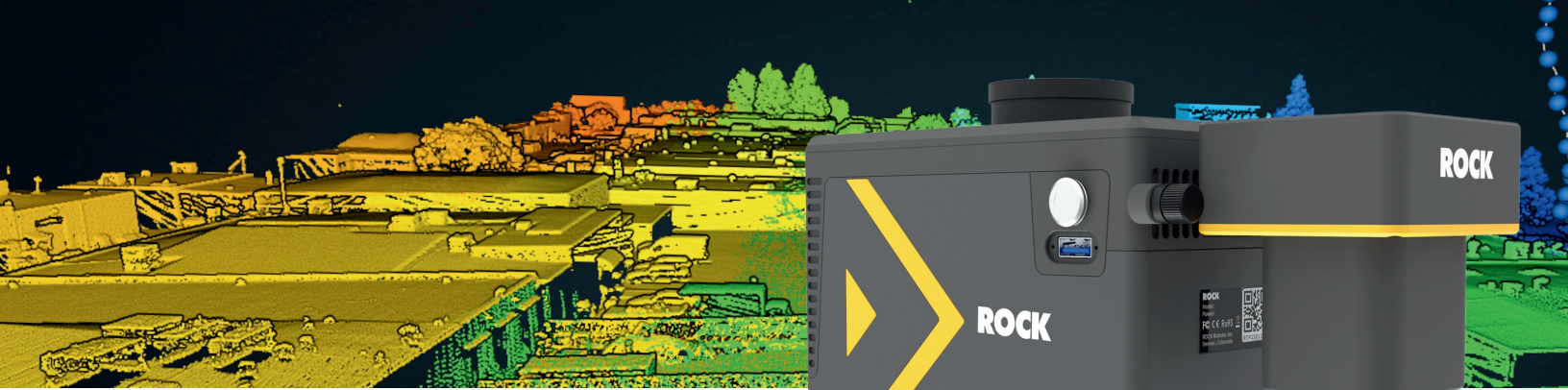




ROCK Ultra

The **ROCK Ultra** is the next-generation professional airborne LiDAR system from Rock Robotic. Designed with surveyors and engineers in mind, its groundbreaking range and high accuracy ensure you never miss critical data—regardless of conditions. With up to **1,000 meters measurement range** and exceptional penetration capabilities provided by **seven returns**, the ROCK Ultra guarantees comprehensive, high-quality terrain data even in challenging landscapes. Backed by ROCK Desktop and ROCK Cloud, the Ultra system forms a seamless workflow from field to finish.

KEY ADVANTAGES

UNMATCHED RANGE & ACCURACY:

- Achieve precise data collection up to 1,000m, ensuring full terrain coverage.

SUPERIOR VEGETATION PENETRATION:

- ≥ 7 echo returns penetrate dense foliage for reliable ground-point capture.

HIGH-ALTITUDE EFFICIENCY:

- Maximize operational efficiency with higher flights (recommended MAX 450m), enabling rapid coverage of expansive areas.

ROBUST PERFORMANCE:

- Operates reliably in extreme temperatures (-20°C to 50°C), ensuring dependable performance under all conditions.

VERSATILE MOUNTING:

- Standard DJI M300/M350 SKYPORT, Universal mount for broad compatibility (optional).

QUICK SPECS

Parameter	Specification
System Accuracy	2-3 cm @ 120 m
Laser Precision	5mm @ 120 m
Weight	1.21 kg (1.4 kg w/ camera)
Returns	7 returns
Flight Height	350m@20% / 450m@35% Reflectivity
Measurement Rate	up to 1 million points/sec

WHAT'S IN THE BOX

- ROCK Ultra LiDAR Unit
- 26MP or 45 MP Camera (optional)
- ROCK Desktop PPK Software (1 YR)
- ROCK Photogrammetry (1 YR)
- ROCK Cloud - 500 GB (1 YR)
- High-Speed USB Storage (256 GB)
- Universal Mount (Optional)



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TECHNICAL SPECIFICATIONS

SYSTEM PARAMETERS

Weight:	1.21 kg (without cam) 1.40 kg (with 26 MP cam)
Dimensions:	156 mm x 90 mm x 115 mm
Power Consumption:	45 W (typical)
Power Supply:	9-36 V DC
Quick-Release Interface:	DJI SKYPORT
Data Storage:	High-speed USB flash drive (256 GB)
Operating Temperature:	-20°C to 50°C
Storage Temp:	-30°C to 60°C
Compatible Platforms:	DJI M300/M350, Helicopter, other Drones

IMU/GNSS

GNSS Signal Tracking:	BDS, GPS, GLONASS, GALILEO PPK
Operating Mode:	Post-Processed Kinematic (PPK)
Pitch/Roll Accuracy:	0.006°
Heading Accuracy:	0.03°
POS Precision:	1cm horizontal, 2cm vertical

OPTIONAL MOUNTS

ROCK Universal Mount



32mm x 32mm mounting pattern for easy integration into 3rd party vehicles.

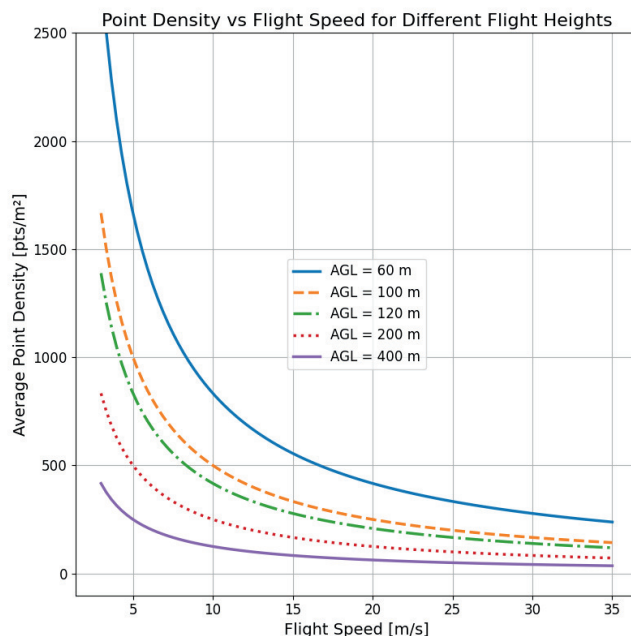


LASER UNIT

Laser Class:	Class 1
Wavelength:	1550 nm
Measurement Range:	500 m @ 20%, 1000 m @ 80% reflectivity
Range Precision:	5mm
Echo Returns:	≥7 returns
Scan Speed:	300 lines/s
Angle Resolution:	0.0018°
Scanning Frequency:	100-1000 kHz
FOV	90°

AERIAL METRIC CAMERA

Pixels:	26 MP	45 MP
Sensor Dimension:	23.5 × 15.6mm	36 x 24 mm
Image Resolution:	6240 × 4168	8192 x 5468
Image Width FoV:	73°	90°
GSD:	2.3cm@100m	2.5 cm @ 100 m



Contact ROCK Sales to get started!

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LEARN MORE



TALK TO SALES

