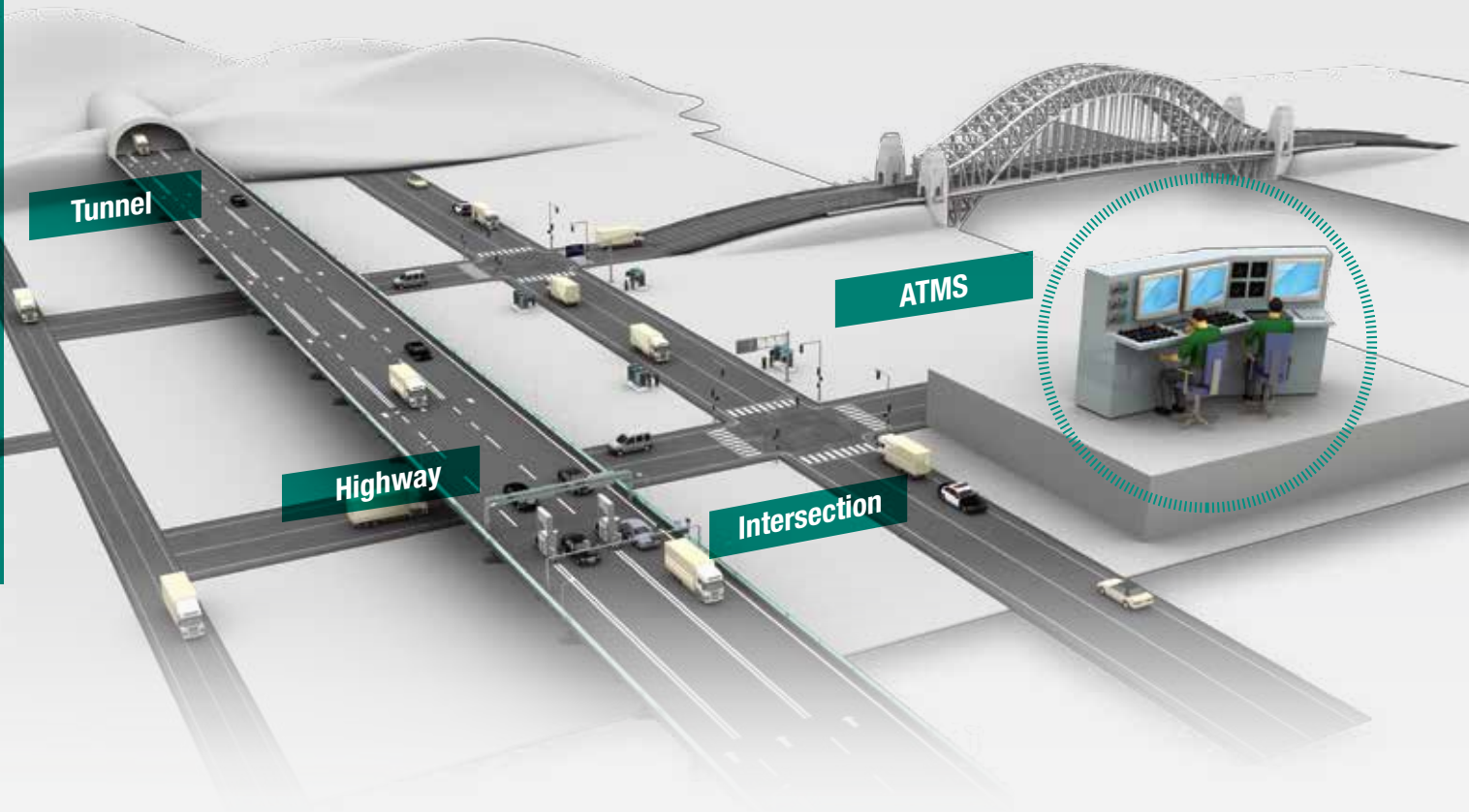# The Engine Driving Cities in Motion

Industrial Communication Product Solutions for ITS

# The Engine Driving Cities in Motion

Smart cities are evolving rapidly, driven by the rise of intelligent transportation. However, the road to smart cities is full of challenges. Aging critical assets need to be upgraded to avoid becoming cybersecurity vulnerabilities. Then there is the lack of human resources to manage and maintain the vast scope of smart transportation infrastructure. Traffic engineers are also often unfamiliar with network infrastructure, creating a knowledge gap when upgrading to modern transportation systems.

This is where Moxa steps in. With over 35 years in ITS data connectivity, Moxa is a trusted partner to many smart cities. Moxa's commitment to seamless and secure transportation management ensures that smart cities can face these challenges with confidence. From intersections, to tunnels, to highways, Moxa helps make transportation safer and more efficient across the board.

Tunnel

ATMS

Highway

Intersection

## Boosting Efficiency With Seamless Deployment

Accessibility embodies one of the core principles behind Moxa's design philosophy. By combining user-friendly features with highly resilient designs, Moxa's ITS solutions are suitable for a wide range of applications and users.

### Easy to Use

- All ITS products support web configuration, no need for CLI
- Simplify mass deployments with the MXconfig software configuration tool
- Easily back up and restore configurations with the ABC Series tools

### Easy to Manage

- Manage a wide range of different devices with the user-friendly MXview One network management software
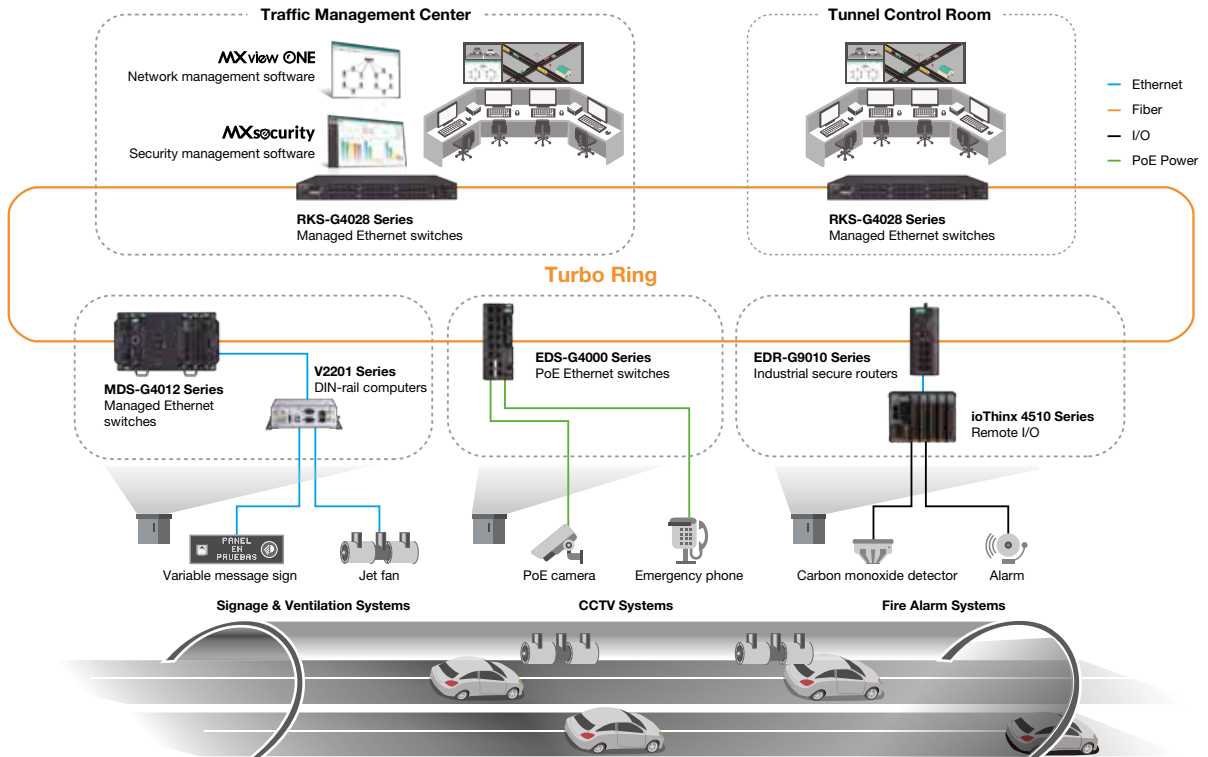- Centrally manage geographically scattered network sites with MXview One Central Manager
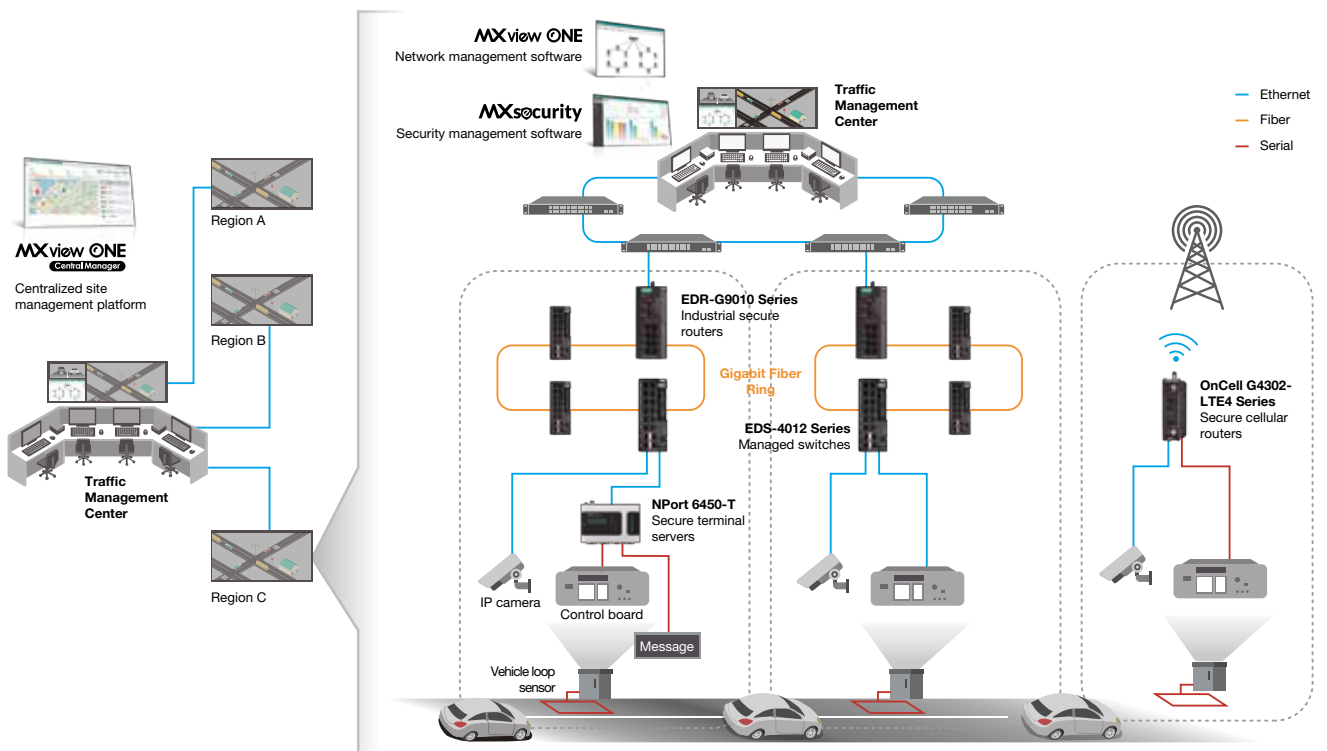
### Easy to Secure

- Build secure connectivity with IEC 62443 certified devices
- Create a holistic network defense to protect the serial-to-network communication of your assets through data transmission encryption, packet filtering, and IDS/IPS
- Easily manage and configure network security assets with MXview One and MXsecurity

# System Architecture

## Tunnels and Highways



**Traffic Management Center**

MXview ONE
Network management software

MXsecurity
Security management software

**RKS-G4028 Series**
Managed Ethernet switches

**Tunnel Control Room**

**RKS-G4028 Series**
Managed Ethernet switches

Ethernet
Fiber
I/O
PoE Power

*Turbo Ring*

**MDS-G4012 Series**
Managed Ethernet switches

**V2201 Series**
DIN-rail computers

**EDS-G4000 Series**
PoE Ethernet switches

**EDR-G9010 Series**
Industrial secure routers

**ioThinx 4510 Series**
Remote I/O

Variable message sign
Jet fan

PoE camera
Emergency phone

Carbon monoxide detector
Alarm

**Signage & Ventilation Systems**
**CCTV Systems**
**Fire Alarm Systems**

## Intersections



MXview ONE
Network management software

MXsecurity
Security management software

**Traffic Management Center**

Ethernet
Fiber
Serial

MXview ONE
Central Manager

Centralized site management platform

Region A

Region B

**Traffic Management Center**

Region C

**EDR-G9010 Series**
Industrial secure routers

*Gigabit Fiber Ring*

**EDS-4012 Series**
Managed switches

**OnCell G4302-LTE4 Series**
Secure cellular routers

**NPort 6450-T**
Secure terminal servers

IP camera
Control board

Message

Vehicle loop sensor

# Intelligent Transportation Product Portfolio

| Network Infrastructure | **L2/3 Managed/Unmanaged PoE Switches** EDS-G4000/RKS-G4028/ EDS-2000 Series | **Modular Switches** MDS-G4012-4XGS Series | **Secure Firewall Routers** EDR-8010/G9010 Series | **Network Management Software** | **Industrial Wireless** AWK-3252A/AWK-1151C/ OnCell G4302 Series |
|---|---|---|---|---|---|
| **Edge Computing & Controllers** | **OPC UA Server** MX-AOPC UA Suite | **IIoT Controllers** ioThinx 4530 Series | **IIoT Gateways** AIG-101 Series | **Industrial Computers** V2403C Series | |
| **Edge Connectivity** | **Remote I/O** ioThinx 4510 Series | **Serial Device Servers** NPort 6100/6200 Series | **PoE Injectors** INJ-24A Series | **Protocol Gateways** MGate 5135/5435 Series | **Media Converters** IMC-21GA Series / **Video Encoders** VPort 461A Series |

# Your Trusted Partner in Automation

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things (IIoT). With over 35 years of industry experience, Moxa has connected more than 94 million devices worldwide and has a distribution and service network that reaches customers in more than 85 countries. Moxa delivers lasting business value by empowering industries with reliable networks and sincere service. Information about Moxa's solutions is available at www.moxa.com.

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