



SCOUT-16

The **SCOUT-16** is an excellent lightweight, entry-level system with a 40-meter recommended AGL. A strong fit for smaller scan areas and teams on a budget. Customize your Scout-16 with photogrammetry, hyperspectral, thermal imaging, and additional options.

Flexibility in sensing and mounting options is a key benefit of this Phoenix system. The **SCOUT-16** is designed to fly on UAVs, including the DJI M600 Pro, and can also be adapted for vehicle and backpack configurations.

FEATURES

- » Compact and lightweight
- » Visual Range: 360° field of view
- » Flexible Mounting: Mount on a drone, vehicle, or even backpack
- » Multi-Target Capacity—up to 2 target echoes per laser shot
- » Fast and accurate measurement 300k shots/s, up to 600k points/s

QUICK SPECS

Absolute Accuracy

55 mm RMSE @ 40 m Range

PP Attitude Heading RMS Error

0.019° / 0.074° IMU options

Weight

1.65 kg / 3.64 lbs

Dimensions

16.0 x 11.6 x 11.6 (cm)

Laser Range

50 m @ 60% Reflectivity

Scan Rate

300 kHz, up to 2 returns

APPLICATIONS

- » Utilities Mapping
- » Construction Site Surveying
- » Agriculture & Forestry Monitoring
- » Open Pit Mining Operations
- » Stockpile Volumetrics
- » General Mapping

PLATFORM

| | |
|-----------------------------|-----------------------|
| OVERALL DIMENSIONS (Sensor) | 16.0 x 11.6 x 11.6 cm |
| OPERATING VOLTAGE | 12-28 V |
| POWER CONSUMPTION | 40 W |
| OPERATING TEMPERATURE | -10° - +40° C |
| WEIGHT | 1.65 kg / 3.64 lbs |

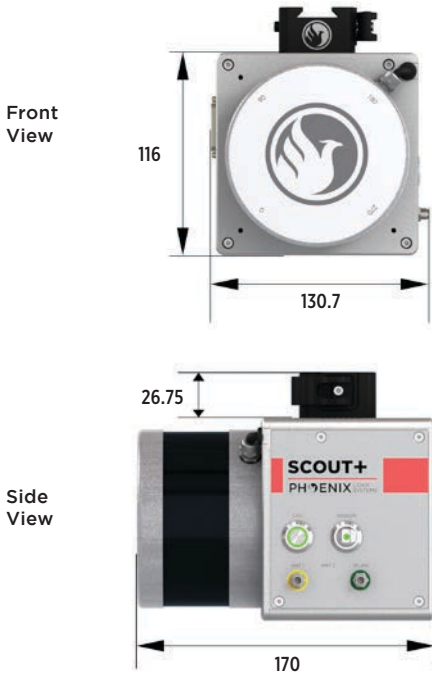
LIDAR SENSOR

| | |
|--------------------------|--|
| LASER PROPERTIES | Class 1 (eye safe), 905 nm |
| RANGE MIN/MAX RESOLUTION | 1.0 m / 100 m / 2 mm |
| RMS RANGING ERROR | 30 mm |
| SCAN RATE | 300k points/s, up to 600 points/s dual return mode |
| FIELD OF RANGE | ±15° Vertical / 360° Horizontal |
| MULTIPLE ECHOES | 2 |
| # OF LASERS | 16 |
| RECOMMENDED SCAN HEIGHT | 20 - 60 m AGL |

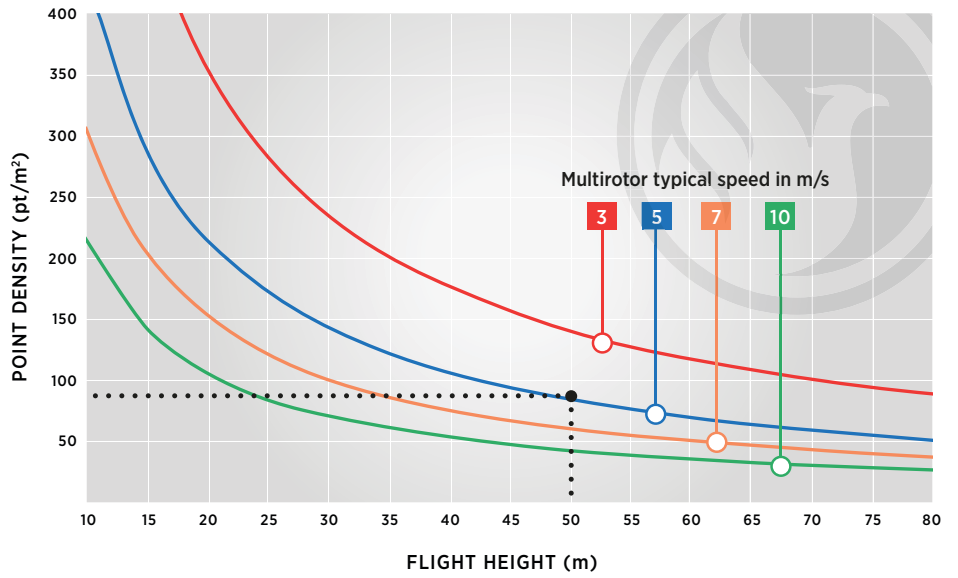
NAVIGATION SYSTEM

| | |
|-----------------------|--|
| CONSTELLATION SUPPORT | GPS+GLONASS+BEIDOU +GALILEO |
| SUPPORT ALIGNMENT | Static, Kinematic, Dual-Antenna (optional) |
| OPERATION MODES | Real-time, Post-processing optional |
| ACCURACY POSITION | 1 cm + 1 ppm RMS horizontal |

SCOUT-16 DIMENSIONS (MM)



POINT DENSITY SCOUT-16



Range to target = 5m, speed 50m/s

Resulting Point Density 90 pts/m²

CAMERA ACCESSORY OPTIONS

Integrating RGB, thermal, or hyperspectral sensors with your LiDAR system has never been easier. With our customizable solutions, you will be able to provide complex analysis and offer dynamic geospatial products to meet any applications needs.

| A6K-Lite | Dual A6k-Lite | Sony 7R3 / A7R4 | A6K-Lite + Thermal PT640 | A6K-Lite + Nano-Hyperspec | A6K-Lite + Thermal PT640 + Nano-Hyperspec | Ladybug option for ground mount* |
|--------------------|--------------------|---------------------|--------------------------|---------------------------|---|----------------------------------|
| | | | | | | |
| Added Weight: 220g | Added Weight: 450g | Added Weight: 1.1kg | Added Weight: 380g | Added Weight: 885g | Added Weight: 1.09kg | n/a |

* Does not apply to systems with bottom mounted cameras.



Aerial Mount (DJI M600 Pro Integration)



Ground Vehicle Roof Rack & LadyBug Mount



Backpack Mount

EXPLORE A PHOENIX LiDAR SYSTEM FOR YOUR TEAM, CONTACT US!

PhoenixLiDAR.com | sales@phoenixlidar.com | USA +1.323.577.3366