



PRODUCT SPECIFICATIONS:

SPEEDLANE PRO COUNTER CLASSIFIER

1-person installation in under an hour, counts and classifies bi-directional traffic in up to 16 user-defined lanes.

SpeedLane Pro Counter Classifier

- Dual beam, side-fire FMCW traffic measurement radar
- Traffic measurements on per vehicle, per lane basis in up to 16 bi-directional user-defined traffic lanes
- Detects lane, speed and class of individual vehicles
- Computes:
 - Per lane volume
 - Occupancy
 - Gap
 - Average speed
 - 85th percentile speed
 - Headway parameters
- Very low power, 0.85W
- Self-contained, no other cabinets needed

Features and Benefits

- Patent pending true dual beam “speed trap” technology inherently provides accurate measurements without the need for in situ calibration
- 255 feet (78m) detection range allows for flexible deployments
- World’s lowest power usage, highly integrated multi-lane traffic measurement radar. At 0.85 Watts, SpeedLane Pro requires 10X less power than competing products
- FCC and CE approved for full 250 MHz operation to suite variety of application requirements
- Mounts on the side of the road for non-intrusive traffic data collection
- Works in all weather and lighting conditions
- Simultaneously measures all vehicles in 16 user-defined lanes

- All traffic measurements are on a per vehicle, per-lane basis, available in real-time and stored in device memory
- Lane-by-lane vehicle counts, length based class, average and 85th percentile speeds, occupancy, headway and gap measurements
- 1 Million individual vehicle memory allows uninterrupted data storage even in the event of comm outages
- Lane-by-lane vehicle counts, length based class, average and 85th percentile speeds, occupancy, headway and gap measurements
- Companion Windows application provides intuitive GUI to set all configuration parameters, display real time plots of targets and view snapshots and streaming HD video
- Android, smartphone and tablet app for setup and camera view ease field setup and maintenance
- Electronic gyroscope for tilt and level measurements to ease setup
- Built-in long range Class I 2.1+EDR Bluetooth, RS232 ports
- 512 Mbytes of on-board storage plus USD card expansion slot
- Built-in 1.3MP HD video camera for sighting makes setup a snap and allows convenient remote monitoring of traffic
- Comprehensive protocol, C and C# SDK
- Powerful SQL based query interface for historical data
- Optional built-in RS485 serial and Ethernet ports

- Optional cloud-based TrafficCloud server to aggregate data from multiple devices provides quick and seamless dashboard view
- Optional built-in UPS with rechargeable battery keeps unit running for over 24 hrs. on loss of external power
- Optional MPPT solar charger for optimal winter and cloudy day charging
- Optional built-in 96Whr LiFePO4 battery for temporary or solar installations
- Optional penta band 3G GSM cellular modem for remote access
- Optional POE (power over Ethernet)
- Optional DVR records video for last 18 hours



| Specifications & Recommended Operating Conditions | |
|---|---|
| Specification | Recommended Condition |
| Type | Dual beam side-fire FMCW traffic measurement radar |
| Vcc | Standard: 9 to 28VDC Optional: 48V PoE |
| Icc@12VDC (typical) | Ethernet Off: 71mA (0.85 W) Ethernet On: 97mA (1.2W) Streaming HD video: 183mA (2.2W) With GSM Modem Option: On Line: 97 mA (1.2W) Upload New Data: 108mA (1.3W) |
| Reverse Power | Protected w/resettable fuse |
| RF Power | 5 mW maximum each radar |
| Occupied Band | 24.020 GHz to 24.230 GHz |
| Modulation Type | Frequency with linear ramp |
| Beam Angle | 7° x 74° |
| Beam Polarization | Linear |
| Speed Accuracy | Average per lane: +/- 1% Average per direction: +/- 1% Per Vehicle: +/- 6% for 90% of vehicles |

| Specifications & Recommended Operating Conditions | |
|---|---|
| Specification | Recommended Condition |
| Volume Accuracy | Per Direction Typical: 98 to 99% Per Direction Minimum: 95% Per Lane Typical: 98 to 99% Per Lane Minimum 90% |
| Length Class Accuracy | +/- 5.7ft Minimum: (1.7m) 90% or 15%; whichever larger for 90% vehicles |
| User Defined Lanes | 16 max |
| User Defined Length Class | 8 max |
| Max Detection Range | 255 feet (78 m) |
| Minimum Setback | 6 feet (1.8m) |
| Sample rate | 500 Hz x 2 Radars |
| Certification | FCC, CE |
| Ethernet | Optional: 100 BaseT Half/Full Duplex auto polarity detect |
| Power Over Ethernet | Yes, optional. 802.3af. Mode A/ Type 1 (power over data pairs) |
| Rechargeable Battery | Optional built-in 96Whr LiFePO4 |

| Specifications & Recommended Operating Conditions | |
|---|---|
| Specification | Recommended Condition |
| Solar Kit | MPPT charger, 30W solar panel |
| Storage Capacity | Speed, lane and class for 1,000,000 vehicles; per lane average speed, 85th percentile speed, occupancy, gap, headway for 3 months |
| Sighting Camera | 1.3MP HD video (Ethernet and 3G modem only) or HD snapshots. 60° field of view 1280x960, 800x600, 640x480, 320x240 (800x600 10fps video) |
| Bluetooth | Ultra low power 800+ feet Class I 2.1+ EDR 460KB baud rate for setup, download and camera |
| Smartphone/ Tablet App | Android smartphone or tablet ver. 4.0.3 and higher. Bluetooth and TCP/IP access. |
| Remote Access | Optional built-in ultra-low power penta band 3G GSM modem |
| GPS | Optional built-in |
| Operating °F (°C) | Without battery: -40F (-40C) to +185F (+85C) With LiFePO4 battery: -4F (-20C) to +140F (+60C) |
| Dimensions without mounting bracket | 26"length x 3" diameter (670mm x 76mm Diameter) |
| Weight | Without battery: 4.6lb (2.1 Kg) With battery: 6.4lb (2.9 Kg) |

