

Lynx MG Mobile Mapper™

Summary Specification Sheet

Features

- Survey-grade relative accuracy
- Highest precision in the mobile mapping segment
- Highest scanner speed and point density in the industry—ideal for mapping at high speeds
- Fully upgradeable to a Lynx SG
- Ladybug® integration for seamless, aligned and accurate 360° images
- Support for two 5-Mpix cameras for higherresolution applications
- Real-time visualization, real-time diagnostics, and real-time image display with Lynx Survey software
- Easy system installation in minutes

Applications

- Urban modeling
- Asset mapping
- Bridge clearances



Mapping-Grade Lidar Data

Equipped with a world-class lidar sensor integrated with a comprehensive workflow solution, the Optech Lynx MG mobile lidar system is the perfect fit for the most common mobile mapping projects. While designed for projects where engineering-grade accuracy is not a primary requirement, the Lynx MG integrated lidar and imaging solution vastly outperforms its peers in the mobile mapping market segment.

Optimization of Teledyne Optech's processing workflow, world-class lidar performance, flexible configuration, integrated imaging solutions, and Applanix POSPac™ software have created a system that can be used cost-effectively on small or very large mapping projects. Additionally, the system is available with an upgrade path to Teledyne Optech's industry-leading Lynx SG system. Superior and cost-effective performance, with the ability to upgrade as your business expands, means that the Lynx MG will protect your investment and help grow your business.





The Lynx MG Advantage

Lidar Performance

The Lynx MG comes with a 500-kHz, 360°-FOV, 200-Hz-scanner lidar sensor that maintains a 5-mm precision. Though the system is designed for mapping-grade absolute accuracy, its lidar performance is equivalent in precision and data quality to that produced by survey and engineering systems, making it significantly better than anything in this product category. Higher quality means deliverables can be created more cost-effectively while offering your clients better data than your competition.

Accuracy

The Lynx MG provides an absolute accuracy targeted specifically at mobile mapping applications. It includes $POSPac^{TM}$ with $SmartBase^{TM}$ and an imaging system, offering improved accuracy over its peers.

Camera Options

The Point Grey Ladybug camera delivers high-resolution 360° imagery, with images calibrated and boresighted by Optech LMS in a simple, tightly integrated workflow. Operators view images, control the camera directly, and match the imagery to the lidar point cloud for simpler feature extraction.

Software Workflow

Lynx Survey and Optech LMS are a complete software solution that includes best-in-class survey planning, project execution, inertial/positional processing, lidar post-processing and information extraction.

Upgradeability

To protect your investment, the Lynx MG is fully upgradeable to the Lynx SG, the industry-leading solution for surveying and engineering applications, where resolution, precision and accuracy are of paramount significance.

Parameter	Lynx MG
Number of lidar sensors	1
Camera support	Ladybug ®3 or Ladybug ®5 camera
Timestamp support for additional camera/sensor (1)	Yes
Maximum range (2)	250 m @ 10% reflectivity
Range precision (3)	5 mm, 1 σ
Absolute accuracy (4)	±20 cm, 1 σ
Laser measurement rate	75-500 kHz programmable
Measurement per laser pulse	Up to 4 simultaneous
Scan frequency	80-200 Hz programmable
Scanner field of view	360° without obscurations
Power requirements (5)	12 VDC, 30 A max. draw
Operating temperature	-10°C to +40°C (extended range available)
Storage temperature	-40°C to +60°C
Relative humidity	0-95% non-condensing
Laser classification	IEC/CDRH Class 1 eye-safe
Vehicle	Fully adaptable to any vehicle

- 1 Customer can add additional sensors and use existing POS output.
- 2 Slant range from sensor.
- 3 Under test conditions. Contact Optech for details.
- 4 Assumes good GPS data (PDOP <4) and 10-m range using a post-processed GPS trajectory. Performance will degrade in the event of poor or lost GPS.
- 5 Power during initialization: 12 VDC, 40 A.