DIGI TRANSPORT WR31 FOR INTELLIGENT TRANSPORTATION SYSTEMS

Secure, reliable 4G LTE connectivity for traffic monitoring and management

In the harsh remote environments common in traffic control applications, the Digi TransPort® WR31 is the ideal 4G LTE solution for connecting to traffic controllers, vehicle sensors, IP cameras and other intelligent traffic monitoring equipment. The result: highly reliable data input to traffic control management applications, smoother traffic flow and increased safety.
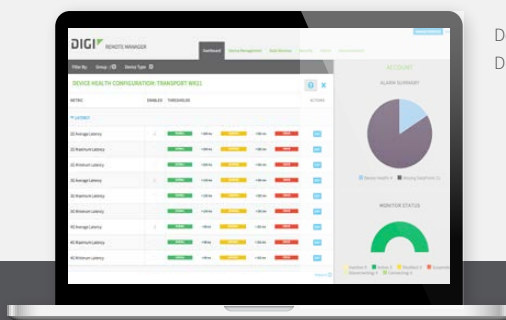
The Challenging World of Traffic Control

Traffic and signals teams at state and municipal agencies around the world face a daunting task: manage the safe, efficient flow of traffic across enormous and diverse geographic areas, and meet stringent critical infrastructure security guidelines, at minimal cost, often using legacy communication networks. Doing this requires integration of data from numerous sources: vehicle sensors, CCTV cameras, conflict monitors, emergency vehicle prioritization systems, and road and weather conditions sensors, to name a few.

As legacy land-line and 2G cellular networks reach the end of their useful lives, agencies are increasingly recognizing the benefits of using 4G LTE wireless networks to connect to their diverse remote assets. This approach has numerous benefits but also requires agencies to learn new technology and network management tools. Choosing a secure, reliable device and a reputable vendor are paramount.

Deploy and manage the WR31 with Digi Remote Manager software.

Digi TransPort WR31: 4G LTE for Traffic Management

- ✓ Software-selectable 3G/4G LTE supports all carriers in North America in a single device
- ✓ Global 3G/4G LTE options cover all other geographies
- ✓ License-free enterprise software and standard 5-year warranty lower the total cost of ownership
- ✓ -30° C to 70° C operating temperature
- ✓ 2 RJ-45 Ethernet ports
- ✓ 1 DB-9 RS-232/422/485 serial port
- ✓ 2 Digital I/O, 1 Analog input for local sensing and alarming
- ✓ Rugged, aluminum enclosure
- ✓ DIN rail form factor for easy cabinet installations
- ✓ Centralized mass configuration and remote troubleshooting with Digi Remote Manager[SM]

Intelligent Transportation Systems Requirements

Equipment Reliability and Longevity

Traffic cabinets, controllers and sensors are expected to last for years—how long is the warranty of your communication gear? The temperature in a traffic cabinet can be 20 degrees greater than ambient temperature and signal loss can be as much as 20 dB. What is the temperature range of your 4G LTE device and does it have adaptable external antennas?

Flexible Networking Options

Agencies typically designate a primary and secondary cellular carrier for traffic cabinets installed across a wide geographic area. The ideal 4G LTE device will support software-selectable carrier switching.

Security

The Critical Infrastructure Protection (CIP) Act in the US and similar legislation in other countries defines guidelines and requirements for traffic control systems. 4G LTE devices and management tools must support enterprise security features like logging, encryption, authentication and firewalls.
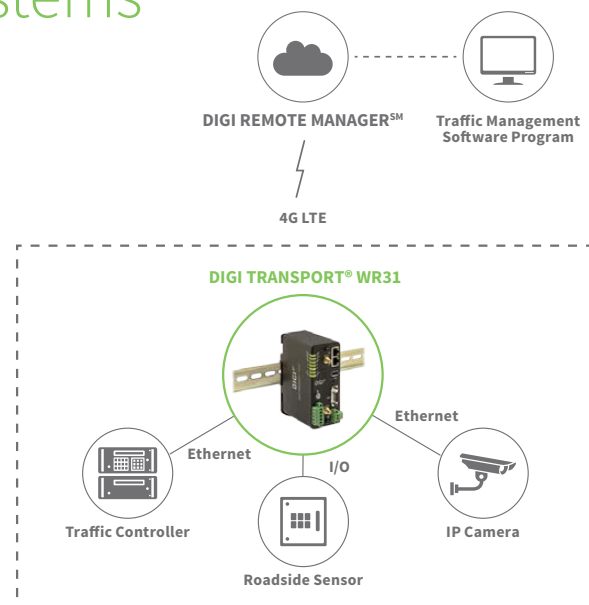
Remote Management

Once devices are installed and systems are operational, much of Intelligent Transportation System management involves reacting to events as soon as they occur, which requires devices to be online all the time. Remote configuration, monitoring and troubleshooting tools are essential.

Digi TransPort WR31: The 4G LTE Solution for Intelligent Transportation Systems

The Digi TransPort WR31 is a flexible, reliable 4G LTE router designed for the challenges of traffic monitoring and control. Software-selectable 4G LTE networking means operators can standardize on one cellular device and then select the best carrier for each remote site. A rugged, DIN rail oriented design with extended operating temperature supports roadside cabinet installations, and Digi's license-free enterprise software provides advanced security and routing functionality without a recurring annual charge. Digi Remote Manager gives network engineers a single tool for configuring and managing remote devices.

With the Digi TransPort WR31 4G LTE router and Digi Remote Manager, ITS professionals can quickly deploy a comprehensive 4G LTE solution for connecting assets, gathering and integrating data, and remotely managing the network devices.

DIGI REMOTE MANAGER℠ Traffic Management Software Program

4G LTE

DIGI TRANSPORT® WR31

Ethernet

Ethernet I/O

Traffic Controller Roadside Sensor IP Camera