

SPECIFICATION



LiDAR System

Working Range	max. 1350 m	Max. Meas. Rate	up to 500,000 meas./sec
Field of View	0°~ 330°	Angle Resolution	0.001°
Working Speed	≤60 km/h(Automotive) ≤120 km/h(Helicopter)	Accuracy	Automotive: H:2cm/V:3cm(≤50m); Helicopter: H:15 cm/V:8 cm(500 m)
Weight	5.99 kg	Dimensions	515 x 248 x 310 mm
Input Voltage	11-32V DC	Power Consumption	85 W
Camera Resolution	22.3 MP (DSLR); 30 MP (panorama camera, see details in Part III below)		

Part I: Laser Scanner

Laser Pluse Repetition Rate	500 kHz	Eye Safety Class	laser class 1
Accuracy / Precision	10 mm / 5 mm	Internal Memory	SSD 240 GB
Environment Protection	IP64	Temperature	operating: 0° to 45°C; storage: -20° to 50°C

Part II: POS System

Gyro Bias Stability	0.05°/per hour	Data Storage	8 to 32 GB
Processed Roll/Pitch Accuracy	0.005°	Processed Heading Accuracy	0.017°
Processed location H/V Accuracy	0.01/0.02(m)	Processed Speed H/V Accuracy	0.02/0.01(m/s)
Performance Range	POS:125Hz		
Data sampling rate	Location:50Hz		

Part III: Panorama Camera (used with automotive mode only)

Resolution	30 MP (6 sensors, 5 MP each)
Imaging Sensor	Sony ICX655 CCD x 6, 2/3", 3.45 μm
Partial Image Mode	pixel binning and region of interest (ROI) modes
Maximum Resolution	2448x2048 pixel (single CCD); 8000x4000 pixel (panorama)
Image Data Format	JPEG; 10 FPS JPEG compressed, 5 FPS uncompressed
Digital Interface	USB 3.0 with locking screws for secure connection
Transfer Rate	5 Gbit/s
Image Data Output	12-bit raw
Shutter	global shutter
Optics	6 high quality 4.4 mm focal length lenses
Field of View	90% of full sphere
GPIO	12-pin GPIO connector for external trigger input, strobe output, and camera power
Temperature	operating: 0° ~ 45°C; storage: -30° ~ 60°C
Dimensions	197 mm diameter, 160 mm height (with lens hoods)
Environmental Protection	IP65
Power Consumption	12-24 V, 13 W via GPIO