# ZL-LS12A LED Lantern





ZL-LS12A LED Lantern, is a low-intensity, Self-Contained light weight, maintenance-free marine signal lantern, ideal for use on small buoys in Rivers, Marinas, Oyster & Fish Farms, Water Sports and Jetties.



12+77
Nautical Mile
LED Lantern
@ T=0.74

ZL-LS12A is a direct replacement to the successful ZL-LS120-M Lantern combining over 30 years of in-house experience using super high intensity Light Emitting Diodes (LED) for a wide range of marine applications with the latest advancements in LED Technology.

## Compact, Lightweight, Robust Design

The lens has been carefully designed to match the LED array, providing an even distribution of light throughout the horizontal plane. Ranges in <u>excess</u> of 2 Nautical Miles @ T=0.74 are achieved, across all IALA signal colours [Red LED; Green LED; Yellow LED; and White LED. Blue LED colour is available on special order].

Lantern base is manufactured from marine grade aluminium, providing a rugged design, suitable for installation in a marine environment with a 3-bolt hole pattern.

Integral to the ZL-LS12A design is a small compact Solar Cell (module) and Battery allowing the selection of IALA single flash (rhythm) characters, pre-set (programmed) at factory prior to delivery. Built-in photodiode turns the lighting unit "Off at Sunrise, and On at Sunset".

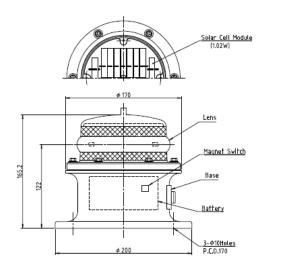
#### Benefits:

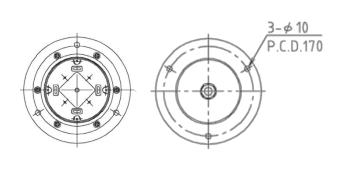
- Zero maintenance
- Long service life
- ☐ No lamps, no moving parts
- ☐ Interchangeable components
- ☐ Rugged compact design suitable for the marine environment

## **Specifications**

Optical	Lens	Ø120mm diameter aspherical lens, UV stabilised polycarbonate
	Light Source†	24 super high intensity light emitting diodes (LED)
	LED Life	>100,000 hours
	LED Colour	Red; Green, Yellow, White [Blue – special order]
	Vertical Divergence	Approx. 8° degree (@ 10% of Peak Intensity)
Electronics, Power, Luminous and Intensity	Photosensor	Photodiode (type PD-3)
	Sun Switch Sensitivity	P.D. •20 ~ 200Lx
	Flash Character (IALA)	Single Flash (one factory preset code)
	Peak intensity (@ 10%)	13 cd
	Effective Intensity   Luminous Range‡	Determined by Flash Character (see below)
	CCT = 0.30s	7.9cd 2.4Nm @ T=0.74
	CCT = 0.40s	8.7cd 2.5Nm @ T=0.74
	CCT = 0.50s	9.3cd 2.5Nm @ T=0.74
	Horizontal Pattern	360°omni-directional
	Reverse Polarity	Built-in
	Battery	6V 4AH Rechargeable Lead Acid
	Solar Cell (Built-in)	8V, 1.02W
	Nominal Voltage	6.0VDC
	Operational Voltage Range	4.5VDC ~ 7.5VDC
	Power Consumption	0.4W (maximum)
Others	Operational Temperature	-10°C to +55°C
	Humidity	100% without condensation
	Wind Loading	40m/s
	Intrusion	IP67 equivalent
	Main Material	Lantern Base – aluminium alloy
	Dimensions	Approx. 170mm (H); Ø200mm
	Total Mass	Approx. 2.9kg (inclusive of solar cell and battery)
	Mounting	3 on 170mm P.C.D.   M8 Bolts
Manufacture's Quality Standard		ISO 9001
Information correct at the time of printing, though subject to change without notice		

‡ Schmidt-Clausen is applied for calculating luminous intensity.





### ZENI LITE BUOY CO., LTD.

HULIC Kyobashi Building, 3F, 2-7-12, Yaesu, Chuo-ku, Tokyo, 104-0028 Japan

Tel: +81 3 3510 7231 Fax: +81 3 3510 7248

10 Anson Road, #29-12 International Plaza, Singapore 079903 Tel: +65 6392 5795 Fax: +65 6392 5796

http://www.zenilite.co.jp/english/overseas@zenilite.co.jp



Industrial Member

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