



## PRODUCT SPECIFICATIONS:

# SPEEDLANE PRO COUNTER CLASSIFIER

One-person installation in under an hour, counts and classifies bidirectional 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)

