



PX150[®] Tracking Radar

The Houston Radar PX150[®] is the pinnacle of tracking and detection radar technology. Featuring wide FOV, it's engineered to precisely monitor the location and velocity of vehicles from variety of installation locations across multiple lanes/turns at intersections and highways.

Features and Benefits

- **Advanced Technology Integration:** Utilizes a blend of MIMO, FMCW, and Doppler technologies to deliver accurate measurements of range, azimuth, speed and robust stopped vehicle detection for a maximum of 256 targets simultaneously.
- **Compact and Non-intrusive:** Offers a highly integrated design for monitoring multiple lanes without intruding on the roadway.
- **All-Weather Performance:** Reliable operation in various weather conditions. Not affected by dust, fog, sun, shadows.
- **Customizable Detection Zones:** Supports 64 user-defined zones for traffic flow, queue & stop bar detection.
- **Detection Alerts:** Robust detection with pre & post trigger video clips uploaded to Tetryon™ cloud server.
- **Detailed Traffic Insights:** Provides real-time, per-vehicle, and per-lane data. Provides turning movement counts.
- **Extensive Vehicle Memory:** Can store data for 1 million vehicles, ensuring continuous data collection even during communication disruptions or offline use.
- **User-Friendly Software:** Features a companion Windows program with an intuitive GUI for easy setup and monitoring, alongside a soon to be available Android app for convenient field installation and maintenance.
- **Effortless Installation:** Includes an electronic accelerometer for tilt and level adjustments, and a built-in HD video camera for easy setup and remote traffic observation.



Houston Radar PX150[®]

Specifications & Recommended Operating Conditions	
Specification	Recommended Condition
Type	Triple Transmit; Quad Receive MIMO Tracking Radar
Input Voltage	8V to 30V DC Under & Over voltage protected
Icc@12VDC (typical total power)	Ethernet Off: 340mA (4.1W) Ethernet On: 355mA (4.3W) Streaming video Eth: 410mA (4.9W) With Cellular Modem Option: On Line: 375 mA (4.5W)
Reverse Power	Protected w/ auto resetting fuse
RF Power	15mW maximum each transmitter
Occupied Band	61.000 GHz to 61.500 GHz
Modulation Type	Frequency with linear ramp
Field of View (FOV)	100° Horizontal, 30° Vertical
Accuracy:	
Speed	Per Vehicle: +/- 1mph or km/h for approaching or receding vehicles.
Volume	Per Direction Typical: 98 to 99% Per Direction Minimum: 95% Per Lane Typical: 98 to 99% Per Lane Minimum: 95%
Vehicle Detection at Stop Bar	Typical: 99+% Minimum: 97%
User Defined Lanes	16 lanes with 8 zones each
Max Detection Range	300 feet (90 m)
Minimum Setback	0 feet (0 m) in "front fire" mode
Sample/Update rate	20 Hz
Certifications	FCC, IC, CE IEC 61000-4-5 Ed 3.1 2017-08 (Surge) NEMA 250-2008 (4X) NEMA TS-2-2021 v03.08 IEC 60529-2020 (IP67)

Features and Benefits Continued...

- **Wired Connectivity:** Features built-in RS232/485 serial and Ethernet ports for connections to NEMA TS2 and Caltrans controllers via LRC and BIU controllers.
- **Wireless Connectivity:** Equipped with Bluetooth, WiFi and optional 4G cellular modem for seamless wireless access.
- **Ample Storage:** Comes with 8GB of internal storage and a microSD card slot for expansion (not accessible externally).
- **Robust Data Access:** Supports comprehensive C and C# SDKs, and a powerful SQL-based query interface for analyzing historical data.
- **Enhanced Data Management:** Optional Tetrayon cloud server for aggregating data from multiple units and alerts with video clips.
- **Regulatory Compliance:** FCC, IC and CE certification for operation within the full 500MHz ISM band.



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Ethernet	Optional: 100 BaseT Half/Full Duplex auto polarity detect
Power Over Ethernet	Yes, optional 802.3af. Mode A Type 1 or Passive
Storage Capacity	Speed, lane and class for last 1,000,000 vehicles.
Sighting Camera	1280x960p 15 fps HD video 1.2MP Snapshots (5MB possible), video clip recording on triggers with pre-roll.
Trigger In/Out	2x Configurable as Inputs or Outputs. 30V, 0.5A (output)
Bluetooth / WiFi	2.4/5GHz 802.11 a/b/g/n BT Classic and 5.1 BLE
Smartphone/Tablet App	Android smartphone or tablet ver. 4.0.3 and higher (future). Bluetooth and TCP/IP access.
Remote Access	Optional built-in 4G Modem
GPS	Optional Built-in
Operating °F (°C)	-40F (-40C) to +185F (+85C)
Dimensions without bracket	4.2" L x 3.8" W x 2.4" H (106mm x 96mm x 62mm)
Weight	0.6lb (270g)

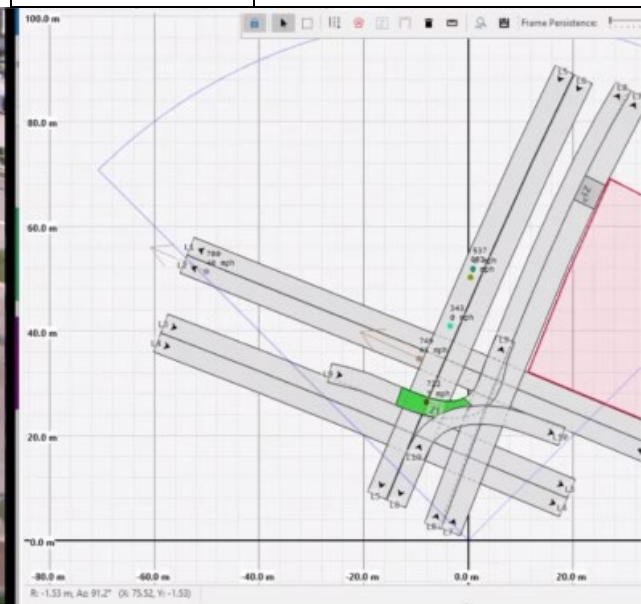


Image From Built in HD Camera

Live Target Tracking and Zone Triggers