalent 470 Mega Pixel

Number of Cameras	Two Full HD Network Cameras, one w/ fixed wide angle lens, one adjustable telescopic
Tracking Speed	Multiple targets tracking at 5 targets/second
Wide Angle Lens	4mm, 6mm, 8mm
Telescopic Lens	5~50mm Zoom
Tracking Mechanism	Mirror Reflecting Mechanism
Sensor	1/2.7" CMOS sensor in 1920 x 1080 resolution
Compression	H.264, MJPEG & MPEG-4
Frame Rates	H.264: Up to 30 fps at 1920 x 1080 MPEG-4: Up to 30 fps at 1280 x 720; Up to 27 fps at 1920 x 1080 MJPEG: Up to 30 fps at 1920 x 1080
Video Interface	BNC connector for video output NTSC/PAL video output switch
Network	10/100 Mbps Ethernet, RJ-45
Support Protocol	Onvif support IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DNSS, PPPoE, CoS, QoS, SNMP and 802.1x
On-board Storage	Sd/SDHC card slot
IR Module	High power infrared LED (8W)
IR Module Circuit Board	Aluminum PCB for fast heat dissipation
Heater	PTC Heater conductor
Construction	Aluminum casing with weather-proof coating
Operational Temperature	-20°C ~ +50°C (-4°F ~ +122°F)
Operational Humidity	10% ~ 75% RH
Storage Temperature	-40°C ~ +60°C (-40°F ~ +140°F)
Environmental Protection	IP 66
Dimension	442(W) x 140(H) x 277(D) mm (17.4 x 5.5 x 10.9 inches)
Weight	6.2Kgs
Power Supply	AC 100~240 1.3A or AC24V 4A