Migrating to IP Surveillance —
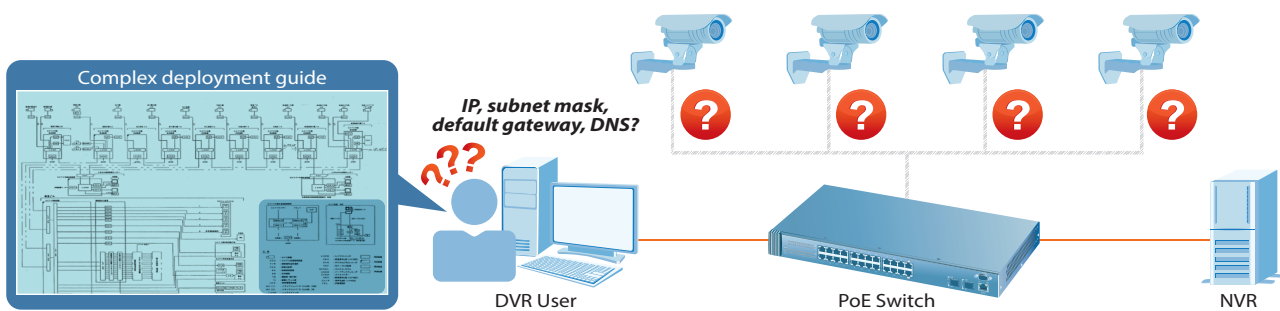# Utilize the Ethernet Network for Surveillance Safety

Today, Ethernet IP (Internet Protocol) is the de facto standard of most business networks. The first benefit of IP networks is that one Ethernet infrastructure can provide multiple services such as data, voice, video and surveillance to save extra efforts laying coaxial cables; and the high-definition IP CAM also calls for high-speed Ethernet services. However, the migration can be a challenge for operators or administrators lacking Ethernet and IP knowledge. Learning about IP camera setup or Ethernet switches can be time-consuming and even intimidating to typical CCTV operators.

ZyXEL's Ethernet Switch solution can be easily deployed and integrated along with the unique ZyXEL One Network technology. With the comprehensive ZyXEL PoE solutions, businesses can easily embrace the advantages of IP surveillance technology.

Challenges of migration from CCTV to IP surveillance

Performance Features of the Solution
- Standard-based PoE, IEEE 802.3af and -at compliant
- Flexible PoE solution — PoE switches and PoE injector
- Power outlet locations are irrelevant in most cases since CAT-5 Ethernet cabling of up to 100 m can be used to provide electricity on the data cabling to a PoE IP camera.
- Less installation, deployment costs and time
- The Smart Connect of ZyXEL One Network simplifies management and trouble shooting

ZyXEL's Complete PoE Solution Consists of a Range of PoE Injectors and PoE Switches
PoE Injector
PoE injection is an economical solution for installations with 2 to 4 PoE elements. The PoE injector is a single-port PoE device in which both power and data can be delivered to other PoE devices (PD) via a single CAT-5 Ethernet cable without extra power supply. The PoE injection is easy to use without any configuration.

PoE Switches
Applying PoE switches to IP surveillance infrastructures is not only economical for cost control since system power and data are transmitted via a CAT-5 Ethernet cable, but it is also convenient for network administrators to maintain and inspect system functionality.

■ High PoE Power Budget

The high power budget support enables ZyXEL PoE switches to comfortably accommodate the power-hungry PDs (Power Devices), like Dome Camera, PTZ (pan–tilt–zoom) camera, video IP phones, and 802.11ac access points which required on a modern IP surveillance network.

■ Flexible Deployment

With one single cable, ZyXEL's PoE switches ease PD deployments especially for locations with hard-to-reach power outlets. In addition, some of the ZyXEL PoE switches feature combo (SFP/RJ-45), SFP or SFP+ ports to make long-distance deployment with better resiliency.

ZyXEL's new small port count PoE switches GS1100-10HP (unmanaged series) and GS1900-10HP (Web-smart managed series) come with eight (8) Gigabit PoE+ ports and two (2) SFP ports. All PoE ports support the PoE Plus standard, which makes GS1100-10HP and GS1900-10HP suitable for high-density surveillance deployments; the

two fiber uplinks also help extending networks to remote locations easily without sacrificing any downlink Gigabit port.

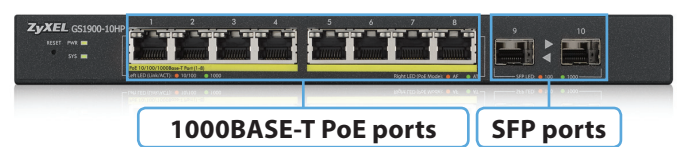### ■ ZyXEL One Network add-on Features

The ZyXEL One Network combines multiple unique, innovative technologies to deliver the easiest, most efficient network setup and initial provision for businesses. The Smart Connect feature of ZyXEL One Network can actively present important information of the attached IP CAM, including its IP & MAC addresses and PoE power consumed, which is essential for troubleshooting. In addition, remote power recycling of the attached IP CAM can also be performed when needed – without the need to go on-site or to figure out how it's connected.

Moreover, ZyXEL One Network also provides the flexibility to be integrated into third-party equipment, like NVR, to significantly improve efficiency of IP surveillance management.
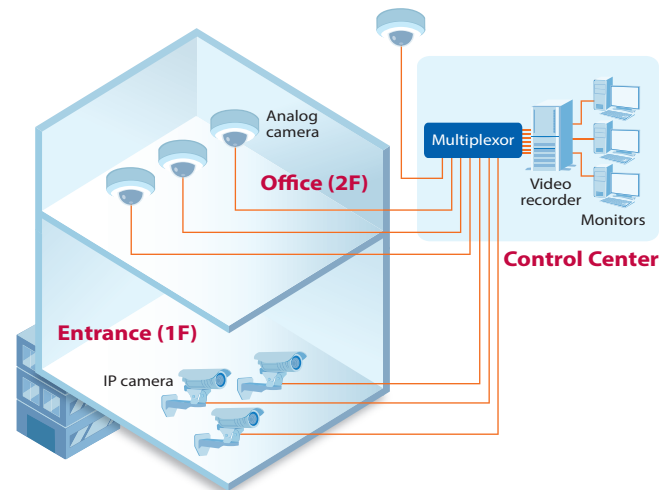
GS1100-10HP

1000BASE-T PoE ports | SFP ports

GS1900-10HP

1000BASE-T PoE ports | SFP ports

Traditional CCTV Surveillance

IP-based Video Surveillance