



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



א General Mapping

PLATFORM

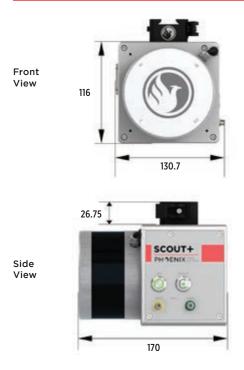
OVERALL DIMENSIONS (Sensor)	16.0 x 11.6 x 11.6 cm
OPERATING VOLTAGE	12-28 V
OPERATING TEMPERATURE	-10° – +40° C
POWER CONSUMPTION	~40 W
WEIGHT	1.65 kg / 3.64 lbs

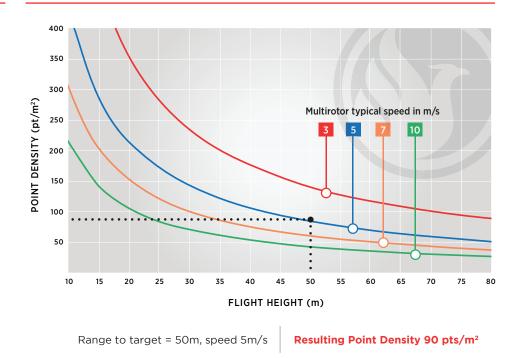
LIDAR SENSOR

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

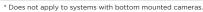




CAMERA ACCESSORY OPTIONS

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.











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