MCL 250-PS

Marine Compact LED Lantern

The MCL 250-PS is a compact LED marine lantern of medium range, with built-in solar power, characterized by great optical efficiency and low consumption, made up of LED diodes of high intensity, reaching a maximum range of 11 nautical miles. Especially suited to locations where the solar radiation level is reduced.

Thanks to its large solar charging capacity, this lantern can integrate an AIS AtoN system.

Ideal for medium-range beaconing applications requiring a low consumption, on- and off-shore, such as channels, river mouths, piers, buoys, marine structures, etc. Manufactured with high-quality and resistant materials, the MCL 250-PS provides a long service life under harsh marine conditions.

Designed according to IALA Recommendations.

Features:

- High-efficiency luminous system. Up to 8 nm (T=0.74), 11 nm (T=0.85).
- 4 nos. solar modules of 7.5W each, plus 1 no. solar module of 2.5W.
- Vertical divergence up to 30° (MCL 250-PS-HD).
- 360° horizontal output.
- Average operation lifetime over 10 years.
- IP 67 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, synchronization via GPS or AIS AtoN module.
- Autonomy without solar charging up to 750 hours.
- Automatic energy management, according to latitude.
- PATENTED OPTICAL SYSTEM.
**LED Compact Beacons**

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**Optical System**

- **Light source:** 3 to 6 nos. ultra-bright LED diodes, with high-precision acrylic lens.
- **Luminous range:** Up to 8 nm (T=0.74) 11 nm (T=0.85).
- **Colours available:** White, green, red, amber and blue.
- **Vertical divergence:** From 5° to 30° (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 7.5W each.
  1 no. of 2.5W.
- **Battery:** 40 Ah, gelled, maintenance-free.
- **Autonomy without solar charging:** Up to 750 hours.

**Materials and environment**

- **Base:** Reinforced polyamide and rotomoulded polyethylene.
- **Lens cover:** Acrylic, UV stabilised.
- **Vibration resistance:** MIL-STD-202G, Method 204D (5G).
- **Shock resistance:** MIL-STD-202G, Method 213B.
- **Watertightness degree:** IP 67.
- **Fixings:** Internal of 4 bolts in a 200mm diameter /External of 4 bolts in a 465mm 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 5°</th>
<th>Vertical divergence 12°</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>436</td>
<td>228</td>
</tr>
<tr>
<td>Green</td>
<td>350</td>
<td>218</td>
</tr>
<tr>
<td>Red</td>
<td>278</td>
<td>154</td>
</tr>
<tr>
<td>Amber</td>
<td>321</td>
<td>171</td>
</tr>
</tbody>
</table>

*Other divergences available.*

**Opciones**

- Infrared (IR) programmer.
- PC programming kit.
- Bluetooth programming.
- Fixing kit for 3 bolts in a 200mm diameter.
- Other specifications available under request.
- MCL 250-PS-HD (with divergence up to 30°).
- MCL 250-PS-SYNC (GPS synchronization).
- MCL 250-PS-TG (GSM remote monitoring).
- MCL 250-PS-TR (Radio remote monitoring).
- MCL 250-PS-TS (Satellite remote monitoring).
- MCL 250-PS-AIS (AIS AtoN).