BlueTOAD

**Bluetooth Travel-time Origin And Destination Advanced System**

BlueTOAD™ is the most advanced traffic-monitoring system on the market, directly measuring travel times using cost-effective, non-intrusive roadside technology.

**Reliable Technology**

BlueTOAD detects anonymous Bluetooth signals broadcast from mobile devices to determine accurate travel times and speeds.

**Real-Time Data**

BlueTOAD calculates travel times and speeds in real-time to provide route management capabilities.

**Flexible Installation**

BlueTOAD can be installed independent of local power or communications systems by using a cellular data connection and solar panel, or can be plugged into existing electrical and/or fiber infrastructure. Utilizing Power over Ethernet (PoE) technology simplifies network design and deployment.

**Powerful Data Processing**

The TrafficCast secure cyber-center processes the data collected by BlueTOAD devices. Data can be viewed in real-time or analyzed historically through a BlueTOAD Web interface, which provides travel times, road speeds, and MAC address detection counts.

**BlueTOAD System Advantages**

- TrafficCast proven algorithms for filtering and processing data inputs to compute real-time travel times and speeds.
- Speeds/travel times updated in real-time on a secure web “Dashboard” and speed maps.
- XML schema is available for third-party integration such as an Advanced Traffic Management System (ATMS), agency website, or Dynamic Message Sign (DMS) software control.
- Secure web interface for generating statistical and analytical reports covering: speeds, travel times, origin/destination, and before and after comparisons.
- Real-time monitoring of device status and performance.

**Power over Ethernet (PoE) Benefits**

- Single Power over Ethernet (PoE) shielded CAT-5 Ethernet cable supplies power and network connection to each BlueTOAD unit.
- Save conduit space and simplify installation using single Ethernet cable for longer distances.
BlueTOAD Cellular

Power Specifications
Voltage Input: 6 – 30 Volts
GSM Modem-Based - Max Current @ 12V - 350 mA (Typical 140 mA)

Power Source Options
• 100 - 240 VAC
• Solar Power 30W, 16.8Vmp Solar
  Weight: 16.6 lbs. (incl. mounting bracket)
  Battery: 44 Ah Sealed AGM
• Solar Power 50W, 17.5Vmp Solar
  Weight: 25.2 lbs. (incl. mounting bracket)
  Battery: 44 Ah Sealed AGM
• Power over Ethernet (PoE)
  IEEE 802.3af standard
  110/220 VAC supply to injector

Operating Range
-30°C to +65°C

Processor
Real time microcontroller

Connectivity
GSM Quad-band Bluetooth
Bluetooth CSR Bluecore 4 Class 1
Data Storage
Secure Digital (SD) – up to 1 year of storage
Antennae
Bluetooth: 4 dBi Omni (Standard)
  Custom options available

NEMA 4X Enclosure
10 in. x 8 in. x 5.75 in.
Weight (with mounting brackets): 9 lbs.

BlueTOAD Ethernet

Power Specifications
DC Supply Voltage: Minimum - 6 VDC
Maximum - 40 VDC
DC Supply Current: Maximum 100 mA @ 12 VDC

Power Source Options
Power over Ethernet (PoE)
IEEE 802.3af standard
110/220 VAC supply to injector

Operating Range
-30°C to +65°C

Processor
Real time microcontroller

Connectivity
Ethernet 10BASE-T / 100BASE-T
Static or DHCP IP Addressing
Bluetooth
CSR Bluecore 4 Class 1
Data Storage
Secure Digital (SD) – up to 1 year of storage
Antennae
Bluetooth: 4 dBi Omni (Standard)
  Custom options available

NEMA 4X Enclosure
10 in. x 8 in. x 5.75 in.
Weight (with mounting brackets): 9 lbs.