

Solution

- Intelligent Transport System

| At a Glance

In recent years, thanks to the rapid development of networking devices, high performance IP cameras, LED displays and other end devices are installed extensively in every corner of urban areas with ease and simplicity. By viewing and analyzing real-time video footages received, traffic control personnel can hence respond to reported situations such as traffic accidents in accurately manner.

However, when it comes to highway networking implementation, the situation becomes more complex. Unlike networking implementation in urban areas, highway runs across many cities. Thus, frequent patrolling is not realistic since it needs more manpower supports and is not efficient enough when an emergent event occurs. Furthermore, when accidents occur in highway, real-time information should be transferred to the personnel who can take immediate and appropriate action to prevent highway traffic jams or to drivers who need to access real-time and accurate information about current road conditions. Before setting up a successful highway networking implementation, there are several challenging factors we need to take into account.

Challenges

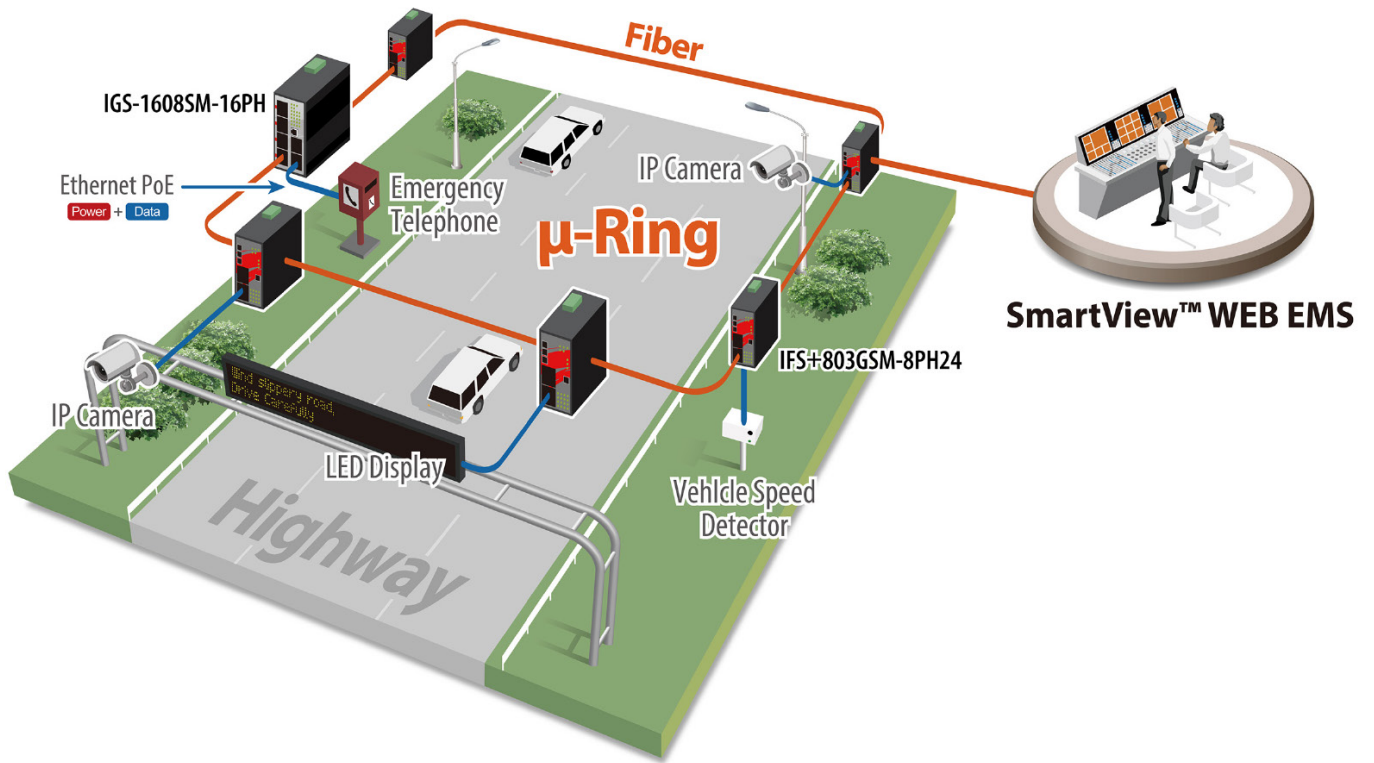
- Devices placed outdoor may have high possibilities to be hit by lightning or suffer from ESD and surge.
- When a single point of failure occurs in a device, the engineer may not be able to visit the highway field site immediately to solve the problem.
- When the connected PoE devices fail, the engineer needs to pay on-site visit to troubleshoot problems.
- Unstable or fluctuated PoE power output may damage the connected PoE devices.
- Outdoor temperature in highway area 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 central management system (SmartView) to view and configure all devices remotely in one system.
- 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.
- Provides redundant and dual power inputs to prevent power failure so that all connected end devices can work uninterruptedly even when one power fails.
- Supports wide range of operating temperature (-40~75°C) with rugged design.



Application



Related Products



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



Industrial Managed FE PoE Switches
IFS-1608GSM-16PH & IFS+803GSM-8PH24



SmartView™ WEB EMS
Element Management System

• The specification and pictures are subject to change without notice.



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