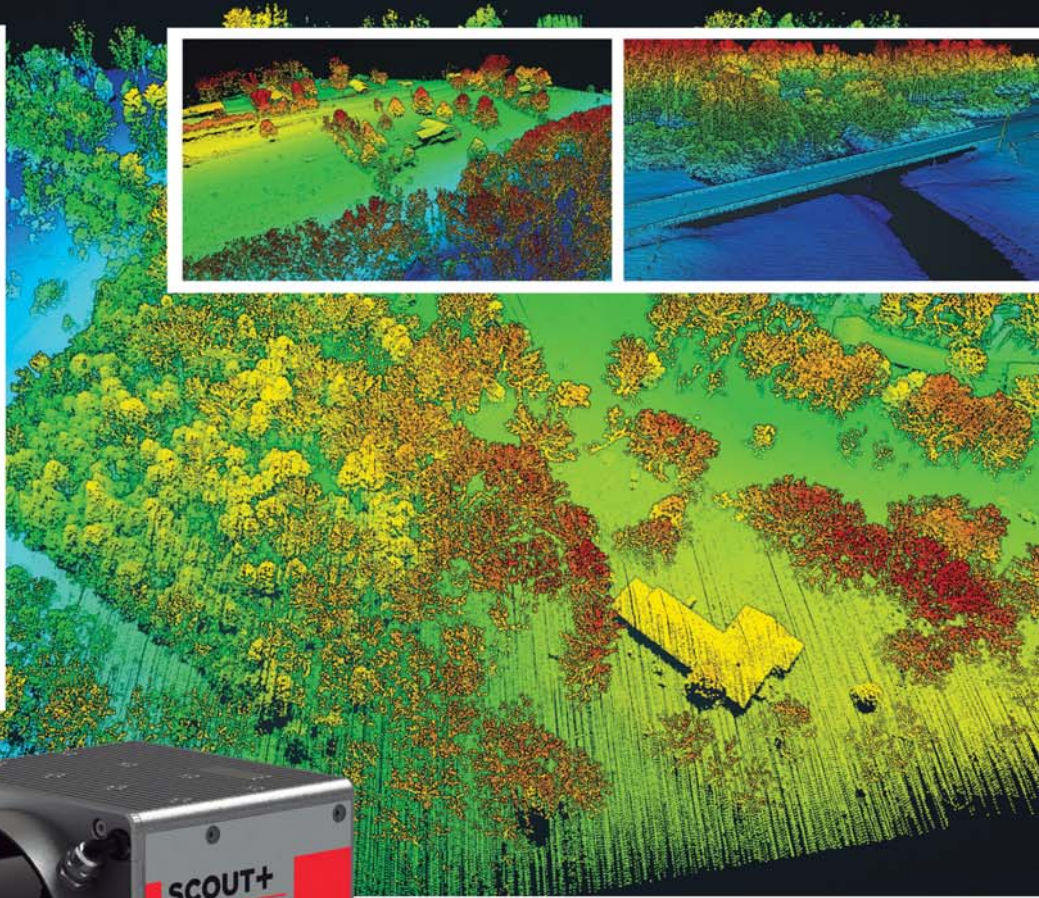


## KEY FEATURES & BENEFITS

- » **Enhanced UAV Integrations**  
TerraHawk CW-20, M600 Pro, & more
- » **Detailed Data at Higher AGL**  
Up to 100 m
- » **Very Compact and Lightweight**  
1.9 kg / 4.19 lbs.
- » **360° Field of View**
- » **Robust Phoenix Design**  
Durable Aluminum Heatsink Body
- » **Multi-Target Capacity**  
Up to 2 target echoes per laser shot
- » **Fast and Accurate Measurement**  
600k shots/s, up to 1.2 million points/s



The Phoenix Scout Ultra is the most powerful member of the Scout Series. Light weight and long range, this sensor enables efficient data collection for challenging areas, even at higher altitudes and speeds. An excellent option for building high-density point clouds, the Scout Ultra also features options for photogrammetry, hyperspectral, thermal imaging, and more.

Flexibility in sensing and mounting options is a key benefit of this Phoenix system. The Scout Ultra is designed to fly on more robust UAVs, including the Phoenix TerraHawk CW-20, the M600 Pro, and others. This system can also be adapted for vehicle and backpack configurations.

### Why Scout Ultra?

- » **Operating Range:** Up to 100 m
- » **Live Data Feed:** View/analyze data in real time
- » **Remote Data View:** Transmit live data to remote viewers via 4G connection
- » **Flexible Mounting:** Mount on a fixed-wing + VTOL drone, multi-rotor drone, ground vehicle, or backpack
- » **Acquisition Upgrades:** Dual LiDAR Sensors; High-Res DSLR; RGB GigE Cam; thermal, hyperspectral cameras; panoramic/spherical cameras; and more
- » **Data Precision Upgrades:** IMU Upgrade Options, Dual GPS Antenna Upgrade Options
- » **Visual Range:** 360° field of view

## SCOUT ULTRA



- » **Power Lines**
- » **Precision Agriculture & Forestry**
- » **Construction Site Surveying**
- » **Light Vegetation & Canopy Penetration**
- » **Open Pit Mining Operations**
- » **Stockpile Volumetrics**
- » **General Mapping**

**QUICK SPECS & DIMENSIONS**



The **Scout Ultra** is often integrated with DJI's M600 Pro UAV, one of the most popular aircraft systems for UAV LiDAR.



Here, the **Scout Ultra** is integrated with the **Phoenix TerraHawk CW-20**, which combines fixed-wing speed and stability with VTOL safety and convenience.

**SYSTEM INFORMATION**

Dimensions (Sensor)	18.5 x 11.6 x 11.6 cm
Operating Voltage	12-28 V
Power Consumption	~40 W
Operating Temperature	-10° to 40° C
Weight	1.9 kg / 4.19 lbs.
Mounting Options	Phoenix TerraHawk CW-20, multi-rotor, backpack, and ground vehicle
Accessories	RGB, DSLR, Thermal, and more
Recommended Scan Height	100 m
Absolute Accuracy	55 mm RMSE @ 50 m Range

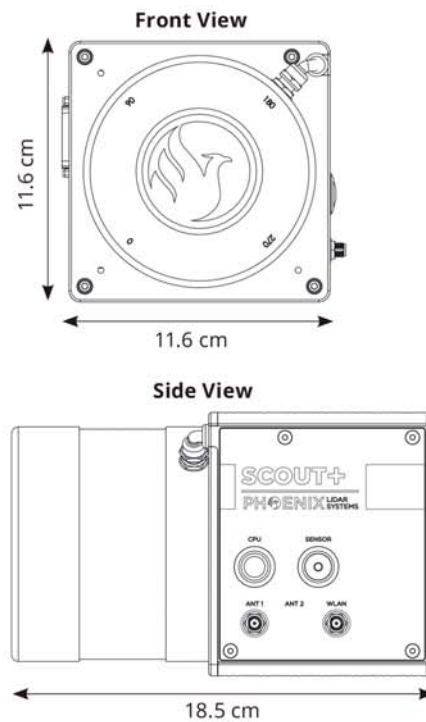
**LIDAR SENSOR**

Laser Properties	Class 1 (eye safe), 905 nm
Range Min / Max	1.0 / 200 m
Scan Rate	600 k shots/s, up to 2 returns
Field of View	40° Vertical / 360° Horizontal
Multiple Echoes	2
No. of Lasers	32

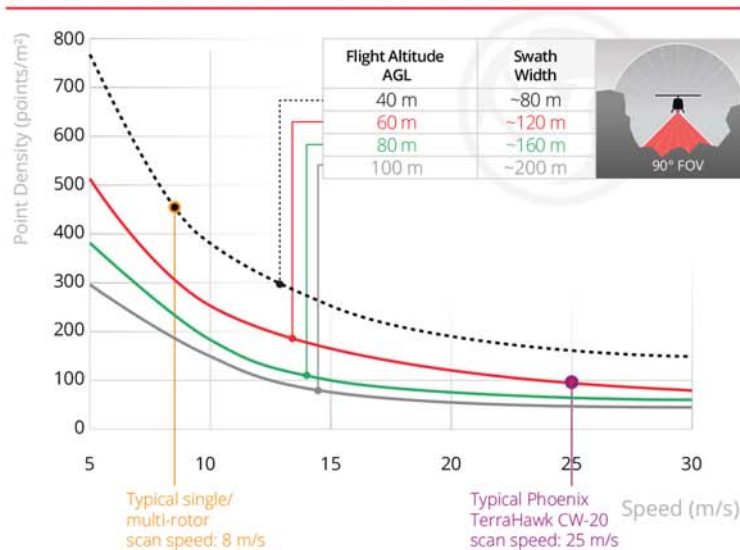
**NAVIGATION SYSTEM**

Constellation Support	GPS, GLONASS
Support Alignment	Kinematic, Dual-Antenna
Operation Modes	Real-time, Post-Processing optional
Accuracy Position	1 cm + 1 ppm RMS horizontal
PP Attitude Heading RMS Error	0.019 / 0.074° IMU options

**DIMENSIONS**



**POINT DENSITY SCOUT ULTRA**



**Explore a Phoenix LiDAR System for your team. Contact us!**