SLAM2000 is a high-precision handheld laser scanner developed by Feima Robotics. The device has a panoramic laser field of view, an integrated visual camera and a texture camera, a replaceable lithium battery handle, a built-in high-precision inertial navigation unit and a high-performance computing unit to enable real-time 3D data acquisition and mapping. SLAM2000 can be expanded to connect to a variety of external devices such as RTK, backpack, power supply, tripod, etc., and can be widely used in closed spaces, volumetric surveying and mapping, emergency rescue, real-time navigation and other scenarios.

Main body

Weight	925 g (Host) 1450 g (With handle and base)
Dimensions	94.5 mm × 84.6 mm × 219 mm (Host) 170 mm ×173.8 mm × 364.5 mm (With handle and base)
Power consumption	20 W (Typical)
Input voltage	20 V
Internal storage	512 GB SSD
Working temperature	-20°C ~ 50°C (Operation) , -40°C ~ 70°C (Storage)
Humidity	< 95%
Protection class	IP54
Scanning FOV	Panoramic 360°

Accuracy

Point cloud thickness	⩽ 1 cm (Post-processing) , ⩽ 2 cm (Real-time)
Relative accuracy	⩽ 2 cm (Post-processing) , ⩽ 3 cm (Real-time)
Absolute accuracy	⩽ 5 cm (Post-processing)

Laser scanner

Wavelength	905 nm
Laser class	Class 1
Range	0.1 m ~ 70 m @ 80%
FOV	360° (H) , -7°~ 52° (V)
Laser pulse repetition rate	200 kHz
Echo	Single (Strongest)
Frame rate	10 Hz (Typical)

Texture camera

Resolution	12 MP
CMOS size	1 inch
FOV	210° (Diagonal)
Frame rate	30 Hz

Visual camera

Resolution	12 MP
CMOS size	1 inch
FOV	100° (Diagonal)

Interface

USB Type-C 1	SSD data copy
USB Type-C 2	Charge by PD power bank, OTG (5 V)
Circular connector	External power supply (20 V), External S-RTK
WiFi	Supported

Lithium battery

Model	SP30
Input voltage	5V – 20 V
Output voltage	10.8 V
Battery Capacity	3000 mAh
Weight	400 g
Dimensions	85 mm × 60 mm × 144.5 mm
Endurance	Approx. 95 mins (SLAM2000 only)

Features

Panoramic laser FOV

Integrated with a 360-degree rotational head, the hemispherical non-repetitive scanning laser can form a panoramic laser field of view, ensuring multi-directional and full-angle data collection. You can see when you walk, and you can get what you see.

Real-time mapping

It can perform real-time mapping, that is, map construction is carried out during the data collection process, and the result data is directly output after the data collection is completed. It is suitable for emergency, real-time surveying and mapping and other application scenarios that require timeliness of results.

Texture camera

The texture camera has a one-inch CMOS sensor with a resolution of 12 megapixels and a field of view of 210°, which can obtain larger range, higher resolution texture information. The image coloring algorithm is specially optimized for surveying and mapping applications, making the colored point cloud clearer and more delicate.

High precision surveying and mapping

The built-in high precision inertial navigation unit effectively reduces accumulated errors. The high precision calibration algorithm further improves the accuracy of the laser sensor. Also, the professional SLAM algorithm achieves high precision mapping results.

Visual camera

The 12-megapixel visual camera can collect visual data and work with visual SLAM algorithms to provide matched feature points for weak structure texture environments, avoiding errors caused by repeated structures and matching errors, and improving the scene applicability of the device. At the same time, the visual camera can also be used as a high-resolution detail camera to obtain high-definition images of local scenes.

Abundant extension

SLAM2000 supports abundant external extensions such as external power supply, RTK module, network module and so on. It supports handheld, backpack and static station working modes, providing customers with more application possibilities.

Softwares

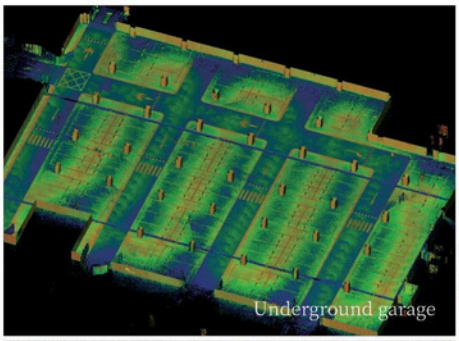
SLAM GO POST

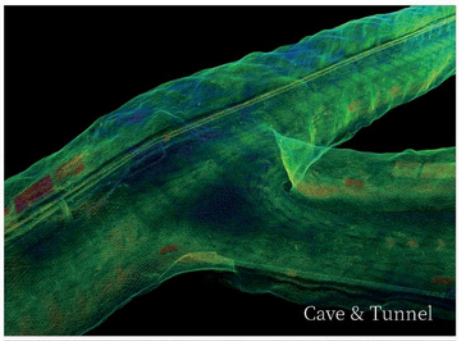
SLAM GO POST, embedded in the UAVManager Professional Edition, is a PC software that is compatible with SLAM2000. The software can perform one-click SLAM mapping, coordinate conversion, point cloud coloring, etc., and can support point cloud browsing, editing, data roaming, measurement and other functions.

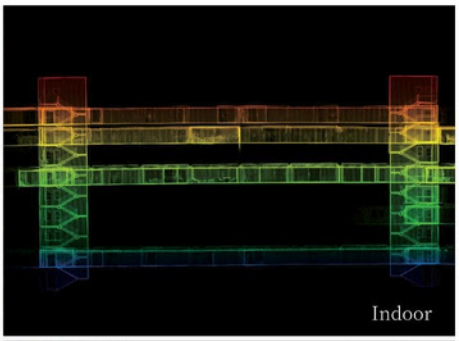
SLAM GO

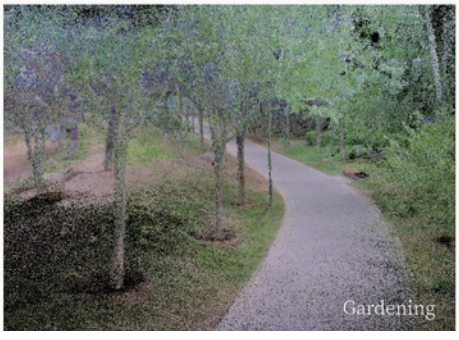
SLAM GO is a mobile APP software that supports IOS and Android systems. It supports device parameter setting, real-time mapping data viewing, device firmware upgrade and maintenance, and other functions.

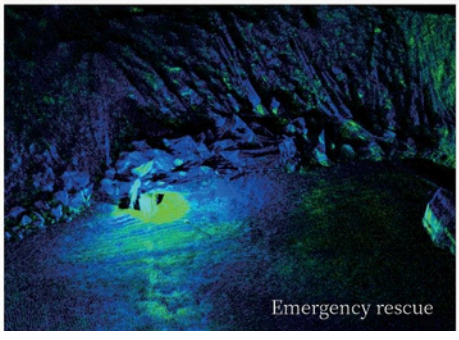
Applications

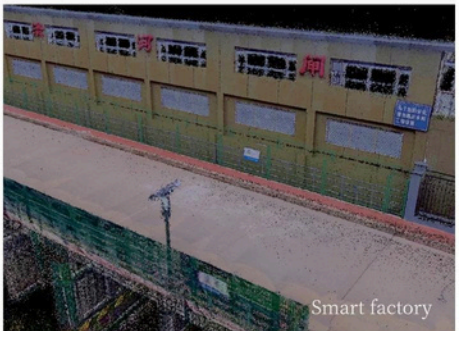












Sankon Technologies India Pvt.Ltd.

D–91, Sector-6,Noida–201301, Uttar Pradesh

Mob: 9971615537/9910739627 | Tel:0120-4104677/4711 Email: sales@sankon.in