



SLAM100 is the first handheld mobile lidar scanner launched by Feima Robotics. It can obtain high-precision and high-definition 3D point cloud data of the surrounding environment without light and GNSS. It is suitable for integrated indoor and outdoor data collection, and can be widely used in various applications such as topographic surveying, underground space, statistics and monitoring, planning and construction, property surveying, forest investigation, powerline inspection, and emergency response.

270°×360° Laser FOV

Through rotating scanning, the laser Scanner of SLAM100 can dynamically collect data and form a 270°×360° field of view, making it accurate and complete to acquire data from the space around us.

The visible light cameras

Three 5-megapixel cameras are adopted to form a horizontal 200-degree field of view and a vertical 100-degree field of view, which can synchronously obtain texture information and to furthermore produce color point clouds and partial panoramic images.

High precision and high definition

Industry-level SLAM post-processing algorithms enable SLAM100 to obtain higher precision and finer 3D point cloud data.

Automatic control point measurement

Without the need to manually add control points, SLAM100 can actively collect and automatically extract the control points and thus easily georeference the result data in the global coordinate system.

UAV mount

SLAM100 can be equipped to the Feima's UAV platforms of D500 or D20 via a UAV mount, so as to carry on air-ground or indoor and outdoor data collection.

Versatile external interfaces

SLAM100 has a wealth of external interfaces, which can be connected to a panoramic camera, a GNSS module, a car, a UAV and so on, to diversify data collections and adapt to more application scenarios.

Overall parameters

Laser scanning FOV	270° × 360°
Camera FOV	200° (H) × 100° (V)
Relative accuracy	6 mm (In specific scenarios)
Absolute accuracy	5 cm
Storage	32 GB (standard)
Power supply	Replaceable battery External power supply
External power supply voltage	20 V ~ 30 V
Internal battery	3350 mAh × 4
Internal battery endurance	2.5 h
Power dissipation	25 W
Operating temperature	-10 °C ~ 45 °C
Working humidity	< 85 % RH
Weight	1588 g (without battery)
Size	372 mm × 163 mm × 106 mm (without base)

Sensor parameters

Laser class	Class 1
Laser channels	16
Maximum range	120 m
Laser pulse repetition rate	320 kpts/s
Echo signal intensity	8 bits
Number of cameras	3
Camera resolution	5 MP
NFC	Supported