



# LiBackpack

### Wearable LiDAR Scanning System

Quickly capture high-accuracy 3D point clouds and panoramic imagery with LiBackpack. Survey and map indoor as well as outdoor spaces with ease. Accelerate you LiDAR data capture with 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

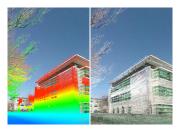
		DGC50	C50
System	Weight (incl. camera)	8.6kg	7.1kg
	Relative Accuracy	3cm	3cm
	Absolute Accuracy	5-10cm	N/A
	Power Consumption	50W	40W
LiDAR	LiDAR Sensors	2	1
	Num of Channels	16 channels	16 channels
	Scan Range	100m@20%reflectance	100m@20%reflectance
	FOV (degree)	Vertical(-90~90) Horizontal 360	Vertical(-15~15) 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
<b>Working Mode</b>		Backpack	Backpack+Handheld
	Resolution	3840*1920	3840*1920
Camera	Frame Rate	30	30
Camera	FOV (degree)	360	360
	Pixel	18 MP	18 MP



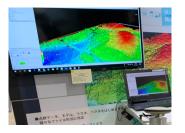
#### **Easy to Carry**

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.



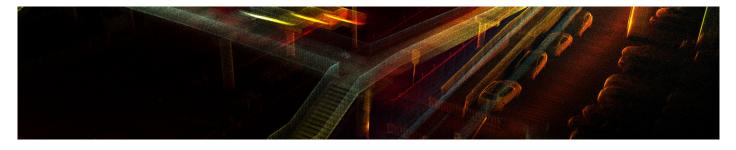
#### **Real-Time Point Cloud Display**

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**

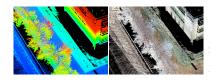
Gather and colorize high-fidelity LiDAR measurements at a rate of 600,000 p/sec to produce point cloud data with densities over 1,000 point per square meter.



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## **LiFuser-BP Data Processing Software**



Fuser-BP is 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 routines, fuse 2D panoramic images to point clouds, clean and align 3D data sets, and asses absolute accuracies using survey check point data.

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

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

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



Real-time Point Cloud Display

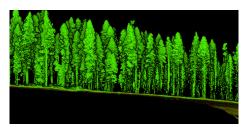


Comfortable to Wear

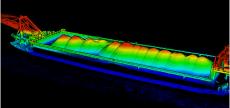


One-Click Data Processing in LiFuser-BP

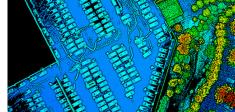
## **The Application Case**



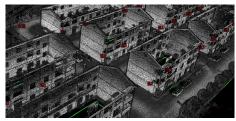
Forest Surveying and Mapping



Volume Measurement



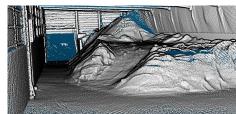
**Underground Garage Scanning** 



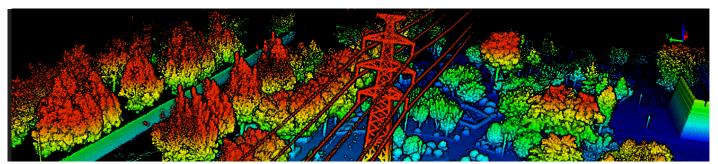
Land Surveying



**Outdoor Scanning** 



BIM



Powerline Surveying