

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

PLATFORM

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

LIDAR SENSOR

LASER PROPERTIES	905 nm Class 1 (eye safe)
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
BEAM DIVERGENCE H x V	3.0 mrad (0.171887°) / 1.5 mrad (0.0859437°)
	8.8 cm x 4.7 cm @ 25 m
LASER BEAM FOOTPRINT H x V	16.3 cm x 8.5 cm @ 50 m
	23.8 cm x 12.2 cm @ 75 m

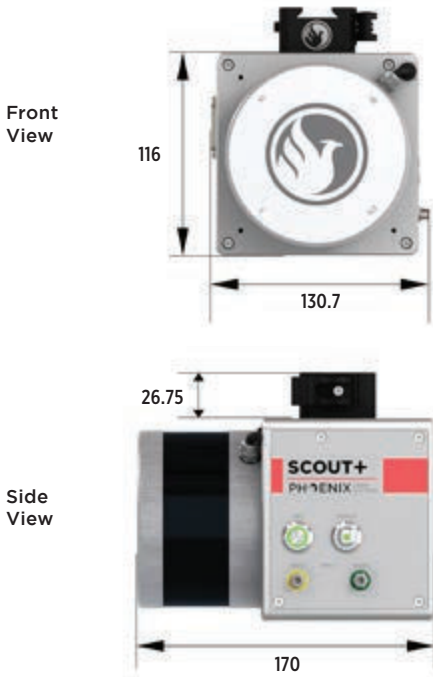
NAVIGATION SYSTEM

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

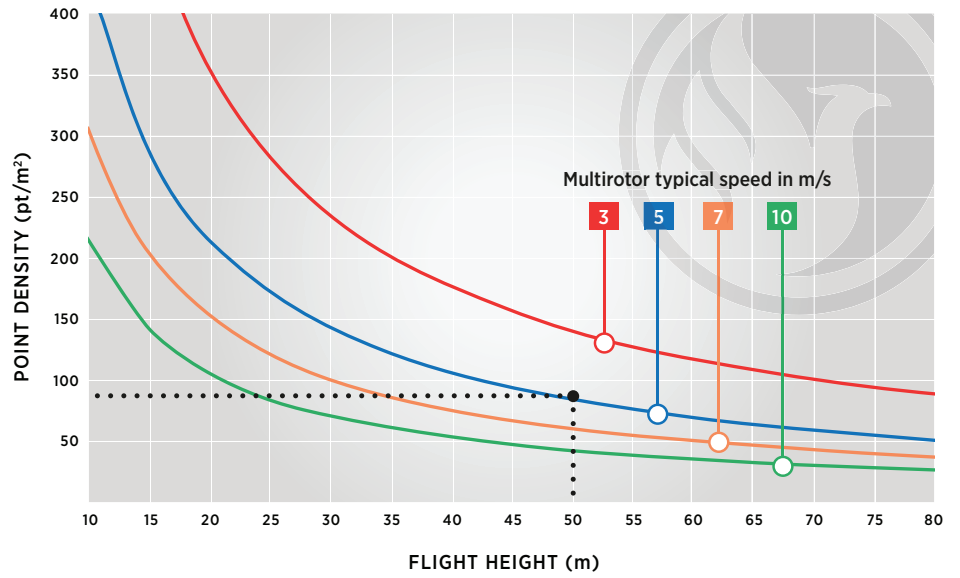
APPLICATIONS

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

SCOUT-16 DIMENSIONS (MM)



POINT DENSITY SCOUT-16



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

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