

# Dynascan



LAND VEHICLE & MARINE VESSEL LIDAR



## Benefits

- No vessel/vehicle calibration problems
- Install system in minutes
- Choice of INS/GPS sensors
- IP67 environmental protection
- Price performance advantage
- Lightweight - small size/one box solution
- Support and warranty - one year

## Applications

- Earth moving and volumetric surveys
- Beach profiling
- Port and harbour surveys
- Dam, canal and riverbank profiling
- LIDAR infill surveys

**An integrated system with laser scanning, GPS & inertial navigation sensor all in ONE POD. For land and marine applications.**

The Dynascan 'Plug and Play' Lidar system is a fully integrated high speed laser scanner, differential GPS system and FOG laser based INS. The system is light weight, highly portable and may be used on land vehicles or marine vessels to acquire 3D survey quality data of topography, urban developments, industrial plants, including overhead utility cables, bridges, dams, harbours, beaches, rivers and canal banks.

By fully integrating all the sensors in one package, MDL has eliminated the need for field sensor calibrations, installation offset measurement errors and reduced Lidar system mobilisation time to minutes not hours.

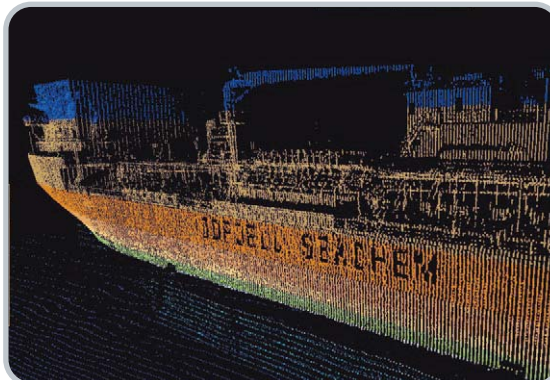
A Dynascan system comes complete with data acquisition and post processing software suite. Recorded data may be exported to most 3D data base and CAD software packages.

Dynascan is highly affordable and represents a 'Price-Performance' advantage unmatched by any existing manufacture. This will open up the benefits of 3D Lidar to many more applications and market opportunities.

Dynascan is sold and supported world - wide directly by MDL and its 'Partner' Network of Resellers and Service centres.



Combined laser and bathymetric data from a harbour survey



Ship scan

world leading laser measurement technology



## Technical Specifications

### Laser Scanner

- Class 1 eye safe (FDA/ IEC)
- Maximum range: 150m (500')
- Accuracy  $\pm 5\text{cm}$  (2")
- Range resolution: 1cm (0.4")
- Scanner field of view: 360°
- Scanner angle resolution: 0.1°
- Scanner rate: 10Hz (600 rpm)
- Measurement rate: 36,000 per second
- Number of scanners per system: up to 10

### Inertial Sensor

- Gyro technology: FOG (Fibre Optic Gyros)
- Out put range: 375°/sec
- Gyro bias:  $\pm 20^\circ/\text{hr}$
- Gyro stability:  $\pm 1^\circ/\text{hr}$
- Accelerometer range:  $\pm 10\text{g}$
- Measurement rate: 100hz
- Time accuracy: 20ns
- Max velocity: 515m/s

### Attitude Accuracy

- Azimuth: 0.1° RMS
- Roll: 0.05° RMS
- Pitch: 0.05° RMS

### Horizontal Position Accuracy (RMS)

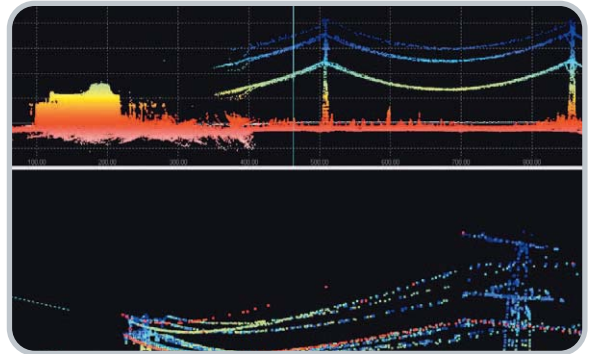
- NovAtel OEMV® GNSS technology
- SBAS: 0.6m
- Omistar® HP: 0.1m
- RT-2: 1cm + 1ppm

### Environmental

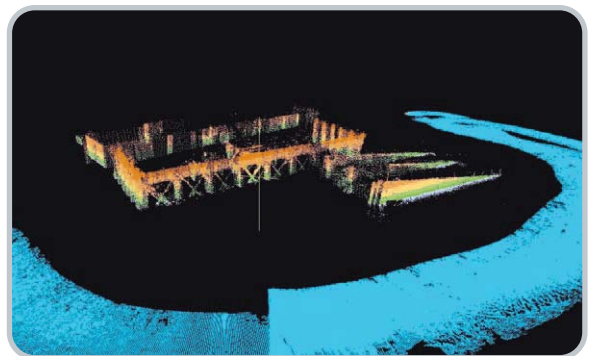
- Operating temperature: -20° C to +60°C (14°F to 140°F)
- Storage temperature: -20°C to 70°C (14°F to 158°F)
- Water and dust resistant to IP 67.

### Power and Dimensions

- Power: 12 to 17 volts DC 30W
- Weight: 11kgs (25lbs)
- Size: L595mm x W240mm x H255mm (L23 x W9.5" x H 10")



Scan of pylons and overhead cables



Old caissons



Drive-by street scene

## For more information on Dynascan:



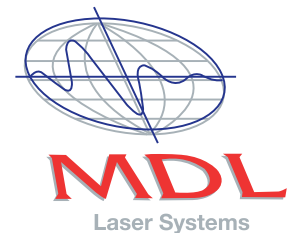
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9001/2000 Certified

