Protecting Your Assets with Panduit Enterprise Solutions

Enterprise buildings house numerous valuable fixed assets as well as employees. When it comes to security, there should be no compromise – protecting those assets is a top of mind issue for every building owner or facility manager.

Recently, the security industry has taken advantage of the available technology upgrades for Enterprise surveillance to increase security efficiency while meeting often stringent budget requirements.

Previously, the best way to ensure facilities were secure, was to have security officers patrol the building around the clock. After the introduction of closed circuit video cameras in the 1960's, companies were able to reduce security staff and utilize a centralized system to monitor the entire perimeter. This change improved security deployment efficiency, but not enough to satisfy facility managers' requirement for continuous improvement.

PANDUIT®

building a smarter,
  unified business foundation

Connect. Manage. Automate.

Article: Enterprise Networking and Security

Specifically, network-enabled IP cameras can integrate with software packages to provide face-detection, voice recognition, and uninterrupted recording, all of which offer advantages over traditional closed circuit cameras.

- **Face-Detection**
  Real time video is processed by software to determine if everyone in a specific area has authorized access. If a violation is found, the software can pinpoint which camera the image comes from and security personnel can be dispatched to the exact location

- **Voice recognition**
  Microphones embedded in an IP camera provide the capability to capture voices to be used as another way to verify identity. This reduces the possibility of fraudulent ID card usage and provides an additional layer of confirmation

- **Uninterrupted recording**
  The length of magnetic tape determines the length of recording for closed circuit cameras, which is no more than 24 hours. The accessibility of tape rolls also makes data retrieving difficult. With IP cameras, all video is stored digitally in a server and the recording time increases when more hard drives are added. Advanced software can also link video to create a continuous timeline and work around prevent disk limitations

Other benefits of IP cameras include security systems with email alert for intruders or security over camera to enable offices and commercial buildings to operate without guards. Visitors can obtain access through video conferencing and if there is an intrusion, the system sends an email that dispatches law enforcement. In addition, IP cameras with Power over Ethernet (PoE) provide more flexibility in location of deployment, because they do not require a power outlet and can be installed anywhere there is a networking outlet.

Successful implementation of an IP camera depends heavily on the capability and stability of the physical infrastructure. Power and data transmission are the two requirements for the deployment of IP cameras. There are currently two common ways to power IP cameras – traditional DC powered and Power over Ethernet (PoE) powered.

With traditional DC powered IP cameras, power outlets with converters, or centralized power supplies running into the cameras are needed. Also, power cabling, power outlets, converters and power supplies may require extensive maintenance over time. Modern IP cameras use PoE technology as the power source, providing more flexibility in location of deployment because they do not require a power outlet, and can be installed anywhere there is a networking outlet. This technology also may come with a higher per unit price tag; however, this cost is somewhat offset by eliminating the extra cabling required for supplying power.

Article: Enterprise Networking and Security

It is recommended to position monitoring and controlling facilities in a secure, centralized location that houses both building security and facility management personnel to promote more efficient communication in case of emergency. To achieve a secure, central location, determination of the cabling path from all IP cameras and sensors is needed during the design phase of the implementation. A secure cable trough to house the cabling system is critical to minimize the exposure of the cabling system to the environment, thus guaranteeing the longevity of the transmission system.

IP cameras transmit images via copper data cabling, so transmission lines from the cameras need to connect with a consolidation point such as a switch or a controlling station. It is important to specify a high bandwidth, high quality cabling system to maximize the throughout and stability of the image transmitted. It is also important to observe copper cabling reach requirements in order to yield the best image quality, as these images may be used as legal evidence.

As a global leader in the physical enterprise network, Panduit offers integrated solutions to empower an enterprise's IP network to reduce cost and enable better management of data for strategic decision making. As a technology thought leader, Panduit continuously works to develop Enterprise Solutions that align the physical infrastructure to logical network systems. Panduit offers multiple infrastructure cabling solutions to meet your current and future enterprise security IP camera transmission needs. The solutions are categorized in different tier levels to provide the best return on investment.

In order to deploy an effective security system, you must first have a robust, reliable cabling infrastructure. Panduit offers high bandwidth cabling systems for small, medium, and large enterprise applications. The TX5500™ Category 5e Copper Solution is ideal for smaller office environments. For the small to medium enterprise, Panduit offers the TX6000™ Category 6 Copper Solution to handle the additional data bandwidth requirement of current application needs. For the large enterprise, Panduit offers the TX6A™ Category 6A Copper Solution to not only meet all current and future application bandwidth requirements, but also future applications.

In order to securely house the essential infrastructure cabling, Panduit offers a full line of FiberRunner® Routing System, Wyr-Grid® Overhead Cable Tray System, and GridRunner™ Underfloor Cable Routing System products. Additionally, Panduit offers a complete line of DPoE™ Power Patch Panels to efficiently power IP cameras via PoE wherever needed. Panduit solutions offerings are end-to-end complete turnkey systems that include all of the necessary components for your vital network transmission. Components include racks, enclosures, cabinets, jacks, patch cords, cable management, asset management, safety and network security solutions, and surface raceway.

Article: Enterprise Networking and Security

Panduit designs and manufactures all of the above product systems, which meet applicable standards such as RoHs, CE, UL, EIA/TIA and ISO. By developing and implementing the latest manufacturing techniques and processes such as Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) systems and state-of-the-art Rapid Modeling equipment, engineers have the ability to take new product designs from art-to-part in a matter of hours. Additionally, computerized engineering tools such as Finite Element Analysis (FEA) and Mold Flow Analysis assure robust, high quality product designs from the start. Producing innovative products of the highest quality, and at the lowest possible cost, is what drives Panduit to constantly seek out and implement the best design and manufacturing technologies available – a key component to the Enterprise Solution offering.

Together with our Business Partners, Panduit can help your company take the right steps to assess, design, implement, and manage the physical infrastructure for your enterprise network and capture the full value of your IT and technology investments. With a proven reputation for excellence and technology innovation, Panduit is a valuable, trusted partner offering strategic vision and real-world solutions to ensure the success of our customers.

Enhance your physical infrastructure.

Call or visit us online, we can show you how.

Panduit Corp.
World Headquarters
Tinley Park, IL 60487

cs@panduit.com
US and Canada: 800.777.3300
Europe, Middle East, and Africa:
44.20.8601.7200
Latin America: 52.33.3777.6000
Asia Pacific: 65.6305.7575

www.panduit.com

Panduit is a world-class developer and provider of leading-edge solutions that help customers optimize their physical infrastructure through simplification, agility, and operational efficiency. Panduit's Unified Physical Infrastructure[SM] **(UPI)-based solutions give enterprises the capabilities to connect, manage, and automate communications, computing, power, control, and security systems. With eleven worldwide manufacturing facilities and support in over 120 countries, Panduit's world class products, coupled with industry leading technology create a smarter, unified business foundation.**

Unified Physical Infrastructure

PANDUIT®