



Solution

- Intersection Monitoring

At a Glance

In a city or town, intersections are usually the busiest places where minor or severe road accidents occur frequently. To tackle this issue, city governments are increasingly installing various monitoring systems at intersections so as to effectively reduce traffic accidents and at the same time to strengthen road safety.

Intersection monitoring systems including the use of PoE IP surveillance cameras, traffic flow sensors and traffic controllers, are able to record traffic images, count the number of passing cars and record car speed or to be reviewed for accident footage. However, these monitoring devices are mostly powered devices that need to be used with PoE-supported Ethernet Switches so that a secure intersection monitoring solution can be built up. When choosing the right intersection monitoring devices, there are several challenges that need to be considered.

Challenges

- Devices placed in a junction box at intersections may have high possibilities to be hit by lightning or suffer from ESD and surge.
- When a single point of failure occurs in a device, the engineer may not be able to visit the field site immediately to solve the problem.
- When the connected PoE devices fail, the engineer needs to pay on-site visit to troubleshoot problems.
- Unstable or fluctuated PoE power output may damage the connected PoE devices.
- Outdoor temperature at road intersections varies greatly from day to night or from season to season. During summertime, the temperature in a metal junction box may reach up to 60°C or higher; however, in winter, temperature may drop to -20°C or lower.

CTC Union's Solution

- Provides Industrial grade EMI, EMS and EN50121-4 certification to offer better protection against unexpected lightning strikes, ESD or surges.
- Supports various efficient network redundancy (such as u-Ring) when a single point of failure occurs. u-Ring can support up to 5 rings (maximum) and can recover from a single point of failure in 10 ms.
- Supports PoE device auto test and auto reset function to reduce frequencies of on-site troubleshooting.
- Provides Boost DC power feature to power up PoE devices in 24/48V (20~57V) and regulate power voltage to stabilize PoE devices.
- Supports wide range of operating temperature (-40~75°C) with rugged design.



EN62368-1



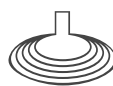
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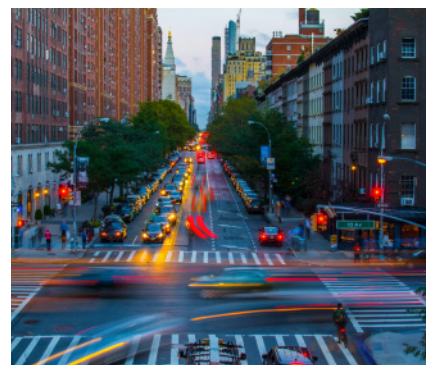
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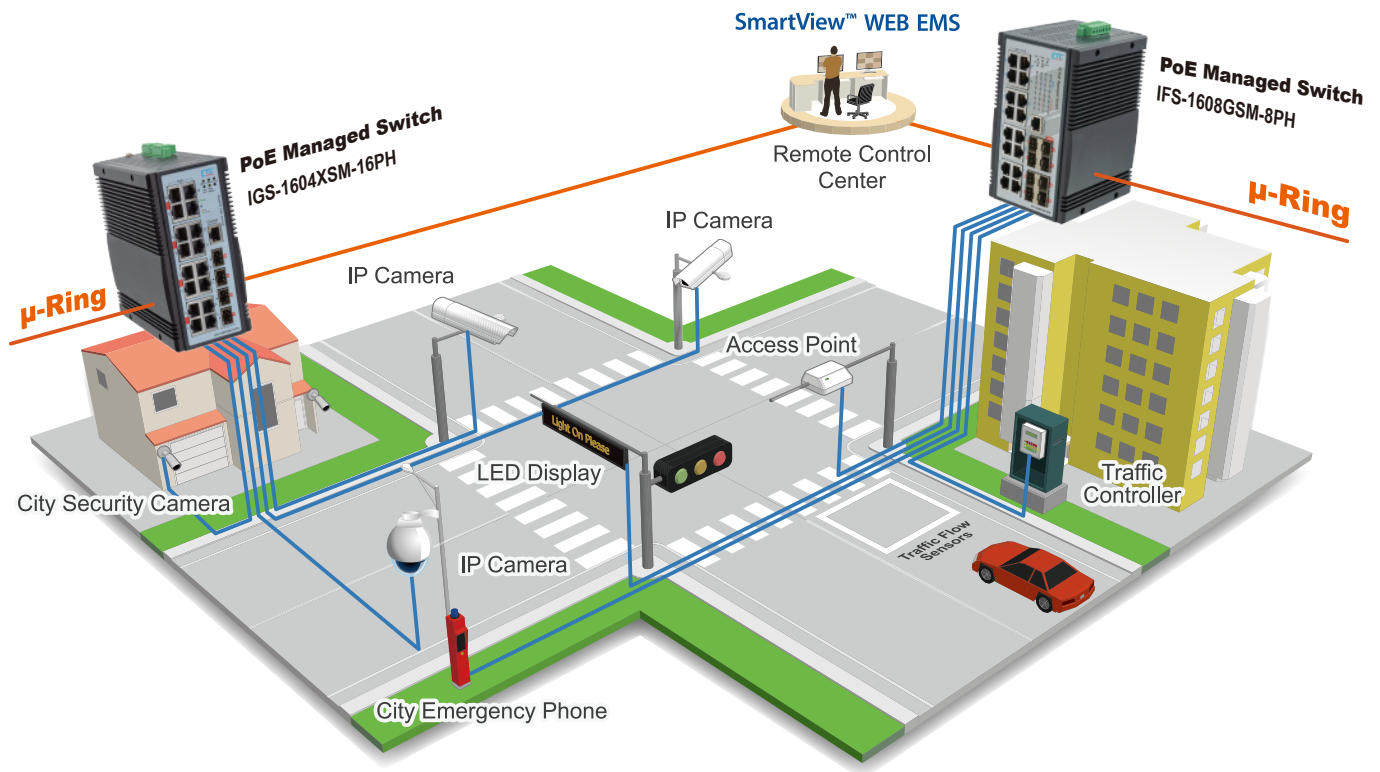
-40~75°C



u-Ring



Application



Related Products



Industrial Managed GbE PoE Switches
IGS-1608SM-16PH & IGS-1604XSM-16PH



Industrial Managed FE PoE Switches
IFS-1608GSM-16PH & IFS-1608GSM-8PH



SmartView™ WEB EMS
Element Management System

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08/2024 V1.0