SpeedLane Pro™

Houston Radar SpeedLane Pro™

Houston Radar SpeedLane Pro™ is state of the art **true dual beam, low power side-fire radar**. It is designed to accurately detect lane, speed and class of individual vehicles and compute per lane volume, occupancy, gap, average speed, 85th percentile and headway parameters.

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 flexible deployments.
- World's lowest power usage highly integrated multi-lane traffic measurement radar. At 0.85 Watts SpeedLane requires 10X less power than competing products.
- FCC and CE approved for full 250MHz operation to suite variety of application requirements.
- Mounts on the side of the road for non-intrusive traffic data collection and works in all weather and lighting conditions.
- Simultaneously measures all vehicles in 16 user defined lanes.
- All traffic measurements are on 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 un-interrupted data storage even in the event of comm outages.
- Companion Windows application provides intuitive GUI to set all configuration parameters, display real time plots of targets and view snapshots & streaming HD video.
- Android smartphone and tablet app for setup and camera view ease field setup and maintenance.

Specifications & Recommended Operating Conditions	
Specification	Recommended Condition
Type	True 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°x74°
Beam Polarization	Linear
Speed Accuracy	Average per lane: +/- 1% Average per direction: +/- 1% Per Vehicle: +/- 6% for 90% of vehicles
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 (1.7m) 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

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Toll Free: 1-888-602-3111

Short Form Datasheet: SpeedLanePro Rev 1.0 Jan 2017
Specifications subject to change without notice.
Product availability expected May 2017

Features and Benefits Continued…

- Electronic gyroscope for tilt and level measurements 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 Houston Radar protocol, C and C# SDK.
- Powerful SQL based query interface for historical data.
- Optional built-in RS485 serial and Ethernet ports.
- Optional cloud based Tetryon 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 24hrs 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.

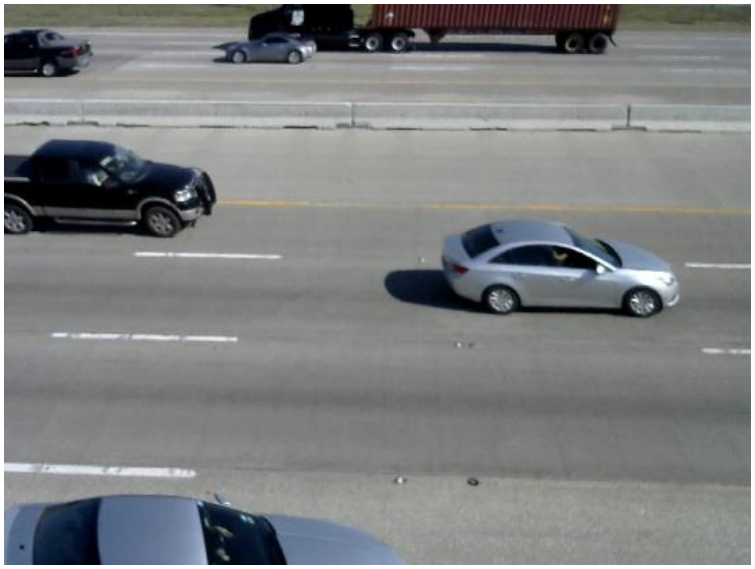

Image from Built-In HD Camera

Specifications & Recommended Operating Conditions	
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
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)

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