

EmiSLAM

CARVING THE REAL WORLD ACCURATELY



Mobile SLAM **COLOR**

3D Laser Scanner



R8+

Accurate
Modeling

World-Realistic Color · Precision Level (mm)
Rotating Single Lidar

R8+ Accurate Modeling · World-Realistic Color · Precision Level (mm)

R8+ is an equipment which is handheld, wearable , and vehicle-on. It is widely used in various fields, such as cultural relics protection, real 3D, topographic mapping, water conservancy surveys, completion surveys, traffic surveys, mine surveys, facade surveys, underground space mapping, power inspections, and forestry surveys, etc.



2mm
Point Clouds



2mm Accuracy of
Dynamic Scanning



Pixel-level
Texture



Auto-Modeling 3D of
Real Scene Mesh Models



Handheld
(Removable)

▲ Wearable

PARAMETER

Relative Accuracy ¹	2mm (Dynamic/Static Scanning)	Moving Objects Removal	✓
Absolute Accuracy ²	Horizontal 1.8cm, Vertical 2.5cm	CORS System/GNSS Receiver	✓
5A Criteria of Surveying and Mapping ³	✓	LIO-PANO ⁶	✓
Repeatability Accuracy ⁴	2cm	RTK-SLAM ⁷	✓
Horizontal/Vertical Accuracy Error	0.005°	PPK-SLAM ⁸	✓
Point Cloud Density ⁵	250,000 pts/m ²	LiRF	✓
Point Cloud Thickness	2mm	3D Real Scene Mesh Models	✓
Image Sensor	1inch SONY CMOS*2	3D Thermal Map of Point Cloud Accuracy	✓
Camera Field of View	360°	Accuracy Report	✓
Lens	Leica F2.2*2	GCP Inserting Instruction	✓

MODEL

	R8+32	R8+300
Laser Channels	32	32
Measure Range	120m	300m
Points per Second	640,000	640,000

1/2/4. Scenes with weak quantity and quality can impact **Repeatability Accuracy**, **Relative Accuracy**, and **Absolute Accuracy**, it's better to acquire the accurate point clouds according to the working methods which are recommended by the manufacturer.

3. **5A Criterion of Surveying and Mapping**: In the geogspatial information, anyone, at any time, using any device, following any route, and scanning any scene, can obtain the unique result of point clouds.

5. **Point Cloud Density**: Products can approach to the maximum density of point clouds.

6. **LIO-PANO**: Online colorization technology with multi-model fusion of lidar and panoramic camera.

7. **RTK-SLAM**: RTK-SLAM(Real-Time Kinematic), an unique type of Tightly Coupled Complementary Filtering Algorithm.

8. **PPK-SLAM**: PPK-SLAM(Post-Processed Kinematic), an innovative type of Tightly Coupled Complementary Filtering Algorithm.

9. **LiRF**: Lidar Radiance Fields.

