

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 your 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

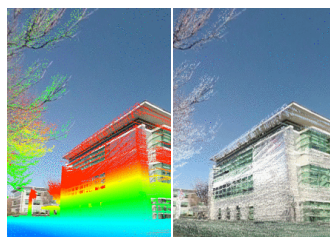
| | | DGC50 | C50 |
|---------------|---------------------------|---------------------------------|---------------------------------|
| System | Weight (incl. camera) | 8.6kg | 7.1kg |
| | Relative Accuracy | 3cm | 3cm |
| | Absolute Accuracy | 5-10cm | N/A |
| | Power Consumption | 50W | 40W |
| LiDAR | 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, N/A, L2C, L2P, L3, L5, BEIDOU: B1, B2 | N/A |
| | Accuracy | 1cm+1ppm | N/A |
| Working Mode | | Backpack | Backpack+Handheld |
| Camera | Resolution | 3840*1920 | 3840*1920 |
| | Frame Rate | 30 | 30 |
| | FOV (degree) | 360 | 360 |
| | Pixel | 18 MP | 18 MP |



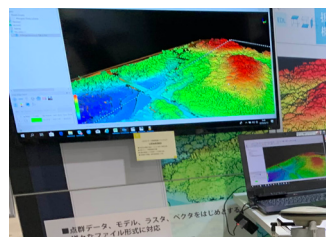
Easy to Carry

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.



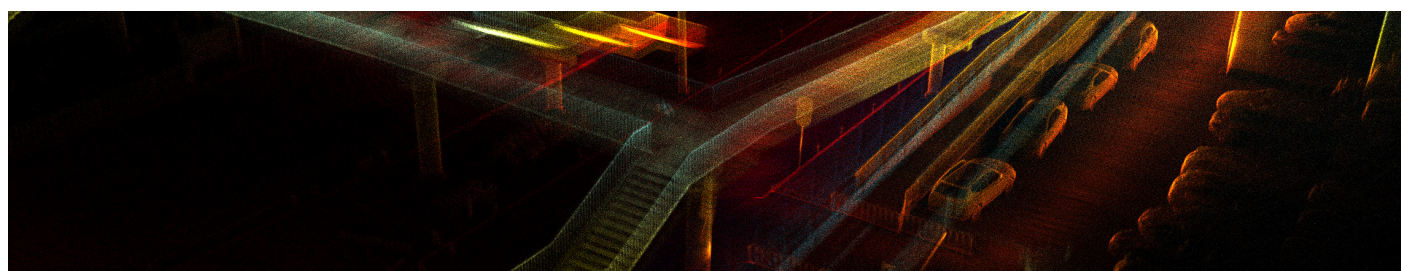
Real-Time Point Cloud Display

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

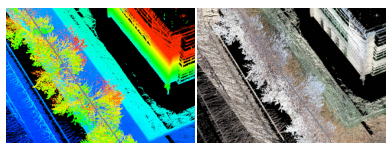


Capture Reality in 3D

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 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 assess 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.



Real-time Point Cloud Display

2.5 km/h
Avg. Collection Rate



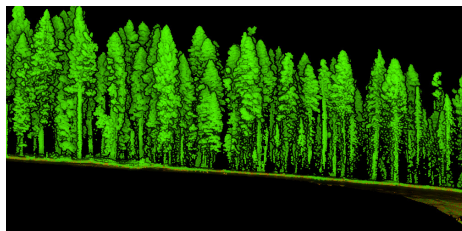
Comfortable to Wear

600,000 p/sec
Scanning Rate

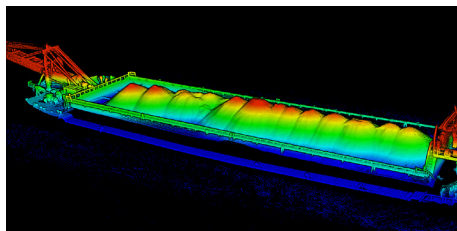


One-Click Data Processing in LiFuser-BP

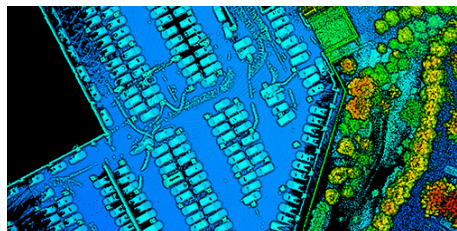
The Application Case



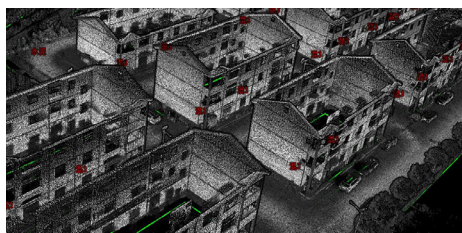
Forest Surveying and Mapping



Volume Measurement



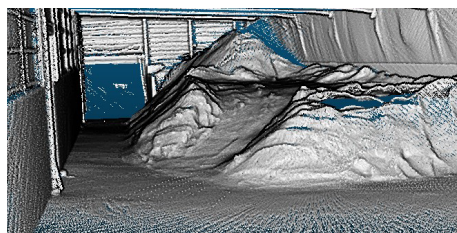
Underground Garage Scanning



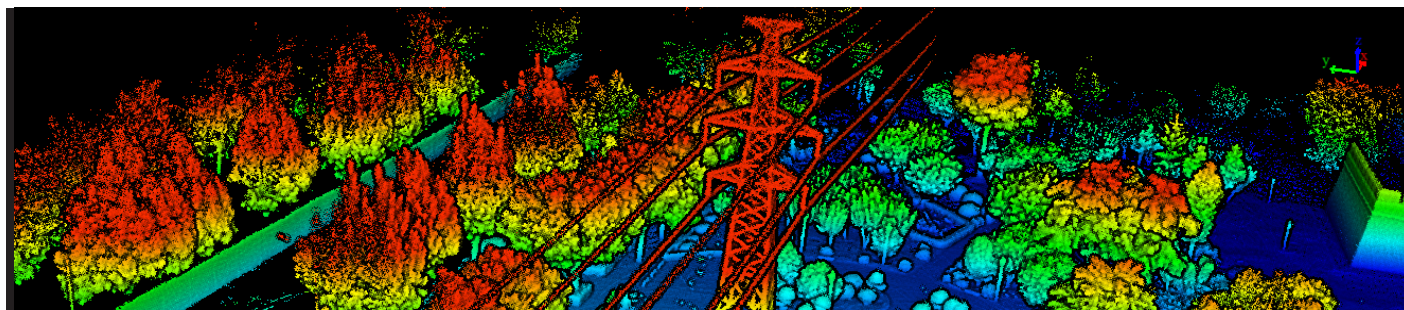
Land Surveying



Outdoor Scanning



BIM



Powerline Surveying