

ROBIN

MINI + UAV



SYSTEM WEIGHT

Scanner, IMU & x2 GNSS Antennas	3.1kg
Optional Fit Anti-Vibration Mount	0.5kg
Optional Fit 90 Wh Li-ion Battery	0.7kg
Optional Fit GNSS Antenna Mounting Boom	0.5kg
Total Weight (All Options)	4.8kg

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:	-0 °C to + 40 °C
Storage Temperature:	-40 °C to + 60 °C
Relative Humidity:	95% non-condensing
Altitude:	10,000ft

POWER

Input Voltage	11-34V / Typ 22W
Batteries	High Performance LiPo Lithium Batteries
Flight Time	Approx. 4 Hours
Interface	All Power & Data Interface Cables

SENSORS

Laser Scanner	miniVUX-1UAV
Inertial Navigation System (INS)	Dual Antenna Micro-electromechanical (MEMS) IMU
GNSS	x2 Harxon Helix Antennas

SCANNER SPECIFICATIONS - miniVUX-1UAV

Minimum Range	3m
Scanner Accuracy	15mm
Scanner Precision	10mm
Laser Pulse Repetition Rate	100kHz
Max Effective Measurement Rate	up to 100,000 meas/s
Scanning Speed	10-100 rev/s
Field of View	up to 360°

NAVIGATION SPECIFICATIONS - MEMS IMU:

Position	0.02m
Velocity	0.005 m/s
Roll/Pitch	0.02°
True Heading	0.05°
Data Rate	200Hz
Gyro-Bias	0.5° /h
Gyro-RW	0.014° /√h



The laser scanner miniVUX-1UAV meets or exceeds the requirements of the following European Standard: EN 61010-1:2010: Electrical equipment for measurement, control and laboratory use.

Protection Class: IP64 - dust & splash-proof



SYSTEM HIGHLIGHTS

- Lightweight & Robust: < 5kg & IP64 rated
- Survey Grade GNSS Receiver
- Multiple Target Capability
- Anti-Vibration Mounting Option
- Dual GNSS Antennas

AVERAGE POINT CLOUD DENSITY FOR ROBIN MINI:

RANGE: 50m	62 Points per m ² at speeds of 5 m/s
RANGE: 75m	42 Points per m ² at speeds of 5 m/s
RANGE: 100m	32 Points per m ² at speeds of 5 m/s

