



RTMS by EIS



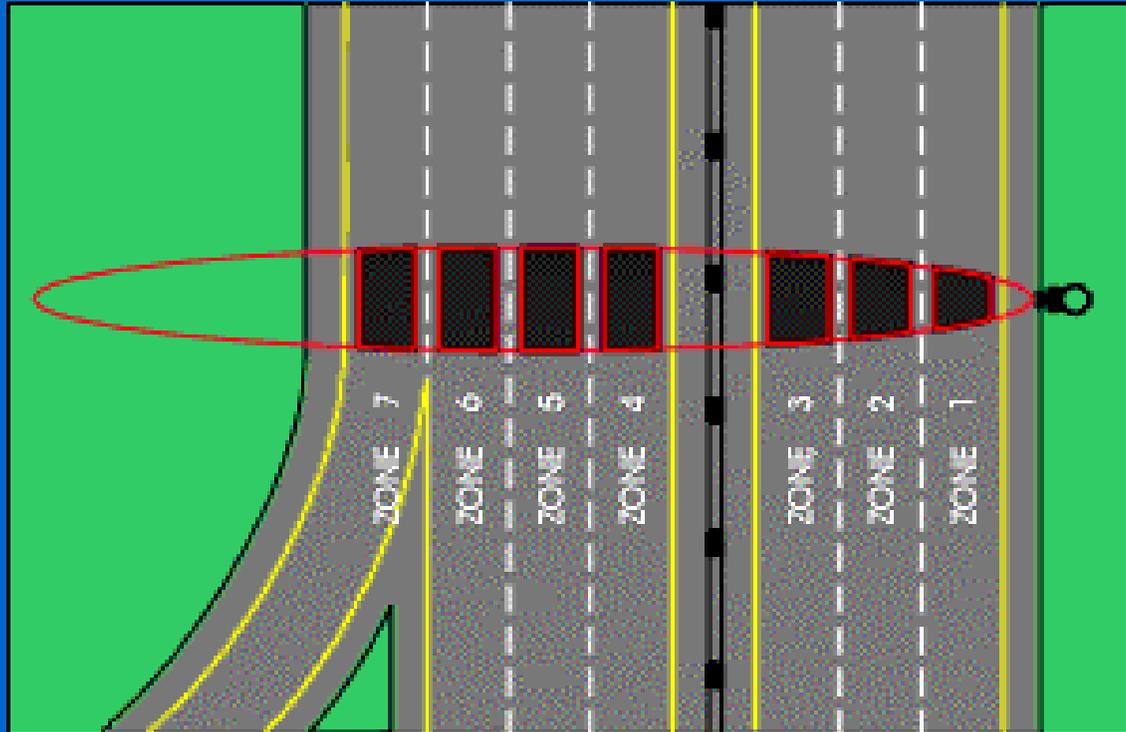
A Simple Solution to
Traffic COUNTING

What is an RTMS?

- RTMS = Remote Traffic Microwave Sensor
- Frequency Modulated Continuous Wave Radar unit
 - Transmits at 10.525 GHz X-Band
 - Receives reflected energy - detects stationary or moving objects
 - Transmit power less than cordless telephone

Multiple Lane Coverage

- Detection range is 200 feet, one RTMS can provide coverage for up to eight lanes of traffic



RTMS Applications

- Incident detection
- Actuated intersections
- Mid-block detection
- Traveler information
- Work zone safety
- Counting

High Availability

- Mean Time Between Failure is 10 years
- Mean Time To Repair is 30 minutes
- Failure detection
 - RTMS software detects and reports failures
- Maintenance free
- RTMS has the highest availability of any vehicle detector and lowest total cost of ownership

Easy to Install



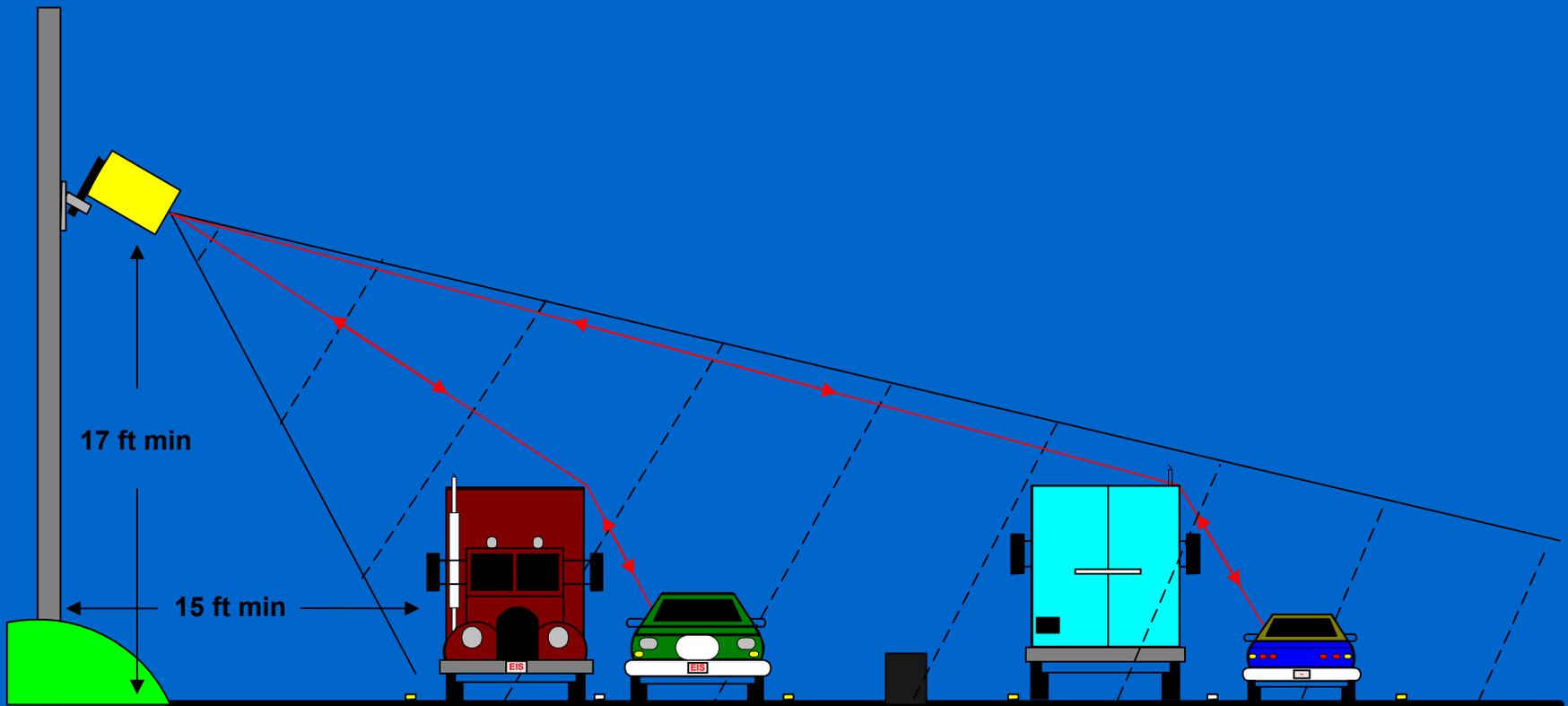
- Easily installed using a ladder or bucket truck in any weather conditions, Set-up using PC
- No road closures!, no cuts in the road!
- Deployed in 1/4 the time of other technologies
- Sensor can be re-located and re-configured



Installation Options

- Mounting requirements are:
 - 17 feet high / 15 foot setback for 2-6 lanes of coverage
 - 21-25 feet high / 20 foot setback for 7-8 lanes of coverage
- Installation examples:
 - Lighting poles
 - CCTV poles
 - Sign structures
 - Retaining walls

Side-fired Highway Configuration

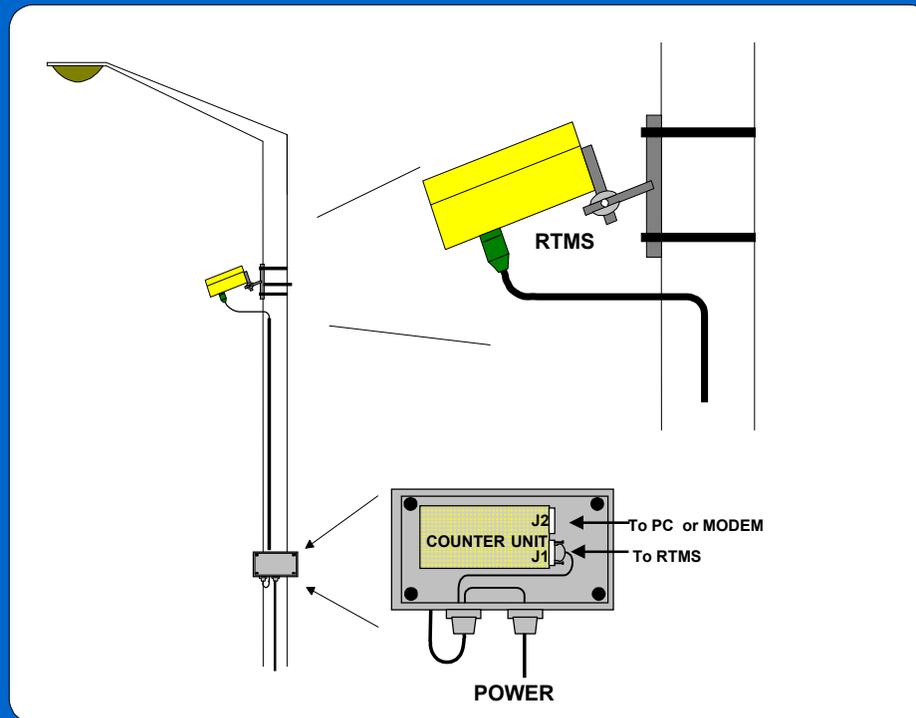


Side-fired Performance

| Measurement (per lane) | % Error |
|------------------------|---------|
| Volume | 5% |
| Occupancy | 5% |
| Long vehicle volume | 10% |
| Average Speed | 10% |

RTMS Counting Station

- RTMS Sensor
- Counter Unit



Counter Unit

Functions

- Storage of Traffic Data
- Time-stamping of traffic data

Capabilities

- 8000 data packets (up to 4 weeks of data)
- Internal battery backup of clock and data (10-year battery life)
- Low power consumption (0.5 watt)
- Serial port for set-up and data retrieval

Data Retrieval

Stored data retrieved by:

- Remote data retrieval via serial port using:
 - Wireless communications (Spread Spectrum Radio, Cellular Public Data Packet service)
 - Land- based communications — dedicated facilities: wire-line, fiber-optic facilities; Dial-up via PSTN (Public Switched Telephone Network)
- Download to PC during routine visits (visit may include routine battery replacement)

Power Requirements

- Standard Power
 - Nominal 12-24 V AC or DC
 - Maximum 33 VDC or 24 VAC (auto shutdown if exceeded)
 - 115 +/-20V AC @ 50-60HZ, 80 mA option available
- Power Consumption
 - 6.5 watts (including Counter Unit)
 - Suitable for battery operation
 - Weekly routine battery replacement
 - Solar Power recharging systems

Some RTMS Deployments

- Virginia
- North Carolina
- Louisiana
- Rhode Island
- NY State
- California
- Ohio
- etc.
- Ontario
- Georgia
- South Carolina
- NY City
- Illinois
- Maryland
- Texas

Proven RTMS Technology

- Top grades on multiple third party test efforts
 - Minnesota DOT Guidestar, May 1997
 - FHWA Hughes
 - Transportation Technology Institute, Texas DOT
- Copy of reports available

RTMS Summary-

- Ease of installation, minimizes schedule risks
- Multiple lane coverage with no road closures means \$'s are saved
- Protocol options, minimize integration effort
- Proven, mainstream technology - no maintenance

-
-
-

For More Information

Visit our EIS website at:

www.rtms-by-eis.com