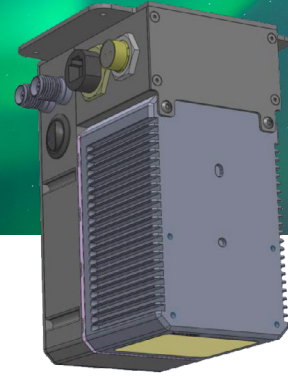


AERIAL HD MAPPING SYSTEM

POLYSCANNER 2000LS1



The POLYSCANNER LS1 is an affordable, precise Aerial HD mapping system that includes advanced LiDAR, GNSS/INS sensors and post-processing software.

ADVANTAGES

- LiDAR, position and pose data in a single folder
- No calibration required
- Up to 2 hours recording capacity
- RTK GNSS/INS with centimeter-level accuracy
- Sensory data sync without GNSS
- High-density point cloud output
- Ultra-light

Post-processing software allowing to create a single LAS file annotated with the geodetic data :

- time-sync lidar data with navigation data.
- geo-reference lidar data to generate “rich” point cloud in LAS format.

The system features dual frequency RTK with centimeter-level accuracy, high level of integration, and compact, robust design. The POLYSCANNER LS1 system consists of:

- Advanced high-density Solid State LiDAR
- Dual RTK INS/GNSS with centimeter-level accuracy
- On-board data storage
- Post-processing software
- UAV adaptors :
 - Standard DJI Matrice 600 adapter
 - Standard UAVOS VTOL UVH-EL adapter
 - Customized adaptors available on request



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

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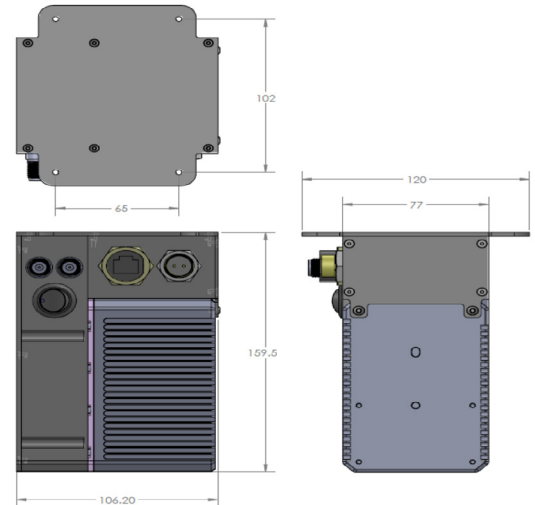
TECHNICAL DATA

AERIAL HD MAPPING SYSTEM POLYSCANNER 2000LS1

HARDWARE SPES

Recording time: up to 2 hours
 Weight: 1.2 kg
 Dimensions: 160 mm x 120 mm x 107 mm
 Output: Ethernet

POLYSCANNER LS1 DIMENTIONS



GNSS/INS CHARACTERISTICS

Constellation	GPS/GLONASS/Beidou/Galileo
Satellite signals	L1 & L2
Accuracy	
Position	1.6 m CEP SPS, 0.02 m RTK
Velocity (RTK)	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

LIDAR

Laser Wavelength	905 nm
Laser Safety	Class 1 (IEC60825-1)
Detection Range (@ 100 klx)	90 m @ 10% reflectivity, 130 m @ 20% reflectivity ,260 m @ 80% reflectivity.
FOV	81.7°(Horizontal) x 25.1°(Vertical)
Distance Random Error	(1σ @ 20m) < 2 cm
Angular Random Error	1σ<0.05°
Beam Divergence	0.28°(Horizontal) x 0.03°(Vertical)
Point Rate	240,000 Points/s(first or strongest return), 480,000 Points/s(dual return)
False Alarm Ratio(@100klx)	<0.01%



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