

LiMOBILE

Lightweight Mobile Mapping System



LiMobile is designed to be mounted on SUVs at 45 degrees tilted angle. It can be used to acquire high-quality ground and terrain data on both sides of the road as it is equipped with a high-resolution camera. The integrated vehicle mounting system is highly adaptive to various SUV models. A variety of connection ports are reserved for optional modules, such as panoramic cameras, encoders, horizontal lasers, and many others in order to provide a complete mobile surveying solution.

Modularization

A range of optional modules is available to fit customers' specific needs in various of industries.

Integration

The all-new integrated vehicle mounting system, with pullout design. Highly adaptable to various SUV models.

Sensors

The ability to scan and acquire high-precision 3D point cloud data from vertical (-90° to 90°) and horizontal (360°) within the scanning range.

Lightweight Design

Robust aluminum housing and small PCB boards are adopted to reduce the interior space significantly to compact the size and weight of the system.

Power Supply

Powered by a battery compartment containing a maximum of six easy-carry batteries, it lasts all day without needing a recharge.

Control Method

The real-time running condition and the state of the system can be monitored through wireless and wired control.

Specifications

System Specifications

| | | | |
|---------------------------------------|-----------------------|--|--------------------|
| Dimensions ^[1] (mm) | 265*270*230 mm | Battery | 5700mAh*4 |
| Weight ^[1] (Excl. Battery) | 4.7 kg | Battery Life | ~6 h / Battery |
| Storage Capacity | 512 GB SSD | Ports | HDMI, USB, Network |
| System Control and Data Display | Wireless Mode | Smartphone/Tablet Connect via WIFI, Simultaneous Control and Display | |
| | Wired Mode | Wire Connection between System and Tablet, Control and Data Transmission | |
| Processor | 4 Cores and 8 Threads | | |

Sensor Specifications

| | |
|----------------|-----------|
| Laser Sensor | XT32 |
| Range Accuracy | ±1 cm |
| Verticle FOV | -16°~ 15° |
| Horizontal FOV | 0°~360° |
| Maximum Range | 120 m |

GNSS Specifications^[1]

| | |
|----------------------|---|
| Satellite Tracking | GPS: L1 C/A, L1C, L2C, L2P, L5 GLONASS: L1 C/A, L2C, L2P, L3, L5 BeiDou: B1, B2 |
| Positioning Accuracy | 1 cm + 1 ppm |

Camera Specification

| | |
|------------|------------------|
| Camera | Panoramic Camera |
| Resolution | 8.9 MP |
| Frame Rate | ≥3 |

Data Output

| | |
|-------------------------|-----------------------|
| Relative Accuracy | ≤3cm ^[2] |
| Absolute Accuracy | ≤15cm ^[2] |
| Point Cloud Data Format | las, laz, ply, LiData |

[1] The camera module and GNSS module are optional, the weight and dimension of the system may vary depending on the choice of modules.

[2] May be affected by environmental and route planning factors.

