

**NOW
200 KHZ**



ORION



ULTRA-COMPACT TOPOGRAPHIC MAPPING SYSTEM

Purpose-built for engineering-scale mapping applications, the ALTM Orion is available in several models to suit your surveying needs.

Optech
The Lidar Company™

ALTM ORION

The ALTM Orion Advantage:

- High-accuracy and precision independent of pulse rate, enabled by Optech's iFLEX™ technology
- A rugged and modular design purpose-built for maximum reliability and ease of field serviceability
- The world's most compact full-system design for unlimited flexibility and installation options
- ALTM-NAV Flight Management Software with underlying DEM planning capability, and real-time swath coverage directly exportable to Google™ Earth, and others
- The latest in tightly-coupled inertial and Virtual Reference System processing technology, enabling steep turns, extended baselines, and the elimination of remote base stations for maximum collection efficiency without sacrificing accuracy
- Powerful DASHMap lidar pre-processing software with embedded 3D viewer for rapid XYZI data output and visualization
- Optional integrated digital camera, hyperspectral, and waveform digitizer solutions for multiple data end-products
- Available as a COTS solution for UAV platforms and ISR applications.

ALTM ORION	M200	C200
Application Areas		
Wide Area Mapping	✓	
Corridor Mapping	✓	✓
Power Line Management	✓	✓
Performance Specifications		
Operational Altitudes ¹	~ 200-2500 m AGL, nominal	~ 50-1000 m AGL, nominal
Laser Classification	1.0 µm Class IV (US FDA 21 CFR)	1.5 µm Class IIIB (US FDA 21 CFR)
Elevation Accuracy ²	< 5-20 cm	< 5-10 cm
Horizontal Accuracy	1/5, 500 x altitude	1/3, 000 x altitude 1/5, 500 x altitude (optional)
Effective Laser Repetition Rate	50-200 kHz	100-200 kHz
Scan Width (FOV)	Programmable 50° max.	
Scan Frequency	Programmable 70 Hz max.	
Roll Compensation	Programmable 10° min.	
Number of Returns	4: first, second, third, last	
Number of Intensities	4: first, second, third, last; 12-bit dynamic range	
System Dimensions and Weight	0.34 m x 0.34 m x 0.25 m; 27 kg; 0.03 m ³ (1.0 ft ³)	
Power Requirements	28 VDC, 300 Watts (nominal)	
Data Storage	Internal HDD; External HDD (optional)	

* Specifications subject to change

¹ 20% reflective target

² Accuracy dependent on selected operational parameters using nominal 50° FOV in standard atmospheric conditions; 1 σ .



Many Products - One Family

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