

# ROBOT SLAM®

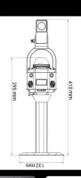
A Survey-grade SLAM Handheld



# Illustration

#### All-in-one

Laser scanner + IMU + camera + master control + power supply all integrated into one device.



#### **Laser Sensor**

Measuring range up to 70m, scan rate 200,000 pts/sec max., FOV 360 ° x 59 °, anti-interference design.





#### 360° Pano Camera

Dual 1-inch CMOS sensor, 6K video resolution, 21MP image resolution.

#### **Handgrip Battery**

Magazine feeding and lever knob mechanism to well tight between handgrip and device.



#### **Storage & Download**

512GB SSD built in, with raw data transfer rate 125 MB/s max.





## Main Control & GCP Record Buttons

Physical buttons available as well as access via APP interface, convenient in use.



Device status and commands to display, real-time and interactive.





## **Applications**

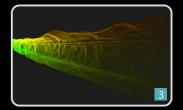
- Building Interior
- 2 Architecture Facade
- 3 Tunnel Engineering
- 4 Stockpile Calculation
- 5 Landscape Reconstruction
- 6 Emergency Response















### **Specification**

Series	RobotSLAM	Dimension	180x132x312 mm (w/o camera);
Model	RobotSLAM Lite		180x132x386 mm (with camera)
Laser Wavelength	905 nm	Weight	1.29kg
Laser Safety Class	CLASS 1 (IEC 60825-1:2014), eye-safe	Power Supply	handheld grip with inbuilt battery, cable-free connection
FOV	horizontal 360°, vertical -7°~52°	Endurance	2~2.5 hours
Measuring Range	0.1~70 m (70 m @80% reflectivity; 40 m @10%	Input Voltage	DC 9~27 V
	reflectivity)	LED Screen	available
Measurement Rate	200,000 pts/sec	Relative Accuracy	best up to 1 cm
Scanning Rate	10 Hz	Realtime Point Cloud	available
IMU Module	built in, with push frequency 200 Hz (when enabled)	Realtime Trajectory	available
Anti-interference	available	Pano Camera	external, Pano360 II, 2-lens fisheye 360°, 21 MP in total
Temperature	$-20^{\circ}$ C $\sim$ 65 $^{\circ}$ C (operating), $-40^{\circ}$ C $\sim$ 70 $^{\circ}$ C (storage)	Software	RobotSLAM Palm (smartphone APP)
IP Protection	IP 67		RobotSLAM Engine (PC)