High-Speed Wireless Data Transfer

– from Traffic Cameras & to Automatic Signs

Industry: Transportation
Product: Spectre™ Cellular Routers

• The Challenge
How to reduce traffic density and prevent enormous traffic jams?
Not an easy task to solve...

Traffic cameras, connected wirelessly via cellular technology, are part of a complete traffic management system. They capture and send pictures or video streams from highways and streets to a control room or web accessible interface. Based upon continuously updated information, traffic monitoring staff can take actions to slow down or speed up traffic in defined passages or reroute drivers to more empty roads thereby preventing rush-hour congestion or an array of other traffic headaches.

• The Solution
A cellular operator infrastructure is a very effective way to monitor and manage traffic. Using B&B Electronics’ Spectre cellular routers – connected directly to cameras installed above roadways – pictures, movies or other data is captured and transferred to a central control room or a web accessible interface. Here control room dispatchers monitor the data, make decisions, and immediately react to various traffic situations. Within seconds, revised speed limits or lane closures can be sent wirelessly via Spectre cellular routers connected directly to road LED boards or other automatic signage instantaneously changing the information displayed to drivers.

• Why B&B Electronics?
B&B Electronics provides easy answers to even the toughest networking questions. Whether the answer involves cellular or wireless connections, copper cable, fiber optics, or some mix of them all, B&B Electronics knows how it all fits together. We’ll help you network just about anything, just about anywhere.

• The Product
Spectre Wireless Cellular Routers
• Cellular router technologies: LTE, HSPA+/UMTS/CDMA/EDGE/GPRS
• Standard ports: (1) 10/100 Ethernet, (1) USB host, (1) I/O, (2) SIM holders
• Configuration via web interface, password protected
• VPN tunneling supports Ipsec, OpenVPN and L2TP for safe communications
• Web interface provides statistics for activities, signal strength, detail log, etc.
• DHCP, NAT, NAT-T, DynDNS, NTP, VRRP, SMS control, SNMP, and more
• Secure features with HTTPS, SSH, and Firewall functions
• Modbus TCP/IP and Modbus RTU protocol converter
• VLAN 802.11 virtual Wi-Fi LAN