



# Groundhog® G-10

## Wireless Traffic Analyzer

### Overview

The Groundhog G-10 is a wireless, permanent traffic analyzer that collects data without any external sensors, loops, or tubes. The Groundhog is a self-contained, in-pavement sensor that utilizes Vehicle Magnetic Imaging (VMI) technology to detect vehicle count, speed and classification.

The Groundhog reports wirelessly to a site controller alongside the roadway, or it can report to a road weather station (RWIS). The sensor features an easily removable lid, which allows for quick extraction of sensor components during road maintenance or sensor maintenance.

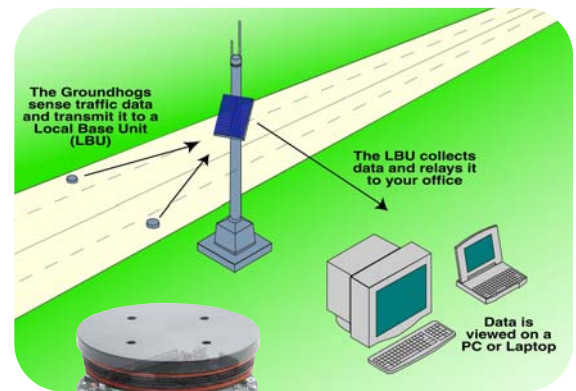
The Groundhog provides accurate and essential data necessary for effective traffic analysis, control and management. When used with Wireless Data Management (WDM) software, historical data can easily be presented in the form of reports, charts, and graphs.

### Benefits

- ▶ Permanent solution provides data 24/7/365
- ▶ Easy install and maintenance means less cost over the lifetime of the product
- ▶ Provides useful data for planning expansion/growth of roadways
- ▶ Provides accurate count data to reference other systems (toll booths, parking attendants, etc.)
- ▶ Using multiple wireless sensors on a single base unit reduces overall cost

### Applications

- ▶ Highways and city streets with free-flow conditions
- ▶ Parking lots, garages, and shopping centers with free-flow conditions
- ▶ Toll booths
- ▶ Construction areas
- ▶ Airports, stadiums, and casinos
- ▶ Military bases and border crossings
- ▶ Integration with incident management systems, such as low visibility warnings, vehicle-in-median warnings, and variable message sign notifications
- ▶ Compatible with QTT Road Weather Information Systems (RWIS) and IntelliZone AdvanceWarn® systems



**Groundhog G-10 Sensor**

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## Wireless Traffic Analyzer

### Features

- ▶ Provides accurate vehicle counts, speed, and classification
- ▶ Monitors traffic at specific locations
- ▶ Wireless data transfer to base unit on side of roadway
- ▶ Easy to use software for viewing data
- ▶ Removable lid allows equipment to be retrieved for road or sensor maintenance
- ▶ Compatible with QTT road weather stations and IntelliZone systems
- ▶ Optional road weather data for roadway condition monitoring



### Key Specifications

Model	G-10CS
Canister Dimensions	6 inches (diameter) x 3.25 inches (height) (152.4 millimeters x 82.6 millimeters)
Operating Temperature	-40°F to +185°F (-40°C to +85°C)
Electrical Operating Voltage	3 volts
Battery Type	Lithium thionyl chloride
Battery Life	Up to 3 years (typically 1 to 3 years, varying with AADT* and polling interval)
Transmitter Frequency	Frequency hopping: ISM 902 - 928 MHz or ISM 2.4000 - 2.4835 GHz
Distance from Groundhog to LBU	600 feet (183 meters) maximum; 400 feet (91.4 meters) recommended
Vehicle Count	Binned; speed, length, daily and AADT*
Vehicle Speed	Binned; custom up to 12 bins
Vehicle Length	Binned; custom up to 6 bins
Polling Intervals	5 to 120 minutes
CE Compliant	CE Conformity: Electromagnetic Compatibility Directive EN-61326-1:2006 Section 6 - Immunity Requirements, Table 2 Section 7 - Emissions Requirements, Class A limit

\*AADT denotes Average Annual Daily Total



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