

THE ALPHA AL3-16

The Alpha AL3-16 contains all you need to collect precise survey data. Quality control the data in real-time and create a very dense and accurate georeferenced point cloud. The Alpha LiDAR sensor is easily upgradeable for future sensor options.



FEATURES

- » High accuracy due to precision Fiber Optic Gyro IMU
- » Fully autonomous, can be mounted on any drone, car, boat and/or even backpacks
- » Real-time point cloud transmission option via 4G or long-range wifi
- » Easily upgradable for future LiDAR sensors
- » **Modular upgrade options:** Dual LiDAR Sensors, DSLR, GeniCam, GigEVision, thermal, multispectral, hyperspectral & custom sensors
- » Accuracy independently verified by a third-party, ask for a copy of the white paper
- » Designed by surveyors for surveyors



AUTOMOTIVE MOUNT



AERIAL MOUNT

QUICK SPECS

Absolute Accuracy
25 / 35 mm RMSE @ 50m Range

PP Attitude Heading RMS Error
0.009 / 0.017° IMU options

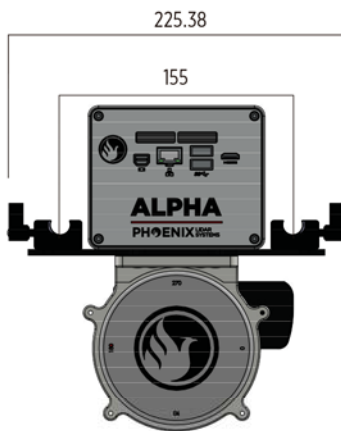
Weight
2.5kg / 5.5lb

Dimensions
29 L x 14 W x 22 H (cm)

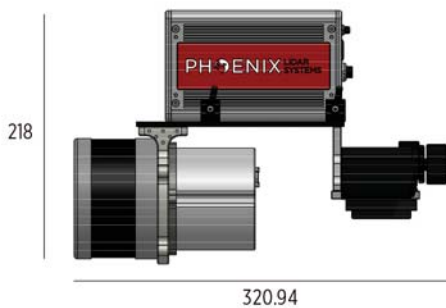
Laser Range
107 m @ 60% Reflectivity

Scan Rate
300k shots/s, up to 2 returns

AL3-16 | Front View



AL3-16 | Side View



Values in millimeters

PLATFORM

OVERALL DIMENSIONS	243 x 225 x 217 mm
OPERATING VOLTAGE	12-28 V
POWER CONSUMPTION	-40 W
WEIGHT	2.2 kg
OPERATING TEMPERATURE	-10° - 40° C

NAVIGATION SYSTEM

CONSTELLATION SUPPORT	GPS, GLONASS
SUPPORT ALIGNMENT	Static, Kinematic, Dual-Antenna
OPERATION MODES	Real-time, Postprocessing optional
ACCURACY POSITION	1cm + 1ppm RMS horizontal

LIDAR SENSOR

LASER PROPERTIES	Class 1 (eye safe), 905 nm
RANGE MIN / MAX / RESOLUTION	1.0 m / 120 m / 2mm
RMS RANGING ERROR	30 mm
SCAN RATE	300k shots/s, up to 600k points/s
FIELD OF RANGE	315° Vertical / 360° Horizontal FOV
MULTIPLE ECHOES	2
NUMBER OF LASERS/PLANES	16
RECOMMENDED SCANNING HEIGHT AGL	20 - 60 m

Pointcloud Density

