

**Model LaserAce® FLM**

Module Type	10	20
<b>Laser</b>		
Wavelength (nm)	905	905
Beam Divergence (mRad)	175 x 0.2	350 x 0.2
Reflectorless Range (m)	0.5 - 30	0.5 - 12
Reflectorless Range (ft)	2 - 98	2 -40
Max range (m)	630	630
Max range (ft)	2000	2000
Accuracy (cm)	10	10
Resolution (cm)	1	1
Speed Accuracy (mph)		
Rep rate (Hz)	1000	1000
Eye safety	Class 1	Class 1

**Communications**

Data I/O	2m cable with 9-pin D-type	2m cable with 9-pin D-type
Trigger Out	TTL Pulse	TTL Pulse
Power (V)	9 to 24	9 to 24
Protocol	RS232	RS232

**Environmental**

Operating Temp (°C)	-10°C to +60	-10°C to 60
Protection Class	IP67	IP67
Physical Construction	Anodised Aluminium	Anodised Aluminium
Dimensions (mm)	154 x 78 x 49	154 x 78 x 49
Dimensions (inches)	6.0 x 3.1 x 1.9	6.0 x 3.1 x 1.9
Weight (g)	950	950
Weight (oz)	33.5	33.5

**LaserAce® FLM-T**

One of MDL's standard range laser modules with a repetition rate of up to 1000Hz. This unit is used in distance measurement, excess height measurement and traffic applications. It is also a fixed distance high-speed camera trigger. This unit is ideal for integration into a camera system for vehicle recognition, vehicle classification and profiling.

Please note that for our OEM customers we can customise the modules output information and repetition rate.

We provide a set of standard systems which are designed for easy integration in all applications based on commonly required specifications. Other variations are available and customisations can be provided for OEM integrators. Please talk to us about your application and needs so that we can show you how our LaserAce® FLM modules can help you.

**Accessories**

- Sighting Scope: Aligned to the laser beam to visually see where the target currently being ranged is located
- Red Dot Pointer: An additional red laser pointer, aligned to the measuring

For more information on LaserAce® FLM:



Certificate Number: 160263  
BS EN ISO 9001 : 2000

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Information contained is believed to be accurate. However, no responsibility is assumed for its use. Technical information is subject to change without notice.  
9001/2000 Certified

LaserAce FLM Rev\_03\_19\_02\_09

# LaserAce® FLM

OEM FANNED LASER MODULE



world leading laser measurement technology





# LaserAce® FLM

OEM FANNED LASER MODULE

**The LaserAce® FLM units are compact class 1 eye safe, rugged, multipurpose laser distance meters for integration into OEM applications.**

These laser distance measuring modules have been specifically designed for additional integration each giving a reflectorless range of up to 30m (98ft) and 12m (40ft) for the FLM-10 and FLM-20 respectively.

The sensors can be integrated into a number of suitable system applications requiring detection of a distance change

LaserAce® FLM modules can be configured to output range and height of vehicles or objects and may also be set to trigger cameras in Tollbooth or Law Enforcement applications. The sensors can also be further integrated to produce vehicle profiles and scans, classify and identify them, over height detection and much more.

Alongside road traffic applications the LaserAce® FLM can be used in Security, Construction and Marine markets. From a camera trigger, motion detector, collision avoidance, each market segment has its own special requirement.

Here at MDL we are aware that no two applications are exactly the same so we work with our OEM partners to provide unique solutions to their individual applications and are always willing to help. LaserAce® FLM is cost effective, accurate, fast and environmentally sealed to IP67 making it the most robust sensor on the market today!

The laser modules use time-of-flight technology, put simply, it measures the time taken for a very short pulse of infrared laser light to travel from one window in the module, to a very low noise detector in a second window. The distance to the target is calculated from the time taken to make the round trip.

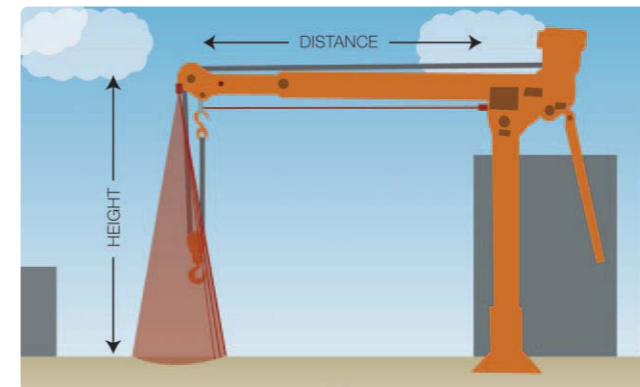


The reflected light signal levels are very low, so the greater the reflectivity of a target, the longer the range over which this target can be 'seen'. Therefore, reflective targets will increase the range of each of the LaserAce® FLM modules.

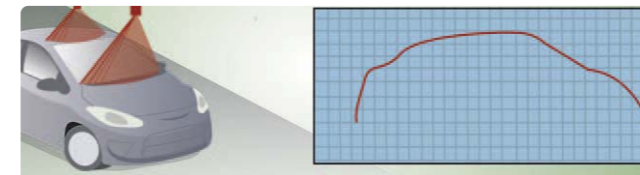
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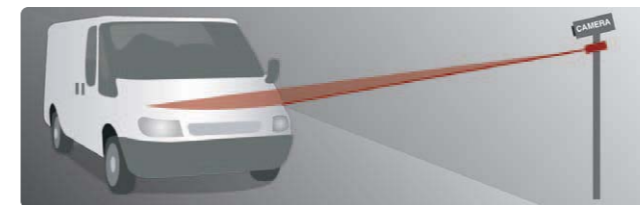
Ship Collision Avoidance



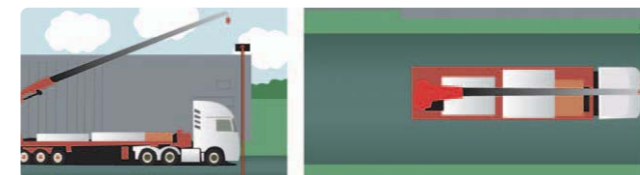
Load Height Measurement



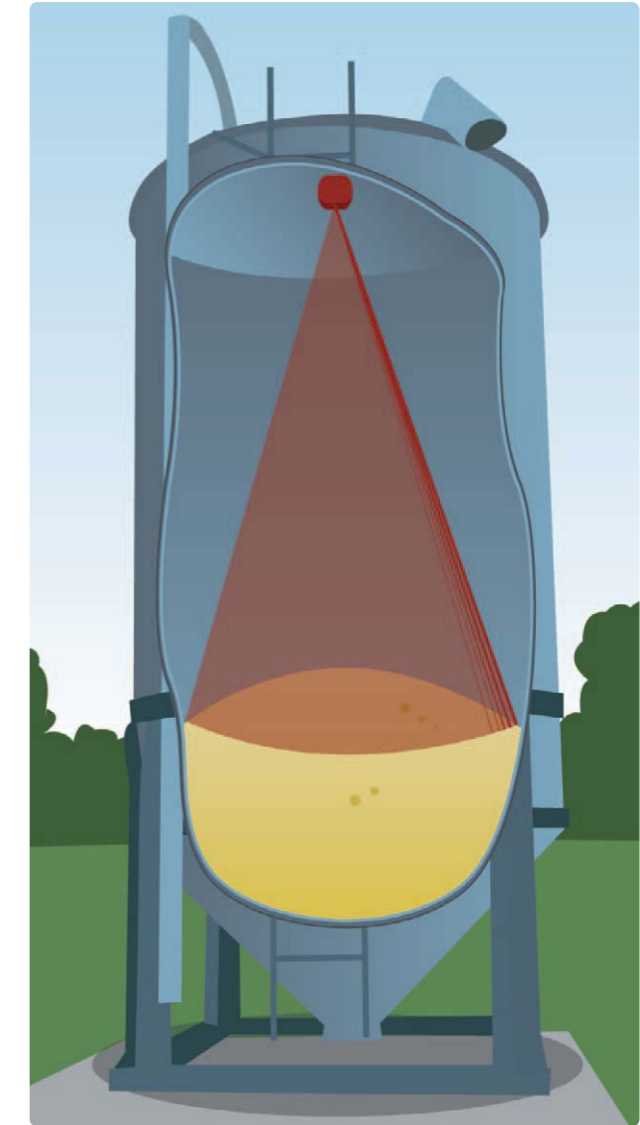
Vehicle Profiling / Height Detection



Camera Trigger



Overheight / Height detection



Silo Measurement



Security/Intruder Detection