

MOBILE HD MAPPING SYSTEM

POLYMAPPER HD 360



The Polymapper HD 360 is a complete system solution for mobile HD mapping. The solution includes mm accuracy HD LiDAR, tactical grade fiber optics (FOG) or MEMS-based precision GNSS/INS, a 360 degrees 6-camera module, and a wheel odometer. The Polymapper HD 360 is fully assembled, factory calibrated, and ready for immediate use. The system also includes post-processing sensor fusion software. The Polymapper HD 360 is the industry's most advanced and affordable professional HD Mapping system.

FEATURES

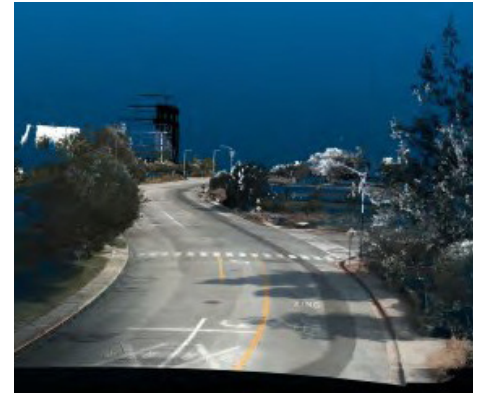
- 5 mm accurate LiDAR, under 5 cm geo-referencing accuracy
- Fully assembled and calibrated
- Up to 8 hours recording. All data in a single folder
- Large scale, high speed (up-to 50 mph) HD scan
- Great performance during GNSS outages
- Half of the cost of a similar systems

SOFTWARE

- Easy to use PolyNav control software
- Sensor fusion post processing PolyFusion software
 - Noise suppression unit, Automatic colorization
 - Geo annotated las file, imagery, trajectory and status
- AI-based feature extraction PolyVision software
 - Lane/Pole/Curb detection
 - Moving object removal, traffic signs/markings extraction

SYSTEM

- Ultra-precise, mm accuracy LiDAR
 - Dual LiDAR options available
- Dual GNSS/INS with centimeter-level accuracy
- On-board data storage, upto 8 hours
- 360 degree 6-camera module
- Wheeled odometer
- Frame with dual antennas and shock/vibration dampers
- Post-processing software
- Power supply



Automatic point cloud colorization.



High accuracy in GNSS-denied environment.



Visit polyexplore.com For More Information.

High End, Cost-Effective Navigation Solutions.

PolyExplore Inc.

2210 O'Toole Ave, Suite 240, San Jose, CA 95131
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REV. 1.01

TECHNICAL DATA

MOBILE HD MAPPING SYSTEM POLYMAPPER HD 360

LIDAR SPECIFICATIONS

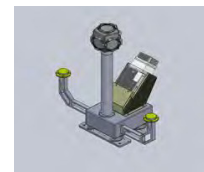
Item	Specification
Laser	
Range Measurement Principle	Time of Flight
Range Performance	775 m (50 kHz) to 300 m (500 kHz)
Pulse Repetition Frequency	500, 200, 50 kHz (Programmable)
Beam Divergence (1/e ²)	0.3 mrad
Wave Length	1550 nm
Laser Safety Classification	Class 1
Range Resolution	2mm
Intensity Recording	2 bits
Maximum Number of Returns	4 (First, Second, Second Last, Last)
Minimum Range	1.5 m
Range Accuracy 1 Sigma ²	10 mm
Precision Single Shot ²	5mm
Scanning Characteristics	
Field of View	360°
Lines per Second[Scan Frequency]	50 - 250 lines/sec

GNSS CHARACTERISTICS

Constellations	GPS/GLONASS/Beidou/Galileo
Satellite signals	L1 & L2
Position accuracy	1.6 m CEP SPS, 0.02 m RTK
Velocity (RTK) accuracy	1 cm/s
Roll/Pitch (RTK)	0.01°
Heading	0.01°, Static
Measurement rate	100 Hz
Sensitivity	-160 dBm
Number of antennas	2

HARDWARE SPECS

Power Consumption	120w
Weight	60 kg
Dimensions	600x 800x 900 (L x W x H)
Output	Ethernet,USB 3



High density at high speed.



Automatic feature extraction.



Easy 3rd party integration.



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