The MCL 200 is a compact LED marine lantern, solar self-contained, with great optical efficiency and low consumption, fitted with LED diodes of high intensity, reaching a maximum range of 9 nautical miles and offering a big autonomy.

As a difference from the MCL 180, this lantern is ready to integrate a remote monitoring and synchronization system.

The battery is replaceable, thus the complete lantern disposal is not necessary at the end of battery’s life. Standard fixings allow for a quick beacon replacement.

Designed according to IALA Recommendations.

Features:

- High-efficiency luminous system.
  Up to 7 nm (T=0.74), 9 nm (T=0.85).
- Vertical divergence up to 12°.
- 360° horizontal output.
- Average operation lifetime over 10 years.
- IP 68 watertightness degree (immersion resistant).
- Double RS-232 serial port for setting adjustments by PC and remote monitoring system.
- Programming, configuration and operating status via PC, IR programmer or Bluetooth as an option.
- Ready to integrate remote monitoring via GSM, VHF or satellite, and synchronization module via GPS.
- Autonomy without solar charging up to 450 hours.
- Automatic energy management, according to latitude.
- 4 nos. solar modules of 2.5W each.
- PATENTED OPTICAL SYSTEM.
LED Compact Beacons

Marine Compact LED Lantern

MCL200

Optical System

- Light source: 6 nos. ultra-bright LED diodes, with high-precision acrylic lens.
- Luminous range: Up to 7 nm (T=0.74) 9 nm (T=0.85).
- Colours available: White, green, red, amber and blue.
- Vertical divergence: From 5º to 12º (50% Io).
- LED average life: More than 100,000 hours.

Electronic control

- Flash rhythms: 256 (6 nos. user selectable).
- Day/night threshold: Adjustable in lux.
- Solar charge regulation function: Regulation in 3 phases.
- Settings: PC / IR programmer (optional Bluetooth).
- Energy management: Dynamic, according to latitude.
- Light intensity reduction due to low battery: Configurable by the user.

Solar modules and battery

- Solar modules: 4 nos. of 2.5W each.
- Battery: 12 Ah, gelled, maintenance-free.
- Autonomy without solar charging: Up to 450 hours.

Materials and environment

- Lens cover: Acrylic, UV stabilised.
- Watertightness degree: IP 68.
- Fixings: 4 bolts in a 200mm diameter.
- Humidity resistance: 100%. Pressure-compensation valve to avoid condensation.
- Temperature range: From -20º to 70ºC.
- Inside hardware: Stainless steel.

Peak intensities (Cd)

<table>
<thead>
<tr>
<th>Colour</th>
<th>Vertical divergence 5º</th>
<th>Vertical divergence 12º</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>231</td>
<td>123</td>
</tr>
<tr>
<td>Green</td>
<td>214</td>
<td>135</td>
</tr>
<tr>
<td>Red</td>
<td>161</td>
<td>90</td>
</tr>
<tr>
<td>Amber</td>
<td>183</td>
<td>96</td>
</tr>
</tbody>
</table>

Other divergences available.

Options

- Infrared (IR) programmer.
- PC programming kit.
- Bluetooth programming.
- Fixing kit for 3 bolts in a 200mm diameter.
- Other specifications available under request.
- MCL 200-SYNC (GPS synchronization).
- MCL 200-TG (GSM remote monitoring).
- MCL 200-TR (Radio remote monitoring).
- MCL 200-TS (Satellite remote monitoring).