



LiBackpack DG50

Mobile Handheld 3D Mapping System

LiBackpack DG50

LiBackpack DG50 is an upgraded version of GreenValley International's dual-sensor laser scanning system. With a GNSS module onboard, the LiBackpack DG50 provides 3D point cloud model with highly accurate absolute positioning information. With just a 500 grams increase in weight, the newly designed LiBackpack DG50 gives you absolute positioning function along with all the advantages of LiBackpack D50.



Specifications

Laser Sensor	Velodyne VLP-16*2
Scan Range	100 m
System Relative Accuracy	≤ 3cm*
Operation & Data Transfer	WiFi connection (mobile phone, tablet)
	Wired Ethernet connection (tablet)
Onboard Storage	512 GB
Ports Available	HDMI, Ethernet & USB
Operation Time	~2 hour w/ DJI TB48S battery
Weight	9.3 kg without battery
Dimensions	1085*300*150 mm
Typical Ground Speed	1 m/s
Max. Power Consumption	85 w
WiFi Band	2.4 GHz
Scan Rate	600 kHz
FOV	V : -90° to +90° \ H : 360°
Display	UI via mobile device
GNSS Positioning Accuracy	1 cm + 1 ppm
System Absolute Accuracy	≤ 5cm*
GNSS Signals	GPS: L1C/A, L1C, L2C, L2P, L5 GLONASS: L1C/A, L2C, L2P, L3, L5 BeiDou: B1, B2
Outputs Data Format	Las, Laz, LiData, ply

*Affected by scanning route and environment.



Highly Accurate Positioning Information

The relative accuracy of the collected point cloud is ≤ 3 cm, and the absolute positioning accuracy after being post-processed by DG 50's complementary software LiBackpack is ≤ 5 cm.



Indoor and Outdoor Scanning Capability

A combination of outdoor and indoor environment can be handled by DG50 with a well-planned scanning route.



Improved SLAM Solution

The 3D modeling performance of DG50's SLAM solution is improved by integrating the absolute positioning information provided by the GNSS module.