



WELCOME TO THE REVOLUTION

The LYNX Mobile Mapper™ defines the state of the art in mobile mapping technology, generating rich survey-grade lidar and image data from a vehicle moving at highway speeds.

Supported by decades of advanced lidar development and a support infrastructure that protects your investment, the LYNX Mobile Mapper is the definitive answer to your large-area engineering and survey work.



Optech
The Lidar Company™

LYNX Mobile Mapper™

Operational Configuration

The LYNX Mobile Mapper consists of a command and control unit (with embedded navigation solution) that is located in the vehicle. This module controls from multiple Optech lidar sensors and two optional calibrated, passive imaging cameras. Operator control is accomplished through a laptop connected to the command and control rack.

Vehicle Mounting

The LYNX Mobile Mapper sensor array is an integrated, rigidly mounted platform that is usable with standard vehicle roof racks and adaptable to custom installation. The standard mounting apparatus contains adjustable orientation mounts for two lidar sensors and two cameras as well as mounting for the system IMU and GPS antennas. A rigid design for the entire mount structure ensures that alignment and accuracy between the sensors and the navigational equipment are maintained.

The Technology Difference

The LYNX Mobile Mapper is equipped with the latest in lidar innovation. Each onboard lidar sensor possesses Optech's patented iFLEX technology, allowing for unsurpassed system specifications including:

Software

All models of Optech's LYNX Mobile Mapper are equipped with a complete software solution that allows for best-in-class survey planning, project executions, inertial/positional processing, lidar post processing and information extraction. The LYNX Mobile Mapper software solution consists of LYNX-Survey and DASHMap™.

Power

The LYNX Mobile Mapper is powered directly from the vehicle battery/alternator system. No auxiliary power unit is required.

Eye Safety

The LYNX Mobile Mapper is an IEC/CDRH Class 1 lidar solution under all operating conditions. Class 1 designation ensures that the operational functionality is never limited by risks associated with potential eye safety hazards. The invisible eye-safe beam also eliminates the chances of distracting drivers and onlookers in populated survey settings.

Support and Warranty

1 year Optech system warranty with 24/7 telephone and email support.

LYNX MOBILE MAPPER	V100	V200
Parameter		
Number of lidar sensors	1-2	1-2
Camera support	Yes, 2 x 2 Mpixel	Yes, 2 x 5 Mpixel
Maximum range	100 m, 20%	200 m, 20%
Range precision	±8 mm, 1 σ	±8 mm, 1 σ
Absolute accuracy	±5 cm (1 σ) ^{1,2}	±5 cm (1 σ) ^{1,2}
Laser measurement rate	100 kHz	200 kHz programmable
Measurements per laser pulse	Up to 4 simultaneous	Up to 4 simultaneous
Scan frequency	150 Hz	80 to 200 Hz programmable
Scanner field of view	360° without obscurations	360° without obscurations
Power requirements	12 VDC, 30 A max. draw	12 VDC, 30 A max. draw
Operating temperature	-20°C to +40°C (extended range available)	-20°C to +40°C (extended range available)
Storage temperature	-40°C to +80°C	-40°C to +80°C
Laser classification	IEC/CDRH Class 1 eye-safe	IEC/CDRH Class 1 eye-safe
Vehicle	Fully adaptable to any vehicle	Fully adaptable to any vehicle

¹Assumes good GPS quality.

²Accuracy may be improved via post-processing techniques.