GROUNDHOG® G-10 Wireless Permanent Traffic Sensor
G-10CS
Nu-Metrics P/N: 70000172, 70000173

Groundhog G-10CS is a wireless, permanent traffic analyzer is designed to collect data on motor-vehicle traffic for a single roadway lane. This self-contained, battery powered device does not require the installation of any external sensors, loops, or tubes. The Groundhog is a self-contained, in-pavement sensor that utilizes Vehicle Magnetic Imaging Technology to detect vehicle count, speed and classification. The Groundhog G-10 CS reports wirelessly at pre-determined intervals to a roadside site controller or a QTT Road Weather Information System (RWIS). QTT roadside collection stations are capable of storing statistics from up to sixteen lanes of traffic. The Groundhog features an easily removable lid, which allows for quick extraction of sensor components during road maintenance or sensor maintenance.

Features:

- Vehicle Volume Counts
- Vehicle Speed and Length
- Fast, Easy Installations
- Battery life up to 1-3 years
- Removable Lid
- Low Maintenance
- No Loops, Tubes or Chains
- License Free Spread Spectrum RF
- Data displayed in SCANWeb and/or WDM

Performance Specifications:

- Minimum measured speed is 8MPH
- Maximum measured speed is 95 MPH.
- The unit has volume count accuracy of 97% or greater.
- Speed accuracy is 90% of vehicles ± 5 MPH
- Length accuracy is 90% of vehicles ±5FT
- Classifies vehicle speed up to 12 bins
- Classifies vehicle length up to 6 bins

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Specifications:

Canister	
Canister Dimensions	6.0 in. dia. x 3.25 in H (152.4mm x 82.6mm)
Canister Lid	Threaded Lid with Dual O-Rings
Core Drill Size	6.5 inches diameter
Housing	Machined Molybdenum disulfide filled nylon thermoplastic
Weight-housing	1 lb. (454 g)
Detection	
Traffic Sensor Type	Magnometer (GMR Magnetic Chip)
Traffic (Count, Length, Speed)	Vehicle Magnetic Imaging
Electronics Operating Temperature	- 40°F to 185°F (-40C to + 85 C)
Power	
Battery Type	Lithium thionyl chloride -40°F to 185°F (-40°C to 85°C)
Battery Config.	4D, each rated @ 19AH 3.6V – Combined total = 76AH, 3.6V
Battery Life	1-3 years (varies with traffic volume & reporting rate; 3.5 yrs average)
Radio RF Transceivers	
U.S. Domestic – (915 MHz)	
Frequency	900 MHz (Spread Spectrum)
Transfer Rate	10,000 bps (@ 9600 bps throughput Data rate)
Transmit Power Output	100 mW
Operating Temperature	-40°F to 185°F (-40° to +85°C)
Distance from Receiver	Maximum 600 Feet (180M). Recommended 300 Feet (90M) or less. (Must have line-of-site)
Radio RF Transceivers	
International – (2.4GHz)	
Frequency	2.45 GHz (Spread Spectrum)
Transfer Rate	10,000 bps (@ 9600 bps throughput Data rate)
Transmit Power Output	50 mW
Operating Temperature	-40°F to 185°F (-40° to +85°C)
Distance from Receiver	Maximum 400 Feet (120M). Recommended 200 Feet (60M) or less. (Must have line-of-site)