

# LED Solar Powered Marine Lanterns

## AL-ML-S7



(Short Visible Range)



(Long Visible Range)



IR programmer



This LED Marine Lanterns is completely self-contained lantern. Four (4) solar panels are integrated into the assembly and mounted to collect sunlight at all angles.

CREE Ultra high intensity LED is used as light source which make performance better.

There is no need to open the light, the light flashing characteristics (IALA 366 flashes) could be remote controlled by IR Programmer easily. (Optional)

GSM Monitoring as optional function, when fault happens, it will send out text message automatically.

### Compliance

- IALA E-200-1
- CE

### Features

#### Electrical

- Based on LED technology, and its color complies to IALA Recommendations E-200-1.
- LED technology reduces maintenance time & costs

#### Physical

- PC housing, UV resistance, shockproof and corrosion proof.
- Bird deterrent spike
- Powder coated die casting aluminum base
- 4-side mono crystalline silicon solar panel, conversion efficiency is better than poly crystalline silicon

#### System design

- Built-in photocell for day/night operation (dusk to dawn)
- ON/OFF button interface located under base
- Steady mode is a special working mode which need much power, if the normal working mode is steady, let us know before our offer.

#### Optional

- Charging port & External battery charger
- GSM Cellphone Monitoring
- RS232 communication port
- GPS Sync flashing
- 366 IALA flash characteristics adjustable
- Infrared Programmer for flashing rate setting

### Application

- AL-ML-S7 Solar Marine Lantern is used on buoy, light house and any other off shore site for marine/river safe navigation.

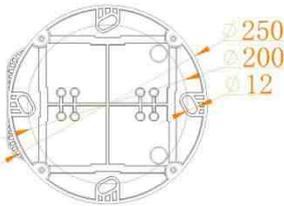
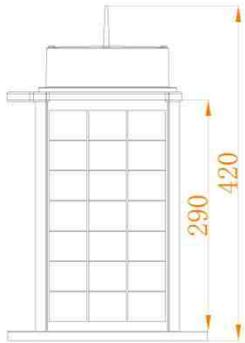
## APPLICATION



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### Dimension(mm)



### SPECIFICATIONS

### AL-ML-S7 LED Solar Powered Marine Lanterns

#### Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue,
Visible Range(nm, AT@0.74)	3-10NM available (Standard: 4-5NM)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	$\geq 10^\circ$ or $\geq 5^\circ$
Flash Characteristics	FL3S(0.2,2.8) (others are optional)
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

#### Electrical Characteristics

Operating Voltage	7.4Vdc or 12Vdc
Circuit Protection	Integrated

#### Solar Characteristics

Solar Module Type	Mono crystalline Silicon
Output(watts)	5W *4
Charging Regulation	Microprocessor controlled

#### Battery Characteristics

Battery type	Lithium ion Battery(VRLA is optional)
Battery Capacity (Ah)	12AH as standard(Others are customized)
Nominal Voltage (V)	7.4V or 11.1V
Battery Service Life	Average 5 years
Autonomy(Day)	$\geq 15$ days(Duty cycle=20%, Longer is customized)

#### Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated Die-casting aluminum
Mounting(mm)	200×200×Φ12
Dimension(mm)	250×250×420
Weight(kg)	5.5
Product Life Expectancy	$\geq 10$ years

#### Environmental Factors

Humidity	0~100%
Wind Speed	240km/h
Waterproof	IP68
Temperature(°C)	-40~75

#### Compliance

IALA	Signal colors compliant to IALA E-200-1
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#### Options Available

GSM Cellphone Monitoring
RS232 communication port
GPS Sync flashing
Charging port & External battery charger
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Infrared Programmer for flashing rate setting