Mediterráneo Señales Marítimas

SOLAR KIT
MSK 160

The MSK 160 is a solar kit, conceived to hold a medium-range LED marine lantern together with its own solar supply system in a compact and self-powered array.

The kit consists of a MBL 160 lantern, a small pole and a big watertight box to house a battery of up to 230 Ah capacity, providing a high autonomy to the luminous system.

The pole works as support for solar modules, lantern and battery box, inside which other electronic devices can be fitted, such as monitoring communication modem, AIS AtoN unit, GPS synchronizer, etc.

This solar kit is suitable for on- and off-shore navaids stations. Due to its standardised design, its installation is quick and easy.

FEATURES

- √ High-efficiency luminous system.
  Up to 11 nm (T=0.74), 16 nm (T=0.85).
- √ Vertical divergence up to 12º.
- √ 360º horizontal output.
- √ Pole, support and battery box in stainless metal.
- √ Watertight box to house a battery of up to 230 Ah capacity.
- √ Able to support 2 nos. solar modules, from 10 to 75W.
- √ Free inputs through IP 68 cable glands for external connections and communications.
- √ 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.
- √ Ready to integrate remote monitoring via GSM, VHF or satellite, synchronization via GPS or AIS AtoN module.
- √ Customized design.
- √ **PATENTED OPTICAL SYSTEM.**

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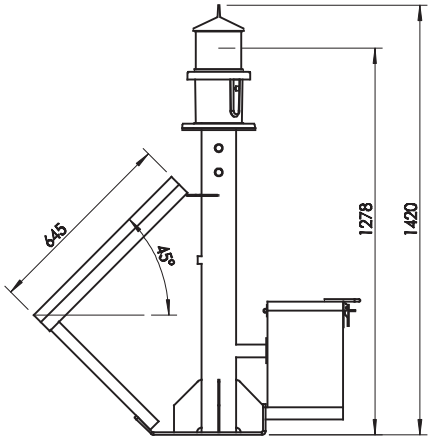

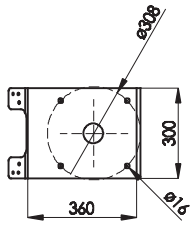

Other panel dimensions and tilt angles under request.

Optical System	
Light source:	3 to 12 nos. ultra-bright LED diodes, with high-precision acrylic lens.
Luminous range:	Up to 11 nm (T=0.74) 16 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 between 10 and 400 lux.
Solar charge regulation function:	Regulation in 3 phases.
Settings:	PC / IR programmer / Bluetooth.
Luminous intensity adjustment:	Linear, between 10 and 100%.
Light intensity reduction due to low battery:	Configurable by the user.

Solar modules and battery	
Solar modules:	Up to 2 nos. from 10 to 75W. Inclination depending on latitude.
Battery:	Up to 230 Ah, gelled, maintenance-free.

Materials and environment	
Pole, support and battery box:	Stainless and/or galvanised steel.
Lantern base:	Glass-fibre reinforced polyamide PA66-GF30.
Lens cover:	Acrylic, UV stabilised.
Watertightness degree:	IP 68.
Humidity resistance:	100%. Pressure-compensation valve to avoid condensation.
Temperature range:	From -20º to 70ºC.
Hardware:	Vandal-proof stainless steel.

Solar kit lantern fixing

Standard fixings for any marine lantern have been respected in this solar kit design.

Options

- GPS synchronization module.
- GSM remote monitoring module.
- Radio remote monitoring module.
- Satellite remote monitoring module.
- AIS AtoN module.
- Other lantern combinations available.
- Other specifications available under request.

MBL 160	PEAK INTENSITIES (Cd)							
	VERTICAL DIVERGENCE 5º				VERTICAL DIVERGENCE 12º			
COLOUR	6W	12W	18W	24W	6W	12W	18W	24W
White	537	1,010	1,515	2,148	338	676	1,014	1,352
Green	439	681	1,022	1,756	290	580	870	1,160
Red	275	550	895	1,190	204	408	612	816
Amber	564	662	993	2,256	235	470	705	940

Other divergences available.

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