

UAV LIDAR SCANNING SYSTEM gAirHawk Series

gAirHawk

gAirHawk GS-130H uav Lidar Scanning System

gAirHawk GS-130H is a kind of compact LiDAR point cloud data acquisition system, integrated Livox new generation laser scanner, GNSS and IMU positioning and attitude determination system, camera (optional) and storage control unit, is able to real-time, dynamically, massively collect high-precision point cloud data and rich image information. It is widely used in the acquisition of 3D spatial information in surveying, electricity, forestry, agriculture, land planning, geological disasters, mine safety.



High efficiency, high precision, high point cloud density, double echo function, good vegetation penetration, it can be widely used in topographic surveying and mapping, pile measurement, power line inspection, marine surveying and mapping, forestry investigation, road survey and design and other fields.

Specification of GS-130H:

| | Item Name | System Parameters |
|-------------------------|----------------------|--|
| GS-130H | Weight | 1.46kg (without camera) |
| | Working temperature | -40°C∼+85°C |
| | Power Range | 12V~15V |
| | Consumption | Average 15W |
| | Carrying Platform | DJI M600 PRO, DJI M300 |
| | Storage | 64 GB Max support 128GB TF card |
| | Measuring accuracy | Less than 0.12 cm @100m AGL |
| Lidar Unit | Measuring Range | 90m@10% Reflectivity 130m@20% Reflectivity 260m@80% Reflectivity |
| | Laser Class | 905nm Class1 (IEC 60825-1:2014) |
| | Laser Line Number | Equivalent to 64-beam |
| | Mix. range | 0.3 M |
| | Range accuracy | ±5cm (@0.3m~1m), ±2cm (@1m~200m) |
| | Data | Double echo 480,000 Points/Sec |
| | FOV | 81.7°× 25.1° |
| | Laser sensor | Livox Horizon |
| POS Unit | Update frequency | 200HZ |
| | Pitch Accuracy | 0.015° |
| | Roll Accuracy | 0.015° |
| | Heading Accuracy | 0.04° |
| | Position Accuracy | 0.02 ~ 0.05 m |
| | GNSS Signal type | GPS L1/L2;GLONASS L1/L2 BDS B1/B2a/B3;GAL E1/E5b/E5a |
| | POS Type | gSpin 302(AGS) |
| Pre-processing software | POS software | Output information: position, speed, attitude |
| | Point cloud software | Output data format: LAS format, custom TXT format |
| Camara (antion) | Camera Model | Sony RX1/a 6000 |
| | Effective Pixel | 42/24 Mega Pixel |
| Camera (antion) | | |
| Camera (option) | Trigger event | Distance or Time trigger |