

MOBILE HD MAPPING SYSTEM POLYMAPPER HD



The Polymapper HD is a complete system solution for mobile HD mapping. The solution includes mm accuracy HD LiDAR , tactical grade fiber optic (FOG) or MEMS-based precision GNSS/INS, industrial cameras with global shutter, and wheel odometer. The Polymapper HD is fully assembled, factory calibrated and ready for immediate use. The system also includes post-processing sensor fusion software.

ADVANTAGES

- A mm accuracy LIDAR
 - Fully assembled and calibrated, just install and scan!
 - Up to 8 hours recording capacity
 - Large scale , high speed (upto 50 mph) HD scan
 - RTK GNSS/INS with centimeter-level accuracy
 - Half of the cost of similar systems
- The post processing software
 - Provides under 10 cm overall mapping accuracy
 - Easy to use, highly intuitive sensor fusion software
 - Quick and accurate geo-annotation
 - Colorization (RGB annotation) available
- The POLYMAPPER HD system consists of
 - Ultra-precise, mm accuracy LiDAR
 - Dual GNSS/INS with centimeter-level accuracy
 - On-board data storage, upto 8 hours
 - Post-processing software
 - Three industrial cameras with Global Shutter
 - Frame with dual antennas and shock/vibration dampers
 - Power supply



Visit polyexplore.com For More Information.

High End, Cost-Effective Navigation Solutions.

PolyExplore Inc.

2210 O'Toole Ave, Suite 240, San Jose, CA 95131
contact@polyexplore.com

TECHNICAL DATA

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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

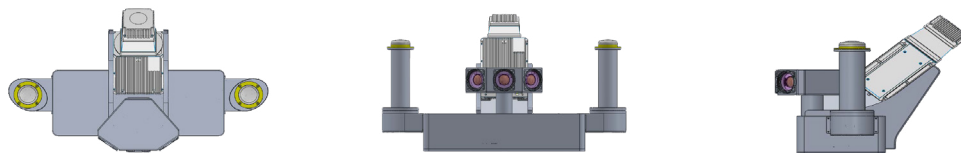
GNSS CHARACTERISTICS

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	0.1° (1 m base),
Measurement rate	100 Hz
Sensitivity	-160 dBm
Number of antennas	2

HARDWARE SPECS

Recording Time	up to 8 hours
Weight	70 lbs
Dimensions	33" x 19" x 20" (L x W x H)
Output	Ethernet

POLYMAPPER HD DIMENTIONS



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