

# LiGRIP

## Rotating Handheld SLAM LiDAR System



LiGrip Rotating Handheld SLAM LiDAR System is a new handheld terrestrial LiDAR scanner by GreenValley International. The product adopts a simple style design, compact body, light hand-held, convenient operation, and flexible installation; on the basis of the original equipment, the further weight reduction, efficiently capturing true color data in a wide range of scenes; supporting multi-platform and multi-mode operations, and combining LiDAR and SLAM algorithms to achieve integrated indoor multi-scene measurement. With GreenValley's self-developed LiFuser point cloud processing software, the point cloud data can be post-processed quickly.

### Specifications

System Parameters			
Size	L204mm×W130mm×H385mm	Battery Pack Size	L134mm×W64.6mm×H167mm
Weight	1.74kg	Battery	5875mAh
Battery Life	~4h (per battery)	Voltage	15.2v
Communication	USB, Ethernet	Storage	256G SSD
Suitable Environments	Indoor and outdoor scenarios	IP Code	IP54
LiDAR Parameters			
FOV°	280°×360°	LiDAR Accuracy	±3cm
Scan Rate	320,000pts/s (Single Return)	Scan Range	120m
Camera			
Camera Type	360 ° panoramic lens intergration	Photo resolution	6080×3040 (2: 1)
Data Format	insv	Video resolution	5760×2880@30fps
Video coding	H.264 / H.265	Size	72mm×48mm×43mm
Resulting Data			
Relative Accuracy	≤3cm*	Absolute Accuracy	≤5m
Point Cloud Formats	Las, Ply, LiData		

## Advantages

### Weather-Resistant Design

With an IP54 protection rating, the LiGrip is rugged and resistant to rain and dust

### Lightweight

Minimalistic design with an Aluminum shell provides a light yet sturdy handheld system

### Customizable

Highly adaptable design, allowing for various modular integrations and custom to the users' needs

### Versatile

With add-on options allowing for adaptations as a UAV, Vehicle, or Backpack mount, the LiGrip is GreenValley's most versatile LiDAR system to date

### Multi-platform

Supports handheld, backpack, vehicle, airborne, and other operating platforms to achieve full coverage of collection requirements in different scenarios and further improving operation efficiency

### Multimodal

Supports two operating modes: mobile WIFI (all-in-one kit) and clientless (pure hand-held built-in) operation, which can be flexibly selected according to the operating environment

### Cutting-edge SLAM Algorithm

Utilizing GreenValley's very own Industry-leading SLAM (Simultaneous Localization And Mapping) algorithm, LiGrip provides real-time on-the-go accurate positioning as you map your environments

## Application

