# X5 Synergy

Video Management Solution

Ascendent's X5 Synergy software creates a true hybrid sur-veillance system by utilizing the advantages of Analog, SDI, Megapixel, and IP in a unified platform for unparalleled performance and expandability.
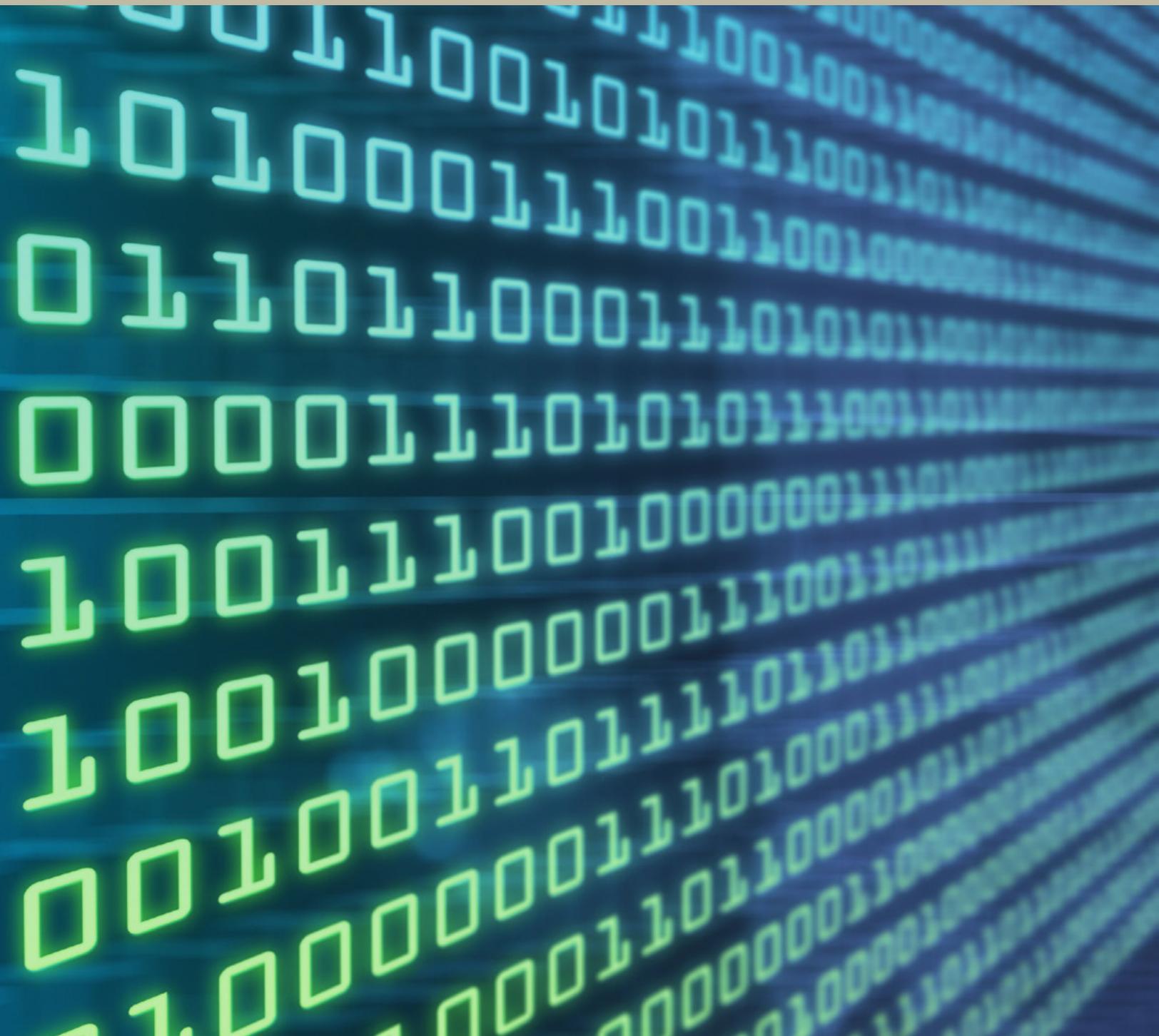
Experience The Technology of Tomorrow

The X5 DVR Series offers the latest technology on the market, providing you with a future-proof surveillance system. Reliability and complete customer satisfaction has given our products their trusted reputation world-wide. Our diverse lineup will ensure that you get the perfect system for the job.

IP or Analog... Why Choose?

Ascendent's X5 standalone DVR works as an IP server so that our DVRs convert analog cameras into IP cameras (like IP servers 4/8/16ch) in a U1 or U2 rack mountable case. This enables the best of both technologies; a DVR that works autonomously with on-site storage, playback, and searching that is also a fully functioning IP device that allows video to be distributed over networks and recorded onto NVRs to create an homogeneous solution.

HD-SDI DVR

Scalability and Flexibility

Our standalone PC-DVRs and IP cameras can record at one resolution, stream at another, and manage the amount of data and bandwidth that is used by each camera individually. This gives you the security and reliability of an analog system with the flexibility and interoperability of an IP based system with unlimited expandability by adding 1-64 cameras at a time. The Synergy platform not only manages video but can integrate with cameras, access control, analytics, biometrics, building management, NVR/DVRs, and other third party applications from the leading security providers. The X5 Synergy is the clear choice for professional security integrators.

IP Mini NVR

Intelligent Data Allocation

The advancement and introduction of high-definition video now exceeds the speed capabilities of mechanical storage. While SSDs are fast and capable they are not practical or cost effective for high amounts of storage. The X5 platform integrates features such as Intelligent Data Allocation (IDA) which allows individual cameras to be recorded onto different hard drives. This means that you will not lose frame rate when saving your high-definition video footage. It does all of this without reducing the amount of recording time on each hard drive.

Hybrid PC-Based DVR

Software Architecture

Ascendent's X5 platform uses the latest H.264 compression based on Digital Signal Processor (DSP) technology which results in superior image quality and the elimination of motion blur, sizes are up exponentially smaller than MJPEG. The X5 Synergy programming and architecture, built from the ground up, address the rapid explosion and demand for high-definition on-demand video by taking full advantage of both CPU and GUP processing power via efficient algorithms and advanced processor utilization and throttling. This not only increases reliability and power saving but enables the X5 to record up to an unprecedented 512 video feeds from one server, up to 20 times more than competitors, using the same hardware specs.

Hardware

Ascendent's X5 Synergy uses the latest third-generation Intel Core i7 Processors with 3.9GHz and 13MB of cache built 32NM micro-architecture to deliver the highest CPU processing performance possible. Intel incorporates dynamic new technologies such as Intel Smart Memory Access, Hyper-Threading, and turbo boost which properly allocates system resources for maximum reliability and performance. Ascendent also uses the latest dedicated video cards with GPU clock speeds to 1100MHz to drive video analytics, display, and distribute high-definition video to multiple displays without taxing the processor (CPU) recourses. This allows for higher resolutions, more cameras, and video analytics. This advanced software architecture working in tandem with the latest hardware makes the X5 an engineering masterpiece.

Uncompromising Reliability

Ascendent uses custom-built PCs with the most robust hardware components available. Ascendent has a number of optional customizations to ensure absolute performance such as Raid 6 storage, solid state drives, dual power supplies, extreme cooling, and hot swappable components for on-site repair with continuous operation for mission critical applications.
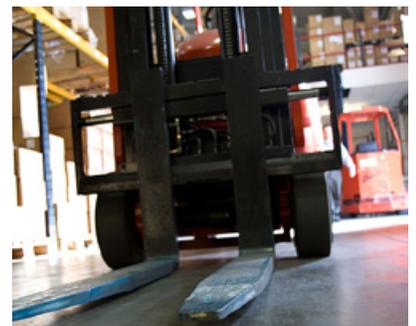
We take full advantage of prior security investments and existing wiring infrastructures while offering the best-of-breed technology creating a cost effective long term solution to suit the needs of small business and global enterprises.

With today's growing security needs the one-size-fits-all approach no longer works. Ascendent believes every customer represents their own unique challenges and requirements and we offer customization to suit any application.

Customized Third-Party Integration

The X5 Synergy is designed to integrate with many of the leading video IP manufactures and is compliant with industry standards protocols such as RTSP and HTTP, industry OPC and ONVIF. Ascendent tailors our software to meet the requirements of specific applications, for third-party integration API's and C++ programming to integrate with the X5 platform.

Integration

The X5 Synergy not only works with other video devices but also boasts the ability to integrate with third-party systems such as POS, alarm systems, home automation, and access control to create a unified management platform that goes far beyond just simple video management but is also a unified managment solution for acess control, alarms, POS, home, and industrial automation making the X5 Synergy the clear choice for future thinking integrators.

Video Analytics

Ascendent's Video Analytics (AVA) is a powerful software tool that significantly improves the efficiency of standard video surveillance. It can detect, identify, classify, and track objects in real-time for fully automated video monitoring which reduces the need for human monitoring. With the usage of multicameras, the system has the ability to not only trace the moving object but also zoom it into a certain section after identifying the traced object in the perimeter. This will provide detailed video footage of the traced objects and gives the X5 an extremely high ROI while improving performance.

GPS Tracking

Ascendent recognizes the growing demand for mobile digital surveillance, and has a GPS/GIS module for the X5 that provides vehicle tracking/locating that can be scaled to manage a few vehicles or an entire fleet. Users can monitor their mobile locations through free online services such as Google and Yahoo. Optional integration is available for commercial grade GIS systems and global positioning systems (GPS). This allows the X5 Synergy platform as a link, to achieve real-time fleet tracking, event feedback, and data inquiries with route playback operations.