

PERMANENT TRAFFIC ANALYZER



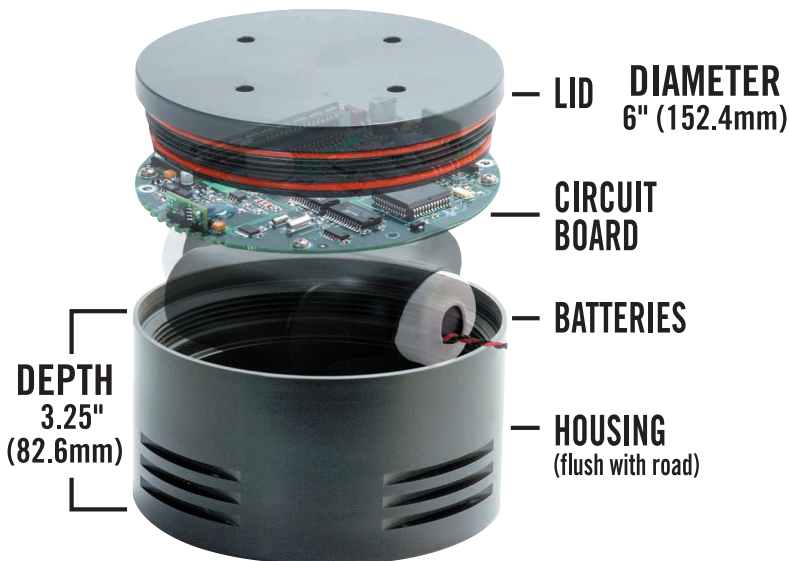
GROUNDHOG[®]

Permanent Traffic Analyzer

G-4

DATA COLLECTION

PERMANENT TRAFFIC ANALYZER COLLECTS DATA WITHOUT ANY EXTERNAL SENSORS, LOOPS OR TUBES!



Why Choose a Groundhog?

With Other Automatic Vehicle Count Systems, You'll Have...

- Extensive Labor
- Significant Structural Impact
- Extended Lane Closure Time
- Unrepairable Components
- Expensive Replacement Costs

With A Groundhog Permanent Count Station, You'll Have...

- Minimal Structural Impact
- Minimal Labor and Lane Closure Times
- Fast and Easy Replacement or Repair

FEATURES

- ▶ Vehicle Counts, Speeds & Length
- ▶ Roadway Surface Temperature
- ▶ Roadway Wet / Dry Condition
- ▶ Period Data from 1 – 120 minutes
- ▶ Wireless Data Transfer
- ▶ Battery Life Up To Five Years

OPERATION

The **GROUNDHOG[®]** permanent traffic analyzer, the sensing component of Nu-Metrics' [Permanent Count Station](#) (PCS), provides accurate and essential data necessary for effective traffic analysis, control and management. With the Wireless Data Management (WDM) software, historical data can be presented in the form of reports, charts and graphs from the convenience of your office.

APPLICATIONS

- ▶ Highways, City Streets & Intersections
- ▶ Parking Lots, Garages & Shopping Malls
- ▶ Bridges & Toll Booths
- ▶ Construction Areas
- ▶ Airports, Stadiums & Casinos
- ▶ Military Bases & Border Crossings

ALERT & ALARM APPLICATIONS

The **GROUNDHOG[®]** G-4 can serve within incident management systems such as low visibility warnings, "vehicle-in-median" warnings, variable message sign notifications as well as incorporate video monitoring and atmospheric sensors.



nu-metrics[®]
A QUIXOTE COMPANY

518 University Drive, Uniontown, PA 15401
Tel: (724) 438-8750 - Fax: (724) 438-8769

TOLL FREE: 1-800-346-2025



Visit us online at: www.nu-metrics.com

Quixote
Transportation Technologies, Inc.

GROUNDHOG® G-4 SPECIFICATIONS

CANISTER

Canister Dimensions:	6.0 in dia x 3.25 in H (152.4 mm x 82.6 mm)
Weight:	1 lb (454 g)
Wall thickness:	0.6 in
Core drill size:	6.5 in
Material:	Molybdenum Disulfide filled nylon thermoplastic
Density:	0.0473 lb/in ³
Lid / Housing:	10 tpi 3.25 in bolt circle, 1/4 in dia pins Double grooved, silicon o-ring construction
Operating Temp.:	-40°F to 185°F (-40°C to +85°C)
Humidity:	0 to 100%
Chemical Exposure:	Sodium chloride(NaCl), calcium chloride(CaCl ₂), calcium magnesium acetate(CMA), magnesium chloride(MgCl ₂), potassium acetate (KAc), etc.

ELECTRICAL

Operating Voltage:	3.0 V
Protocol:	CEBUS EIA 600
Battery Type:	Lithium thionyl chloride (-40°C to 85°C)
Battery Config.:	Heat sealed, 4D cell arrangement, 72 Ah capacity
Battery Life:	Up to 5 years (varies with AADT & polling interval)

TRANSMITTER

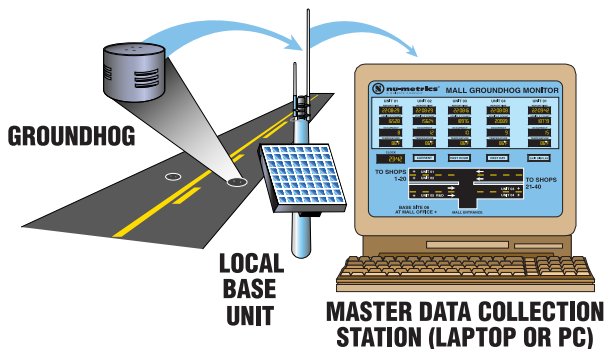
Frequency:	2.45 GHz Spread Spectrum or 915 MHz Spread Spectrum
Transfer Rate:	10,000 bps
Output power:	20 mW / sideband

TRAFFIC

Vehicle Count:	Raw, binned, speed, length, daily and AADT (Average Annual Daily Total)
Vehicle Speed:	Binned; Custom up to 12 bins
Vehicle Length:	Binned; Custom up to 6 bins
Polling Intervals:	1 - 120 minutes
Occupancy:	0 - 100%

WEATHER

Chemical Index:	0 - 100% (passive detection)
Road Surface Temperature:	Fast-response thermistor type
Operating Temperature Range:	-67°F to 185°F (-55°C to 85°C)
Road Condition:	Wet / Dry



PERMANENT COUNT STATION (PCS) APPLICATION

The Groundhog is frequently used in the Permanent Count Station application. This system utilizes a network of wireless Groundhogs which transmit to local base units that then relay the information into the convenience of an office. This data is crucial in traffic analysis, control and management and can be represented in the form of histograms, charts and graphs.



WWW.QTTINC.COM

Quixote Transportation Technologies... **COLLECT. FORECAST. INFORM.**

DISTRIBUTED BY:

Contact Nu-Metrics for inquiries about any of the company's traffic analyzers, distance measuring instruments, integrated warning systems or to locate your nearest distributor. Please visit <http://www.nu-metrics.com> for more information.

The information contained in this publication is presented for informational purposes only, and while every effort has been made to ensure its accuracy, the information is not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use of application. No license is granted by implication or otherwise to any of Nu-Metrics, Inc. intellectual properties. Nu-Metrics, Inc. also reserves the right to alter or revise any of its products or published technical data at any time without notice.

Copyright 2005 © Nu-Metrics, Inc. All rights reserved. Printed in the United States.