

# RobotSLAM II

A Survey-grade Handheld Laser Scanner

- *inbuilt camera default, external camera optional*
- *inbuilt RTK for outdoor direct geo-referencing*
- *LCD screen display on board and APP operation both*
- *industry's first RGB light indicating work status*



**Basic Package**

*(RTK built in but disabled)*



**Standard Package**

*(GNSS antenna installed and advanced license code to activate inbuilt RTK)*



**Supreme Package**

*(both inbuilt RTK activated and external camera installed for top configuration)*

**ROBOT**  
**SLAM** 

Note: all configurations and specifications in this doc are subject to change without any prior notice.

Model	RobotSLAM II	RobotSLAM II Plus	RobotSLAM II Ultra
Series	RobotSLAM II		
Laser Scanner	16-channel	32-channel	32-channel
Scan Range	0.05 to 120 m	0.05 to 120 m	0.5 to 300 m
Scan Rate	640,000 pts/sec max. (from dual returns)	1,280,000 pts/sec max. (from dual returns)	1,920,000 pts/sec max. (from triple returns)
Weight	1.75/2.2 kg	1.75/2.2 kg	1.45/1.9 kg
	(without/with battery handgrip)		
Dimension	103 x 217 x 388 mm (L x W x H, basic package)		
Laser Safety	Class-1 (IEC 60825-1:2014) eye-safe		
Laser Wavelength	905 nm		
Echo Mode	8-bit, 2-3 returns max. (strongest return typical)		
Scan Frequency	10 Hz		
Scan FOV	360° (H) x 285° (V)		
H. Angle Resolution	0.18° (10 Hz)		
V. Angle Resolution	2°	1°	1.3°
Relative Accuracy	best up to 1 cm		
GNSS Differential	GPS + Glonass + Beidou + Galileo, multi-constellation tracking		
Signal Tracking	1698 channels		
RTK Positioning Accuracy	RMS 1 cm + 1 ppm		
CORS Access	nano SIM card slot built in		
Positioning Data Refresh Rate	100 Hz max.		
Absolute Accuracy	best up to 3-5 cm		
Scanning Principle	laser sensor 360° mechanical rotation		
Accumulated Mileage Error	0.1%-0.2% (under the conditions without loop closure)		
Housing Material	aviation-grade aluminum, with high protection level and anti-interference		
System Consumption	26 w		
Power Supply	battery handgrip (model iGrip) to plug in, external power supply available		
Battery Unit	model iGrip, 3500 mAh, 50 Wh, 14.4 V		
Battery Endurance	1.5 to 2 hours per unit		
IP Rating	IP 54		
Temperature	-20°C to 65°C (operating); -40°C to 85°C (storage)		
Device Connection	Wi-Fi / Ethernet / type-C USB 3.0		
Data Storage	built-in SSD 512 GB (extendable upon request)		
Data Download	Wi-Fi / Ethernet / type-C USB 3.0		
Inbuilt Camera	13 MP fish-eye, 2 nos. 26 MP in total		
External Camera (option)	panorama camera, imaging mode: 72 MP; video pano mode: 29.5 MP / 30 fps		
APP	RobotSLAM Palm		
Process Software	RobotSLAM Engine		
On-site Process	available		

Package Option		Basic	Standard	Supreme
default	rotatable scanner	120/300m, 16/32 channel, optional		
	inbuilt camera 13 MP x2	available		
	LED screen	available		
	status light	available		
	battery handgrip	available		
inbuilt RTK		equipped but disabled	activated by an advanced license code	
GNSS antenna		N/A	supplied	supplied
external camera 72 MP		N/A	N/A	supplied

# SOUTH



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