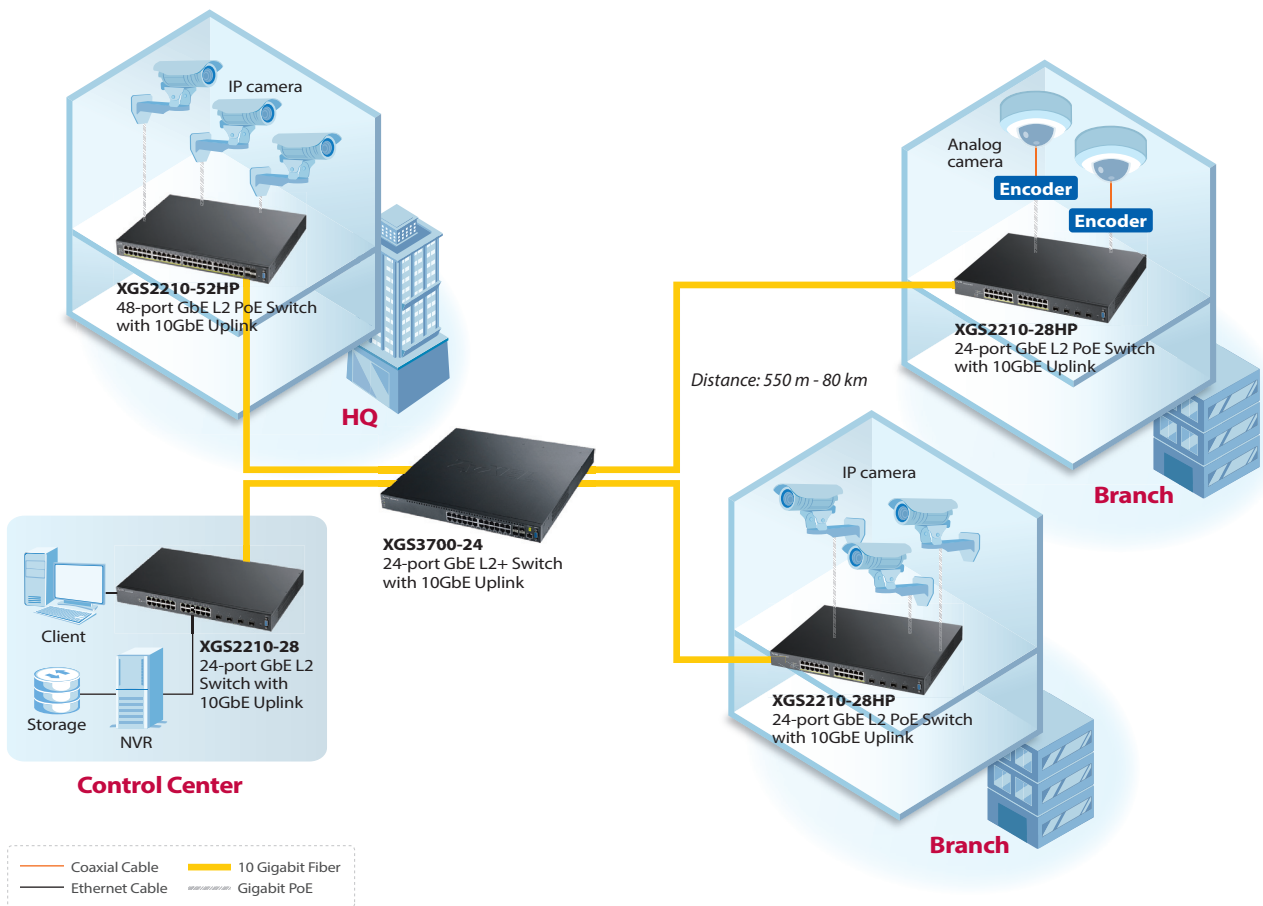


## Fiber Aggregation

Fiber aggregation describes the deployment of IP surveillance in multiple long-distance sites and ensures quality of video traffics. ZyXEL Switches with fiber connections help businesses expand video surveillance coverage to their branches with excellent video quality.



### Performance Features of the Solution

- Suitable for multi-site, small and medium-sized businesses
- Flexible fiber transmission distance from 550 m to 80 km
- Gigabit bandwidth for non-blocking surveillance video stream
- IEEE 802.1Q VLAN
- IEEE 802.1p priority queues enable users to prioritize mission-critical video traffics
- 10 Gigabit capability for more smooth and stable HD video transmissions

### Fiber Connections

ZyXEL's Layer 2 and Layer 2+ Switches with fiber connections permit stable, reliable, secure and high-speed transmission over long distance. They enable headquarter and branch networks located in different sites to connect directly without the 100-meter limitation of copper wires. With fiber connection deployments, IT administrators can take advantage of the feature to plan for extended range of surveillance areas.

## ■ QoS

Video traffic is sensitive to packet delay, drop and jitter in IP surveillance environments where videos and data traverse the same network infrastructure. To ensure optimization for video streaming QoS and multicast, the management features are an integral part of IP surveillance networking solutions. QoS ensures streaming performance at a steady level by transmitting data according to its priority and by the requests of the applications. The following are QoS features that guarantee video quality.

### • IEEE 802.1Q VLAN

VLAN technology allows a physical network to be partitioned into multiple logical networks, where only devices within the same group can communicate with

each other. Devices on a logical network can belong to one or more groups such as video surveillance VLAN, employee VLAN and guest VLAN. With VLAN technology, the video surveillance IP network can be separated into virtual networks and this helps optimizing the utility for both application data and surveillance video.

### • IEEE 802.1p Class of Service, Priority Protocol

ZyXEL's Layer 2 PoE Switches provide IEEE 802.1p features that specify the user priority field and define up to eight separate traffic types. This feature gives video traffic the highest priority to guarantee video quality. With ZyXEL's Layer 2 PoE Switches, bandwidth resources are used more efficiently and real-time multimedia streams can be transmitted constantly.

