



OPTIONAL

MDL

Long-range LED leading lights

The MDL are long-range LED leading lights, especially designed to mark port approaching and entrance channels. They are normally used in traditional leading stations of two lights, in both day and night modes.

State-of-the-art design lens

The MDL light produces an unidirectional beam with a horizontal divergence of 10° . Its luminous source, consisting of high-power LEDs of 100,000 hours average life, makes it a maintenance-free beacon.

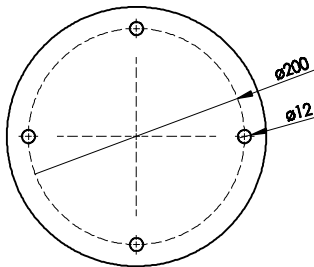
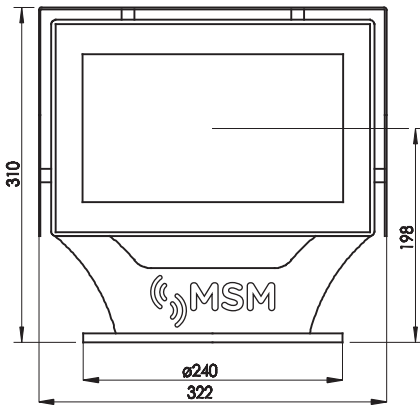
Long service life

Manufactured with high quality and resistant materials, the MDL provides a long service life under severe marine conditions. This lantern strictly complies with IALA Recommendations.



FEATURES

- *State-of-the-art LED technology.*
- *Day range up to 4 nm.*
- *Nominal night range up to 21 nm ($T=0.74$).*
- *Maximum total LED power: 27 W.*
- *Horizontal divergence of 10° ($50\% I_0$), other divergences available under request.*
- *Vertical divergence up to 2° ($50\% I_0$).*
- *High-accuracy optical system, stabilised against vibrations.*
- *Average operation lifetime over 25 years.*
- *Stainless-steel housing with outer polyurethane finish.*
- *Rectangular, high-resistance glass lens cover.*
- *100% humidity resistant.*
- *Double RS-232 serial port for setting adjustments by PC and remote monitoring system.*
- *Maintenance free.*



Optical system

Light source:	Up to 9 nos. high-intensity LED diodes.
Lens:	Collimator, a lens for each LED.
Day range:	Up to 4 nm.
Nominal night range:	Up to 21 nm (T=0.74).
Horizontal divergence:	Up to 10° (50% I ₀).
Vertical divergence:	Up to 2° (50% I ₀).
Power supply:	Up to 27 W.
LED average life:	More than 100,000 hours.

External electronic control unit

Flash rhythms:	256 (6 nos. user selectable).
Circuit:	Microprocessor controlled.
Settings:	By microswitches or PC.
Input voltage:	From 9 to 36 V c.c.
Day/night threshold:	Adjustable between 10 and 400 lux.
Power supply:	Individual for each LED.

Automatic & programmable luminous intensity reduction at night.
Reverse-polarity, short-circuit, over-temperature and transient overvoltage protections.

Materials and environment

Housing:	Stainless-steel, with polyurethane finish.
Lens cover	Rectangular, high-resistance glass.
Watertightness degree:	IP 67.
Humidity resistance:	100%. Pressure-compensation valve to avoid condensation.
Temperature range:	From -30° to 70°C.
Fixings:	4 nos. M10 bolts in a 200 mm diameter.

All internal components are assembled on a base plate.
Easy adjustment and levelling

Options

Synchronization by cable or GPS receiver.
Remote monitoring module via GSM, radio or satellite.
RS-485 MODBUS serial port.
Higher horizontal divergences available under request.

Peak intensities (Cd)

Model	Power			
MDL9	27 W	189,000	133,200	94,500

! Specifications subject to change without previous notice.