—

Specifications

Sensor

Maximum Range	50m (80% reflectivity); 20m (10% reflectivity)
Minimum Range	0m
Range Accuracy	±2cm (typical)
Horizontal FoV	360° without bracket / 210° with bracket
Horizontal Resolution	1.2° at 5Hz update rate, 3.6° at 15Hz
Vertical FoV	95° (21° up, 74° down)
Vertical Resolution	0.76° (best)
Angular Accuracy	±0.3°
Points per second	Up to ~200k (variable)
Returns per pulse	Up to three
Vertical scans per second	1500 per side
Horizontal scans per second	5-15Hz

Mechanical

Operational temperature range	-40°C to 75°C
Storage temperature range	-40°C to 105°C
Maximum operational relative humidity	93% (non-condensing)
Ingress protection	IP67 (lidar only; does not cover bridge board, power supply, or included cables)

Laser

Class 1	per IEC 60825-1:2014
Wavelength	905nm

Physical

Weight	353 grams; 420 grams with bracket
Dimensions without bracket	53mm width / 55mm depth / 127mm height
Dimensions with a bracket	70mm width / 57mm depth / 131mm height

Electrical

Input voltage	48V, ±5%, 12-48V with upcoming bridge board
Steady state power consumption	<10W
Startup power	<30W for up to five seconds
Communication Interface	100Mbps Ethernet via BroadR-Reach or RJ-45 connection

Drivers

OS for drivers	Linux (x86-64 & ARM64)
API	ROS, C++

Data Provided

- Cartesian coordinates
- Spherical coordinates
- Intensity
- Timestamp
- Normals
- Pulse width
- Beam side
- Return index

Last updated 2020-06-04 UTC.