### **AERIAL HD MAPPING SYSTEM**

### **POLYSCANNER LM**



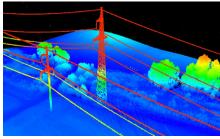
The POLYSCANNER LM is a flexible, highly integrated Aerial HD mapping system which includes LiDAR, optional HD CAMERA, and GNSS/INS sensors.

### ADVANTAGES

- Survey grade accuracy, low cost
- No calibration required
- Up to 2 hours recording capacity
- RTK GNSS/INS with centimeter-level accuracy
- Sensory data sync without GNSS
- Easy to use, intuitive post -processing software provides
- Navigation, LiDAR and camera data in a single folder
- Easy assembly

### **FEATURES**

- LIDAR (2 options) Velodyne VLP-16 OR Velodyne VLP-32C
- Industrial CAMERA w/Global Shutter
- Dual PPK/RTK INS/GNSS with centimeter-level accuracy
- On board FUSION computer
- Data storage for up-to 2 hours of recording
- Post- processing software with automatic colorization for camera systems
- UAV adapters :
- Standard DJI Matrice 600 adapter
- Customized adapters available on request





### POLYFUSION SENSOR FUSION TECHNOLOGY

PolyExplore's proprietary PolyFusion technology encompasses a unique sensor calibration procedure, the mechanical system design, including a processing sensor fusion software. The technology insures survey grade accuracy and a factory calibration. Polymapper doesn't need calibration before every mission.

The technology ensures much higher system precision than the competition with similarly performing sensors

### POLYNAV 2000 TECHNOLOGY

The Polynav2000 is a superior, near FOG-performance GNSS-aided, MEMS-based Inertial Navigation System(INS), by PolyExplore Inc. The system offers dual antennas for precision heading and a dual-frequency RTK/PPK centimeter-level accuracy and a superior performance during GNSS outages with tightly coupled GNSS and INS systems. The system is designed and built by PolyExplore, which allows us to control the system's cost and pass those savings to our customers.



## TECHNICAL DATA

# AERIAL HD MAPPING SYSTEM POLYSCANNER LM

### **POLYSCANNER LM FEATURES**

P/N	LiDAR	Camera	Discription
Polyscanner LM16	VLP-16	N/A	16 - ch. LiDAR, GNSS/INS, M600 harness
Polyscanner LM32	VLP-32C	N/A	32 - ch. LiDAR, GNSS/INS, M600 harness
Polyscanner LM16C	VLP-16	8.9 MP	16 - ch. LiDAR, camera, GNSS/INS, M600 harness
Polyscanner LM32C	VLP-32C	8.9 MP	32 - ch. LiDAR, camera, GNSS/INS, M600 harness

#### **EASY ASSEMBLY**



### **GNSS 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

### **HARDWARE SPECS**

Storage	up to 2 hours
Weight	2.3 kg
Dimensions	260 mm x 150 mm x 145 mm
Output	Ethernet

