Building Reliable Networks for Advanced Transportation Management Systems (ATMS)

Featured Products

EDS-4012 Series
Industrial Managed Switches

- 12-port Ethernet switches with 4 GbE port options
- PoE++ port options for powering demanding PoE devices
- IEC 62443-4-2 certified

EDR-G9010 Series
Industrial Secure Routers

- 10-port Gigabit all-in-one firewall/NAT/VPN/router/switch
- Industrial intrusion prevention system (IPS) for threat defense

MDS-G4020 Series
Industrial Modular Managed Switches

- Up to 20 GbE ports
- Tool-free hot-swappable module design
- Millisecond-level network redundancy

MXview One Series
Next-generation Industrial Network Management Platform

- Visualize the network topology and status
- Real-time alert notifications to minimize downtime
- Easily manage and configure network devices remotely

As a key component of intelligent transportation systems (ITS), advanced traffic management systems (ATMS) use digital connectivity technology to achieve more efficient traffic management and build more convenient, safer, and greener transportation.
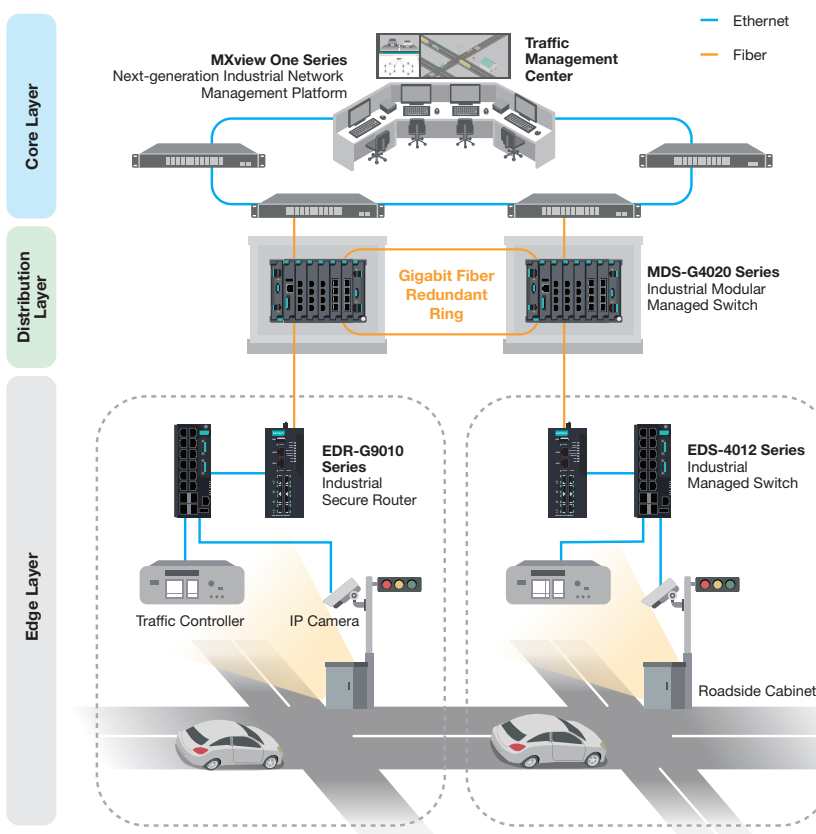
System Requirements

- Reliable and resilient Gigabit network backbone for current and future needs
- Secure networking and communications for critical data
- Easy-to-use network management software to increase maintenance efficiency

Why Moxa

Reliability & Performance
- Gigabit devices with robust redundancy technology for resilient, high-bandwidth networks

OT Network Security
- Layered network defense with security-hardened network devices and threat protection

Simplified Management
- Simplified network management with intuitive visualization software

MOXA®

Enhancing Network Availability for Electronic Toll Collection (ETC) Systems

Featured Products

EDS-4008 Series
Industrial PoE++ Switches

- 8-port Ethernet switches with 4 PoE++ ports and 4 GbE ports
- Up to 90 W output per PoE++ port
- IEC 62443-4-2 certified

EDR-G9010 Series
Industrial Secure Routers

- 10-port Gigabit all-in-one firewall/NAT/VPN/router/switch
- Industrial intrusion prevention system (IPS) for threat defense
- Millisecond-level L2/L3 network redundancy

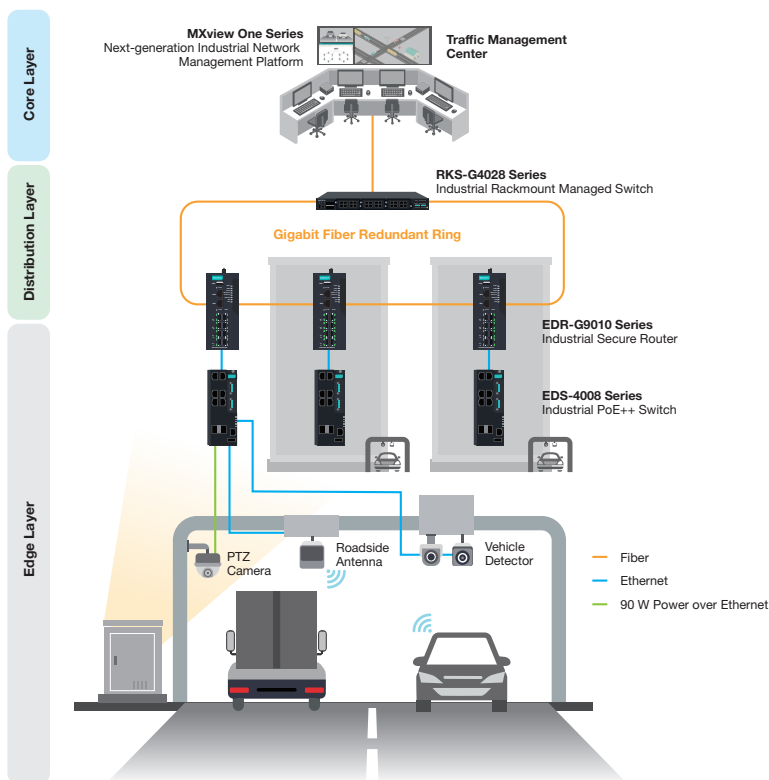### RKS-G4028 Series
Industrial Rackmount Managed Switches

- Up to 28 GbE ports
- Millisecond-level network redundancy
- IEC 62443-4-2 certified

MXview One Series
Next-generation Industrial Network Management Platform

- Visualize the network topology and status
- Real-time alert notifications to minimize downtime
- Easily manage and configure network devices remotely

Electronic toll collection (ETC) systems enhance the efficiency of toll fee collection for both traffic operators and road users by leveraging reliable and secure network infrastructure to collect data on passing vehicles and accurately calculate toll fees.

Core Layer

MXview One Series
Next-generation Industrial Network Management Platform

Traffic Management Center

Distribution Layer

RKS-G4028 Series
Industrial Rackmount Managed Switch

Gigabit Fiber Redundant Ring

EDR-G9010 Series
Industrial Secure Router

EDS-4008 Series
Industrial PoE++ Switch

Edge Layer

PTZ Camera

Roadside Antenna

Vehicle Detector

— Fiber
— Ethernet
— 90 W Power over Ethernet

System Requirements

- High-bandwidth fiber uplinks to transmit high-resolution video data back to the main control center
- Support for high-capacity PoE to power outdoor PTZ IP cameras
- Secure networking and communications for critical data
- Real-time network status and event monitoring

Why Moxa

Reliability & Performance

- High bandwidth to support real-time HD CCTV streams
- Up to 90 W power output for PTZ cameras
- Smart PoE functions to perform failure checks and automatically reboot remote PDs

OT Network Security

- Layered network defense with security-hardened network devices and threat protection

Simplified Management

- Simplified network management with intuitive visualization software

MOXA®