

# LiAIR H1800

## Compact LiDAR Scanning System



The LiAIR H1800 is a lightweight laser radar scanning system developed by GreenValley International. It integrates a long range LiDAR scanner, GNSS and IMU positioning systems, and a storage control unit. This system can acquire large amounts of high-precision point cloud data and rich image information. The product is designed to be compact and lightweight, weighing less than 4.36kg (without the camera and accessories), making it easily mountable. It supports a large data storage mode and can be controlled through a web user interface, allowing for quick and easy device control using smartphones, tablets, and other devices. It is extensively used in various fields, including topographic mapping, power line inspection, forestry monitoring, and mining surveys.

### Specifications

System Parameters	
Accuracy	≤5cm@300m
Detection Range	1845m (Reflectance ≥ 80%)
Weight	4.36/4.72kg (with/without camera)
Power Consumption	80W
Working Temperature	-10°C~+40°C
Storage Temperature	-20°C~+50°C
Storage	256GB /1TB (Storage Card / Internal)
LiDAR Sensor	
Model	Riegl VUX-1LR <sup>22</sup>
FOV	360°
Range	1845m
Scan Rate	1500KHZ
Inertial Navigation System	
Attitude Accuracy (Post-Processing)	0.015°
Azimuth Accuracy (Post-Processing)	0.035°
GNSS	GPS, GLONASS, BeiDou
IMU Data Frequency	200HZ
Camera (Optional)	
Model	SONY A7RIV
Focal Length	18mm
Pixels	61MP
Weight	360g

### Advantages

#### I Customizable Configurations

High level of integration flexibility, supporting various types of cameras such as visible light/multi-spectral, among others. Users can choose from different models of inertial navigation systems with varying levels of accuracy. Allowing for customization based on specific requirements and preferences.

#### I Easy Operation

One-click start, web UI control, convenient for users to use smartphones, tablets, and laptops for quick connection and control operation. No need for manual figure-eight flight, thus increasing the effective flight time.

#### I Virtual Base Station Operation

When used with GreenValley International's LiCloud cloud service platform, centimeter-level precision point cloud data can be obtained without the need for a physical base station.

#### I Compact and Lightweight, Easy to Adapt to a Variety of Flight Platforms

Designed to be compact and lightweight, with the weight of the unit at less than 4.36kg (excluding the camera and accessories). This makes it easy to install and mount, allowing for compatibility with a wide range of unmanned aerial vehicle (UAV) platforms.

#### I Turnkey Solution

Paired with GreenValley's proprietary post-processing software, LiPowerline and LiDAR360, the H1500 provides comprehensive solutions for power line inspection, topographic mapping, forestry, mining, and geological disaster management.