

## Transportation: Urban Traffic Control



### Client Requirement Summary

- Rugged to EN standards for traffic equipment subject to extremes of vibration, power and temperature
- Mounted in a roadside cabinet
- Highly reliable connectivity
- Low error rate
- Extensive diagnostics and reporting for quick problem isolation and reporting
- Ability to add in new IP services such as environmental and CCTV monitoring
- IP VPN

### Key Benefits

- Vibration, EMC, Environmental and mechanical to EN transportation standards
- Advanced security: DMVPN, OSPF, BGP, cable interception prevention
- No on site configuration required
- Four isolated Ethernet ports to provide additional secure services
- Connection and line analysers
- SNMP, syslog, email and SMS monitoring and fault reporting
- Fault archives with event filtering and multiple event levels
- Integrated DSL and 3G/LTE

### Requirement

One of Europe's largest traffic authorities needed to provide highly reliable, secure, managed connectivity for Urban Traffic Control (UTC) equipment located in several thousand roadside cabinets. This is a very demanding environment with high levels of vibration, extremes of cold and heat, humidity and high levels of electrical interference all within the confined environment of a roadside cabinet.

### Virtual Access Solution

The client chose the GW6000 Series industrial router as it is a versatile IP VPN router designed for tough roadside environments. The integrated DSL and optional 3G/LTE interfaces avoid the need for an external DSL modem or USB dongle, thereby increasing the resilience and ease of management since there is only a single device to deploy on site. The compact size means that it complies with strict space limitations, while features such as the latched power connector protect against traffic vibrations. The solution was extensively tested over a year at multiple pilots sites and was proven to meet the low error rate, low latency and high uptime requirements for traffic light control in the demanding roadside environment.

