

2fLiDAR

High-accuracy backpack LiDAR - SLAM system for surveying and mapping.

2fLiDAR marks 2freedom's entry into the LiDAR world.

A backpack-mounted system powered by a high-precision sensor and integrated GNSS RTK, it delivers highly accurate 3D data with an optimized and efficient workflow. Designed for both accessibility and performance, it allows long autonomous field sessions with no advanced technical skills needed.

What makes 2fLiDAR stand out is its exceptional versatility, reliability, and precision. Built to perform in both indoor and outdoor environments, it adapts seamlessly to complex terrain and challenging conditions.

Its robust design ensures accurate results even in harsh environments, and it can be easily mounted on vehicles, making it one of the most flexible LiDAR systems on the market. Whether used on foot or on wheels, 2fLiDAR provides stable, error-resistant measurements and a comfortable user experience, setting a new standard for mobile mapping solutions.

KEY POINTS



Versatile Operation

Backpack, handheld, or vehicle-mounted – adaptable to any field scenario.



RTK GNSS Integration



Optimized workflow

Fast, simple, and intuitive – requires no advanced expertise.



High Accuracy

2fLiDAR achieves 1–3 cm relative precision in real-world conditions.



Seamless Data Exports

Export to CAD, GIS, BIM and standard 3D formats (LAS, E57, PLY).



Expert Support

Training, manuals, and direct assistance to ensure success.



Ready to explore further?

Book a demo and discover how we can take your projects to the next level



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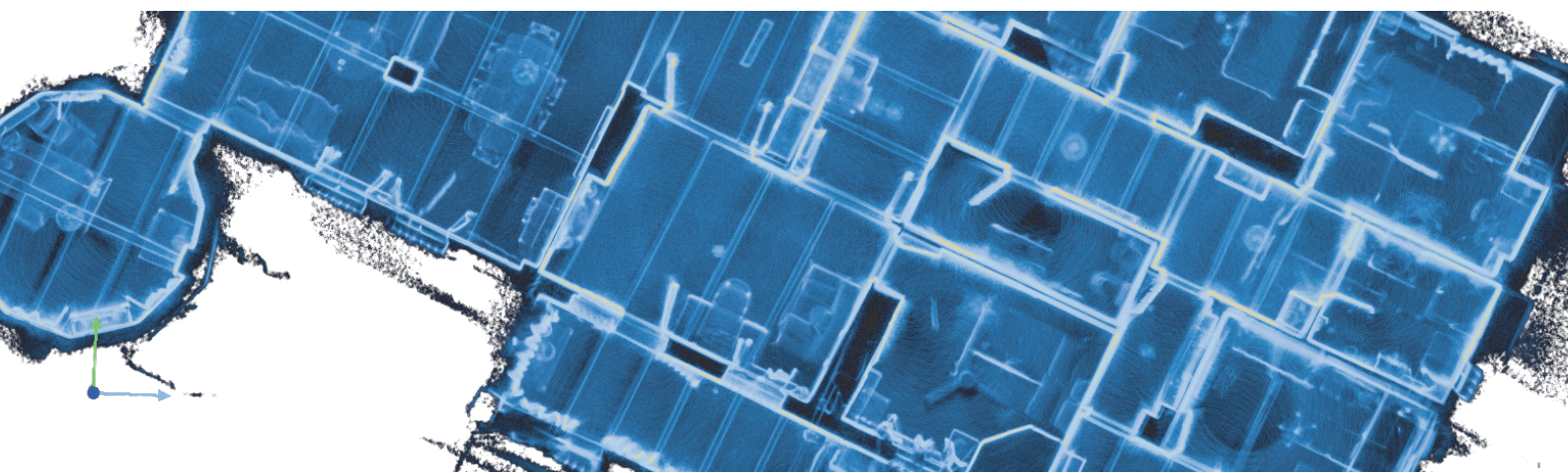
LiDAR Specification	
Range (Max)	~100 m
Vertical FoV	90°
Vertical Resolution	Up to 128 channels
Points per second	~5,200,000 pts/sec

System	
Data storage	External computer (connected PC, no internal storage)
Communication	USB type-c
User interface	Real-time visualization and control via external computer screen
Processing	Local Processing

Electrical Specification	
System supply voltage	14.8 V
Operating time	~5 h (single BP-V99, 99 Wh)

Physical Specification	
Weight	~6.8 kg

Capacities	
SLAM	Yes (real-time mapping and trajectory)
RTK	GNSS RTK compatible (optional)
GCP Support	Allows integration of Ground Control Points
Operating Modes	Handheld / Backpack / Vehicle
Export Formats	LAS, PLY, e57



KEY APPLICATIONS



Urban Survey



Infrastructure Maintenance



Underground Survey



Industrial Digital Twin



Real State Mapping



ICT Construction