

VoxelAero Lite

The all-in-one UAV-based airborne mapping system employs a compact and lightweight design to deliver survey-grade performance. It integrates a built-in aerial metric camera, high-precision inertial navigation system (INS), and a LiDAR sensor with mm-level accuracy.



System Parameter

Weight	1.45kg
Dimensions	179*116*106.9mm (L*W*H)
System Accuracy	Horizontal 5cm; Elevation 4cm
Operating Temperature	-20°C~ +50°C
Light Condition	Natural Environment
Humidity	Non-condensing
Protect Level	IP64
Data Storage	512GB
Power Supply Input Voltage	24VDC(20V~30V input range)
Power Consumption	50W

Laser Scanner

Laser Class	Level 1
Laser Wavelength	1535nm
Beam Divergence	0.5mrad
Measurement Range	10~750m@80%; 10~350m@20%
Laser Pulse Repetition Rate	100k~550K
FoV	80°
Angular Measurement Resolution	0.001°
Ranging Method	ToF
Scan Rate	300 lines/sec
Repeatability Accuracy	5mm@100m(1σ)
Number of Returns	7 times (typical value)
Echo Signal Intensity	8bit (Radiometric Calibration)

POS

Attitude Accuracy	Roll/pitch: 0.005°
	Heading: 0.012°
Horizontal Positioning Accuracy	0.01m
Vertical Positioning Accuracy	0.02m

Aerial Camera

Pixels	45MP/26MP (Optional)
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Applications

