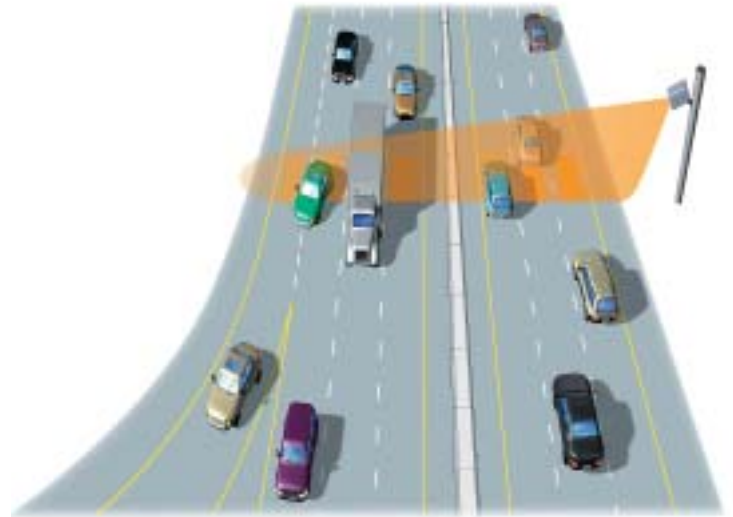


The Simple Solution to

# TRAFFIC DETECTION



**RTMS™** Remote Traffic Microwave Sensor  
A Multi-zone, True-presence Microwave Radar



## Freeway Operations

- ◆ Provides presence indication and accurate measurements of Volume, Occupancy, Average Speed and Classification in up to 8 separate zones (lanes) up to 60m (200 ft.) away
- ◆ Integrated Solutions: Detection Station, Counting, Adaptive Traffic Control, Event Reporting
- ◆ True-Presence: Detects stationary and fast moving vehicles
- ◆ Quick, simple and safe installation on low roadside poles without traffic disruptions
- ◆ Reliable performance in all weather conditions
- ◆ Flexible:
  - Suitable for any road type and pole type
  - AC, Battery or Solar power options
  - Various outputs and communications options
- ◆ Fully programmable to support many applications:
  - Actuated Signals Control
  - Freeway Operations
  - Traffic Counting
  - Work Zone Safety and Security Systems
- ◆ Low life-cycle cost:
  - High reliability
  - No routine maintenance procedures required
  - Field upgradable, NTCIP-ready



Actuated Signal Control

EXCELLENCE • INTEGRITY • SUPPORT



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The Remote Traffic Microwave Sensor is a low-cost advanced sensor for the detection and measurement of traffic at intersections and on roadways.

This compact true-presence detector provides per-lane presence indication, as well as Volume, Occupancy, Vehicle Speed, and Classification information, in up to eight lanes or detection zones simultaneously.

Output information is provided to existing controllers by contact closure and to other computing systems by its serial communication port. A single RTMS can replace multiple inductive loop detectors and the attendant controller.

The RTMS is a small radar operating in the microwave band. Mounted on road-side poles, it is easy and safe to install and remove without traffic disruptions or lane closures. It is fully programmable to support a variety of applications, using simple intuitive software running on a Notebook PC.

**APPLICATIONS**

- Actuated Intersection control, stop-bar and mid-block detection
- Freeway traffic management and incident detection systems
- Traveler Information and Travel Time Prediction
- Ramp metering
- Queue detection and Work zone safety systems
- Permanent and Mobile Traffic Counting Stations
- Enforcement of Speed and Red-Light violation

**PRODUCT SPECIFICATIONS**

**Area Coverage**

The RTMS field of view covers the area defined by:

ELEVATION ANGLE	40 degrees
AZIMUTH	15 degrees
RANGE	3 to 60 meters (10 - 200 ft.)

**Measurement Resolution**

DETECTION ZONES	up to 8 zones
RANGE (INCREMENT)	2 metres (7 ft.)
ZONE WIDTH	2 to 7 metres (7 to 20 ft.)
TIME EVENTS	10 mSec

**Interface**

Single MS crimp multi-pin connector provides power and output signals:

- 9 isolated contact pairs rated for 100 mA at 350 Volts AC for presence indication
- Isolated serial RS-232 or RS-485 data bus provides measurement data
- Wireless option for contact pairs or data transmission

**Mechanical**

The unit is encased in a rugged water-tight NEMA 4X polycarbonate box. It is mounted on a universal bracket, enabling securing of unit to poles, tilting in both axes and quick locking.

SIZE	16 x 24 x 12 cm (6 x 9 x 5 inches)
WEIGHT	2.2 Kg (5 Lbs.)

**Power Requirement**

12 - 24 Volt AC or DC @ 4.5W; 115 VAC option

**Surge Protection:** IEC 1000-4-5 and EN 61000-4-5

**Reliability**

MTBF (Mean Time Between Failures) designed for 90,000 hours (10 years)

**Maintainability**

- Shop repairable
- Self-test diagnostic software
- 15 minute replacement time
- Field level firmware upgrade

**Environmental Conditions**

TEMPERATURE RANGE	-37° to +74°C
HUMIDITY	to 95% RH
VIBRATION	2g up to 200 Hz
SHOCK	5g 10mSec half sine wave

