

Puck LITE

Our lightest sensor ever.

Velodyne LiDAR's Puck LITE is a lighter weight version of the VLP-16 Puck for applications that demand a lower weight to meet their requirements. The Puck LITE has identical performance to VLP-16 with the only difference in weight of 590 g vs. 830 g for the latter. No other changes have been made to Puck LITE as it retains its patented 360° surround view to capture real-time 3D LiDAR data that includes distance and calibrated reflectivity measurements.

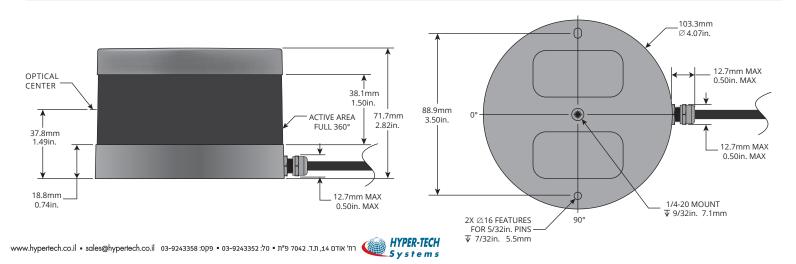
Unprecedented Field of View and Point Density

The Puck LITE has a range of 100 m with dual return mode to capture greater detail in the 3D image while the power consumption is approximately 8 W. A compact footprint (Ø103mm x 72mm) and an industry leading weight of 590 g for a LiDAR sensor with high resolution makes it ideal for UAV/drone and mobile applications in the areas of 3D mapping/imaging, inspection and navigation.

It supports 16 channels and generates 300,000 points/second from a 360° horizontal field of view and a 30° vertical field of view with $\pm 15^\circ$ from the horizon. The Puck LITE has no visible rotating parts and is encapsulated in package that allows it to operate over a wide temperature range (-10°C to +60°C) and environmental conditions (IP67).



DIMENSIONS



Light weight Real-Time 3D LiDAR

The Puck LITE provides high definition 3-dimensional information about the surrounding environment.



Specifications:

Sensor:

- Time of Flight Distance Measurement with Calibrated Reflectivities
- 16 channels
- · Measurement Range: Up to 100 m
- Accuracy: ±3 cm (typical)
- Dual Returns
- Field of View (Vertical): +15.0° to -15.0°
- Angular Resolution (Vertical): 2.0°
- Field of View (Horizontal): 360°
- Angular Resolution (Horizontal/Azimuth): 0.1° 0.4°
- Rotation Rate: 5 Hz 20 Hz
- Integrated Web Server for Easy Monitoring and Configuration

Laser:

- · Class 1 Eye-safe
- 903 nm Wavelength

Mechanical/ Electrical/ Operational

- Power Consumption: 8 W (typical)
- Operating Voltage: 9 V 18 V (with Interface Box and Regulated Power Supply)
- Weight: 590 g (without cabling)
- Dimensions: 103 mm diameter x 72 mm height
- Shock: 500 m/s² amplitude, 11 ms duration
- · Vibration: 5 Hz to 2,000 Hz, 3Grms
- Environmental Protection: IP67, Type 4 Enclosure
- Operating Temperature: -10°C to +60°C
- Storage Temperature: -40°C to +105°C

Output:

- Up to 300,000 points per second
- 100 Mbps Ethernet Connection
- UDP Packets Contain:
 - Time of Flight Distance Measurement
 - Calibrated Reflectance Measurement
 - Rotation Angles
 - Synchronized Time Stamps (µs resolution)
- GPS: \$GPRMC NMEA Sentence from GPS Receiver (GPS not included)

Product Ordering Information:		
Product Name	Connector Type	SKU Ordering Number
Puck LITE	RJ45	80-VLP-16-C0B20P30SR4SL
Puck LITE	M12	80-VLP-16-C0B20P30SM1SL

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