



Ethernet or Cellular Communications | AC, PoE, or Solar Power Real-Time Travel Times and Speeds Web-Enabled and Archived Data Management

# BlueTOAD Bluetooth Travel-time Origin And Destination

# **Advanced System**

BlueTOAD<sup>™</sup> 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 suitable for longer distances.



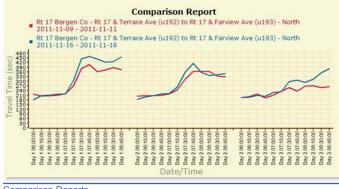
Real-Time Communications Options



BlueTOAD Speed Map

Origin	Destination	Waypoint	Map/Graph Color	Number of matches	Percentage matches	of
Hwy 20 (402) & Fulton Industrial Blvd (Device 199)	Cascade Rd & Fulton Industrial Blvd (Device 207)			3142	87.64%	Edit path
Hwy 20 (402) & Fulton Industrial Blvd (Device 199)	Cascade Rd & New Hope Rd (Device 213)			218	6.08%	Edit path
Hwy 20 (402) & Fulton Industrial Blvd (Device 199)	Cascade Rd & Danforth Rd (Device 210)			225	6.28%	Edit path
Total				3585	100%	
+ Indus	Flags trial Park			laker Hills Wisteria Garriens		
Interstate West Industrial Park	Hartman Road Business Park	Lee Industr		Ha 94 (39)	Fairburn Heights	Collier Heights
	$\mathcal{N}$		Wilson Meado	Wisteria Gardens Mill		Water Las
Non Ro	16			Southwest Atlanta Hospita		Ivan Hill Peyto Fores
			Cascado Ry	AN AN AN	Green Forest Acr	on pay work
MA	and the contraction of the contr	40	Danforth Rit S	Utoy Park	285	Audot

Origin/Destination Reporting



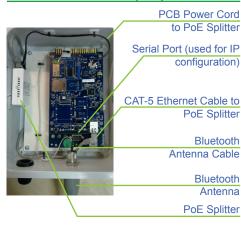
Comparison Reports

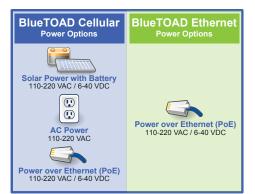


# **BlueTOAD Cellular**



### **BlueTOAD Ethernet (PoE)**





# **Technical Specifications**

# 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 GSM: I-Bar Penta Band Cellular

Antenna GPS: Active Patch 31 dBi

### NEMA 4X Enclosure

12 in. x 10 in. x 7.75 in. Weight (with battery & mounting brackets): 43 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

Antenna 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.

Functionality	BlueTOAD Cellular	BlueTOAD Ethernet
Non-intrusive detection	Ş	Şo
Power over Ethernet	Ş	<b>چ</b> و
Solar Power Option	Şo	
Real-Time Communications	Ş	Ŗ
Web-based Software	Ş	Ş
Travel Time, Speed Reports & Graphs	Ŗo	Ŗ
Archived data	e the second sec	e e e



TrafficCast International, Inc., 2801 Coho Street, Suite 100, Madison, WI 53713 Phone: 608.204.0001 • Fax: 608.204.0114 • www.trafficcast.com/products • sales@trafficcast.com

© 2012 TrafficCast International, Inc. All rights reserved. TrafficCast, BlueTOAD, and all other associated logos are trademarks of TrafficCast International, Inc. All other logos and brand names are trademarks or registered trademarks of their respective holders.