

LiBackpack

Wearable LiDAR Scanning System

Capture highly accurate 3D point clouds and photogrammetric data on the go with LiBackpack. Confined areas or open spaces, accomplish 3D mapping with ease. Accelerate your LiDAR survey with the LiBackpack from GreenValley International.



LiBackpack DGC50

Stable Performance Accurate Positioning Lightweight and Portable



LiBackpack C50

Visible Light Data
Affordable and Easy to Use
3 cm Relative Accuracy and 300,000 p/sec

Specifications

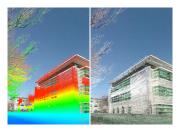
		DGC50	C50
System	Weight (incl. camera)	8.6kg	7.1kg
	Relative Accuracy	3cm	3cm
	Absolute Accuracy	5-10cm	N/A
	Power Consumption	50W	40W
LiDAR	LiDAR Sensors	2	1
	Num of Channels	16 channels	16 channels
	Scan Range	100m@20%reflectance	100m@20%reflectance
	FOV (degree)	Vertical(-90~90) Horizontal 360	Vertical(-15~15) Horizontal 360
	Scan Rate (single return)	600,000 p/sec	300,000 p/sec

		DGC50	C50
GNSS Module	Channels	GPS: L1 C/A, L1C, L2C, L2P, L5. GLONASS: L1, C/A, L2C, L2P, L3, L5 BEIDOU: B1. B2	N/A
	Accuracy	1cm+1ppm	N/A
Working Mode		Backpack	Backpack+Handheld
	Resolution	3840*1920	3840*1920
Camera	Frame Rate	30	30
Camera	FOV (degree)	360	360
	Pixel	18 MP	18 MP



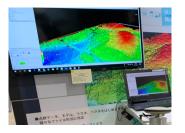
Easy to Carry

Lightweight structure and cushioning make the LiBackpack comfortable to use.



User-friendly Data Processing

LiFuser-BP makes working with LiBackpack data quick and painless with its one-click workflows.



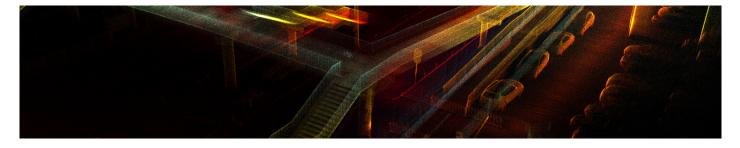
Real-Time Point Cloud Display

Control data collection via any WiFi enabled device and watch point clouds render in real-time from your tablet or smartphone.

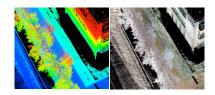


Capture Reality in 3D

Gather and colorize high-fidelity LiDAR measurements at a rate of 600,000 p/sec to produce point cloud data with densities over 1,000 point per square meter.



LiFuser-BP Data Processing Software



LiFuser-BP is purpose-built to process, visualize, edit, and refine data collected with GreenValley International's LiBackpack. Its integrated functions also allow users to perform GNSS data corrections, optimize SLAM-based point cloud compilation, fuse 2D panoramic images to point clouds, clean and align 3D data sets, and access absolute accuracies using survey check points.

This flexible software solution from GreenValley International features specialized modules for processing data collected in outdoor, indoor, as well as a array of other survey environments.

 $2.5_{\text{km/h}}$ Avg. Collection Rate

 $600,\!000_{\text{p/sec}}$



Real-time Point Cloud Display

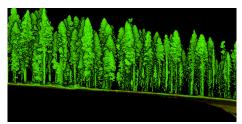




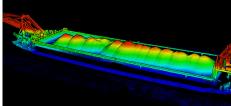


One-Click Data Processing in LiFuser-BP

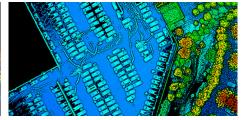
The Application Case



Forest Surveying and Mapping



Volume Measurement



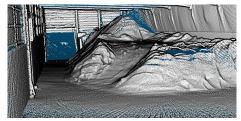
Underground Garage Scanning



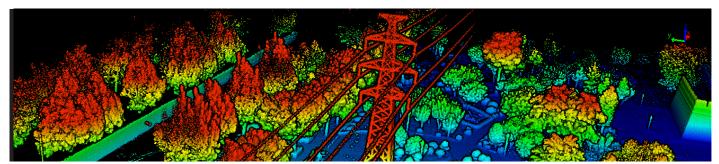
Land Surveying



Outdoor Scanning



BIM



Powerline Surveying