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What are IP-based security products?

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Security products and services using Internet protocol (IP) are digital systems commonly employed for surveillance, and unlike analog systems can send and receive data via a computer network and the Internet.

When should you look at IP-based security products? If you need high definition surveillance cameras, remote intercom stations, or multi-door access control systems to work together, then you should be looking at IP-based products.

In today's world, everything is moving towards IP as it is a standard of communication that allows devices to speak with other devices over a local or wide area network by standardizing the communication protocols, multiple devices can be interfaced together, allowing larger and more diverse systems to be created. IP-based products allow for more flexibility and can, in the right circumstance, become very cost-effective.

If you are contemplating a new security system or system upgrade, then ask yourself the following: will you need to access your system from outside of your building in the future? Is there a cable or network system currently available that you can utilize? Is there a wireless network system available? Are there multiple buildings to secure? If you answered yes to any of these questions, then maybe IP-based products are right for your security program.

Whether you are designing a small surveillance system, or a large access control system, it is very important to look at all of your options. Take the time to speak with a systems expert. They can save you both time and money. But for the do-it-yourself people, here are some basics to keep in mind.

Surveillance camera systems come in two varieties; analog or digital. Analog systems have been utilized for security applications for many years. They are a cost-effective device hardwired back to a video recorder. Analog cameras use a single-strain coaxial cable. They are available in a limited range of resolutions, from 480 TVL to 600 TVL. Analog cameras are generally used for





observation video only.

Digital cameras are available in higher resolutions from 1.2 Mega-pixels to 30 Mega-pixels. The higher the resolution of the camera, the more detailed the image will be. Digital cameras are used for identification video, license plate recognition and detail images. You can use both analog and digital cameras on the same installation by utilizing a hybrid digital video recorder. Hybrid systems offer more flexibility and are fully expandable. A hybrid system is also the most cost-effective.

Access control systems utilize two protocols as well. The standard is RS-485. This protocol has been available for many years and is considered the industry standard. IP protocol is now available but true IP-based systems have not proven to be as stable as the RS-485 systems.

Many manufacturers have produced Hybrid access systems to allow RS-485 controllers to communicate over networks. Hybrid systems offer more flexibility and are fully expandable.

Many security devices available today come with hybrid IP capabilities. This allows the device to communicate with other devices over network structures. If you are connecting to another device in your building or to a building across town, network IP can be cost-effective.

Purchasing an IP-based security device or system will allow you to grow and expand your system as needed. Wherever possible, IP-based devices should be used to allow more flexibility in design and implementation with your next security system.

Common source security solution providers like G4S can offer their client a distinct advantage by providing a complete "solutions based" approach to IP products and services.

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