

Aviation Marine. Lanterns for Buoys.

Lanterns on Lakes & at Sea.

Datasheet Catalogue.



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AL-ML-S6 LED Solar Powered Marine Lantern

Name: LED Solar Powered Marine Lanterns

Model: AL-ML-S6

Product Introduction:

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 256 flashes) could be remote controlled by IR Programmer easily.

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AL-ML-S6 LED Solar Powered Marine Lantern

Name: LED Solar Powered Marine Lanterns

Model: AL-ML-S6

Product Introduction:

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 256 flashes) could be remote controlled by IR Programmer easily.

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AL-LS-C4 LED Solar Powered Marine Buoy Lantern

Name: LED Solar Powered Marine Buoy Lanterns

Model: AL-LS-C4

Product Introduction:

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. And all solar panel vertical angle is adjustable ensure it could be used in different area.

ON/OFF button located interface, so there is no need to open the light, user could turn on/off light easily.

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AL-LS-C LED Solar Powered Marine Lantern

Name: LED Solar Powered Marine Lanterns

Model: AL-LS-C

Product Introduction:

This LED Marine Lanterns is completely self-contained lantern, adopting insert high efficient solar panels integrated design, cooperate with solar dedicated lithium ion battery as power supply.

It is full-sealed structure ensure(IP68) no water go inside. There is a ON/OFF button under base make local control easier.

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AL-LS-P3 LED Marine Navigation Lantern

Name: LED Marine Navigation Lanterns

Model: AL-LS-P3

Product Introduction:

This LED Marine Navigation Lanterns is completely sealed lantern.

Through IR remote controller, users could change the light flashing characteristics(IALA 256 flashes) easily.

GPS sync flashing is optional, it ensure all different flash light could flash at the same time.

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AL-LS-C1 LED Solar Powered Marine Lantern

Name: LED Solar Powered Marine Lanterns

Model: AL-LS-C1

Product Introduction:

This LED Marine Lanterns is completely self-contained lantern, adopting insert high efficient solar panels integrated design, cooperate with solar dedicated lithium ion battery as power supply.

There is two rotatory switch on PCB, user could change the light flashing characteristics(IALA 256 flashes) easily.

LED Solar Powered Marine Lanterns

AL-ML-S6



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 256 flashes) could be remote controlled by IR Programmer easily.

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



Compliance

- IALA E-200-1

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
- ON/OFF button interface

System design

- Solar panel as photocell for day/night operation(dusk to dawn)
- The flashing rate is adjust by IR programmer

Optional

- External battery charger
- GSM Monitoring
- RS232/485 port
- GPS Sync flashing
- Bird deterrent

APPLICATION



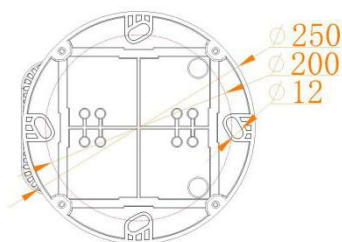
Application

- AL-ML-S6 Solar Marine Lantern is used on buoy, light house and any other off shore site for marine/river safe navigation.

LED Solar Powered Marine Lanterns

AL-ML-S6

Dimension(mm)



SPECIFICATIONS

AL-ML-S6 LED Solar Powered Marine Lanterns

Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue
Visible Range(NM)	3-8m (AT@0.74)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	7
Flash Characteristics	Adjustable 256 IALA light characteristics
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

Electrical Characteristics

Operating Voltage	12Vdc
Circuit Protection	Integrated

Solar Characteristics

Solar Module Type	Mono crystalline Silicon
Output(watts)	24
Charging Regulation	Microprocessor controlled

Battery Characteristics

Battery type	Lead Acid Battery(other kind of battery is optional)
Battery Capacity (Ah)	Depends on different visible range
Nominal Voltage (V)	12
Battery Service Life	Average 3 years

Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated Die-casting aluminum
Mounting(mm)	200×200×Φ12
Dimension(mm)	250×250×320
Weight(kg)	8.5
Product Life Expectancy	Average 5 years

Environmental Factors

Humidity	0~100%
Wind Speed	80m/s
Waterproof	IP68
Temperature(°C)	-20~80

Compliance

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

GSM Monitoring
RS232/485 port
GPS Sync flashing
Charging port
Bird spike

LED Solar Powered Marine Lanterns

AL-ML-S6



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 256 flashes) could be remote controlled by IR Programmer easily.

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



Compliance

- IALA E-200-1

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
- ON/OFF button interface

System design

- Solar panel as photocell for day/night operation(dusk to dawn)
- The flashing rate is adjust by IR programmer

Optional

- External battery charger
- GSM Monitoring
- RS232/485 port
- GPS Sync flashing
- Bird deterrent

APPLICATION



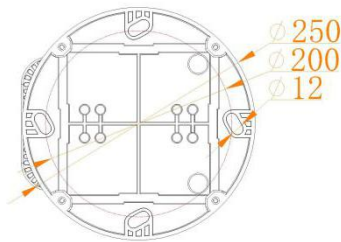
Application

- AL-ML-S6 Solar Marine Lantern is used on buoy, light house and any other off shore site for marine/river safe navigation.

LED Solar Powered Marine Lanterns

AL-ML-S6

Dimension(mm)



SPECIFICATIONS

AL-ML-S6 LED Solar Powered Marine Lanterns

Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue
Visible Range(NM)	3-8m (AT@0.74)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	7
Flash Characteristics	Adjustable 256 IALA light characteristics
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

Electrical Characteristics

Operating Voltage	12Vdc
Circuit Protection	Integrated

Solar Characteristics

Solar Module Type	Mono crystalline Silicon
Output(watts)	24
Charging Regulation	Microprocessor controlled

Battery Characteristics

Battery type	Lead Acid Battery(other kind of battery is optional)
Battery Capacity (Ah)	Depends on different visible range
Nominal Voltage (V)	12
Battery Service Life	Average 3 years

Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated Die-casting aluminum
Mounting(mm)	200×200×Φ12
Dimension(mm)	250×250×320
Weight(kg)	8.5
Product Life Expectancy	Average 5 years

Environmental Factors

Humidity	0~100%
Wind Speed	80m/s
Waterproof	IP68
Temperature(°C)	-20~80

Compliance

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

GSM Monitoring
RS232/485 port
GPS Sync flashing
Charging port
Bird spike



LED Solar Powered Marine Lanterns

AL-LS-C4

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. And all solar panel vertical angle is adjustable ensure it could be used in different area.

ON/OFF button located interface, so there is no need to open the light, user could turn on/off light easily.



Compliance

- IALA E-200-1

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 304 stainless steel base
- 4-side mono crystalline silicon solar panel, conversion efficiency is better than poly crystalline silicon
- 4-side solar panel vertical angle adjustable
- ON/OFF button interface

System design

- Solar panel as photocell for day/night operation(dusk to dawn)
- Equipped with rotary switches for adjust 256 kinds of flashing rate comply with IALA

Optional

- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- External charger
- Wireless remote control
- GSM Monitoring
- RS232 485 port
- GPS Sync flashing

Application

- AL-LS-C4 Solar Marine Lantern is used on buoy, light house and any other off shore site for marine/river safe navigation.

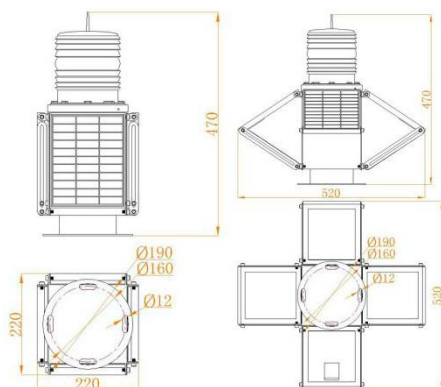
APPLICATION



LED Solar Powered Marine Lanterns

AL-LS-C4

Dimension(mm)



AL-LS/C-4S on buoy

SPECIFICATIONS

AL-LS-C4 LED Solar Powered Marine Lanterns

Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue
Visible Range(NM)	4-6nm (AT@0.74)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	7
Flash Characteristics	Adjustable 256 IALA light characteristics
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

Electrical Characteristics

Operating Voltage	12Vdc
Circuit Protection	Integrated

Solar Characteristics

Solar Module Type	Mono crystalline Silicon
Output(watts)	24
Charging Regulation	Microprocessor controlled

Battery Characteristics

Battery type	Valve-Regulated Lead Acid Battery
Battery Capacity (Ah)	Depends on different visible range
Nominal Voltage (V)	12
Battery Service Life	Average 3 years

Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated 304 Stainless Steel
Mounting(mm)	160×160×Φ12
Dimension(mm)	220×220×470
Weight(kg)	10
Product Life Expectancy	Average 5 years

Environmental Factors

Humidity	0~100%
Wind Speed	80m/s
Waterproof	IP68

Compliance

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

Charging port
Wireless Remote Control
GSM Monitoring
RS232 485 port
GPS Sync flashing



LED Solar Powered Marine Lanterns

AL-LS-C



This LED Marine Lanterns is completely self-contained lantern, adopting insert high efficient solar panels integrated design, cooperate with solar dedicated lithium ion battery as power supply.

It is full-sealed structure ensure(IP68) no water go inside. There is a ON/OFF button under base make local control easier.



Compliance

- IALA E-200-1

Features

Electrical

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

Physical

- Integrated design, enabling a rugged and completely waterproof seal capable of prolonged and deep immersion (IP68).
- PC housing, UV resistance, shockproof and corrosion proof.
- Bird deterrent spike
- Powder coated die casting aluminum base
- Built-in 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 operation)
- User-adjustable working mode between steady&flashing(20fpm)
- ON/OFF button interface located under base

Optional

- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- External charger
- Flashing rate optional
- Bluetooth remote control

Application

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



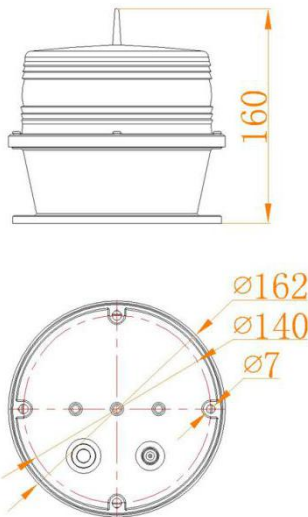
APPLICATION



LED Solar Powered Marine Lanterns

AL-LS-C

Dimension



Production Flow Chart



SPECIFICATIONS

AL-LS-C LED Solar Powered Marine Lanterns

Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue
Visible Range(NM)	1-3 (AT@0.74)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	7
Flash Characteristics	256 IALA Light Characters
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

Electrical Characteristics

Operating Voltage	3.7Vdc
Circuit Protection	Integrated

Solar Characteristics

Solar Module Type	Mono-crystalline Silicon
Output(watts)	1.8
Charging Regulation	Microprocessor controlled

Battery Characteristics

Battery type	Lithium ion battery
Nominal Voltage (V)	3.7
Battery Service Life	Average 3 years
Autonomy (days)	>20

Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated Die-casting aluminum
Mounting(mm)	140×140×Φ7
Dimension(mm)	162×162×160
Weight(kg)	1
Product Life Expectancy	Average 5 years

Environmental Factors

Humidity	0~100%
Wind Speed	80m/s
Waterproof	IP68

Compliance

IALA	Signal colors complying to IALA E-200-1
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Options Available

Charging port
Flashing rate
Bluetooth remote control IALA 256 flashes
Photocell switch



LED Marine Navigation Lanterns

AL-LS-P2



This LED Marine Navigation Lanterns is completely sealed lantern.

There is two rotatory switch on PCB, user could change the light flashing characteristics(IALA 256 flashes) easily.

GPS sync flashing is optional, it ensure all different flash light could flash at the same time.

Compliance

- IALA E-200-1



Features

Electrical

- Based on LED technology, and its color complies to IALA Recommendations E-200-1.
- LED technology reduces maintenance time & costs
- Working voltage: 110-240vac, 12vdc, 48vdc

Physical

- Integrated design, enabling a rugged and completely waterproof seal capable of prolonged and deep immersion (IP68).
- PC housing, UV resistance, shockproof and corrosion proof.
- Bird deterrent spike
- Powder coated die casting aluminum base

System design

- Built-in photocell for day/night operation(dusk to dawn operation)

Optional

- Rotary switches for adjust 256 flash characteristics comply with IALA
- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- External charger
- Wireless remote control
- Bluetooth remote control
- Infrared remote control
- GSM Monitoring
- RS232 485 port
- GPS sync flashing
- Solar panel & battery

Application

- AL-LS-P2 LED Marine Navigation Lantern is used on buoy, light house and any other off shore site for marine/river safe navigation.



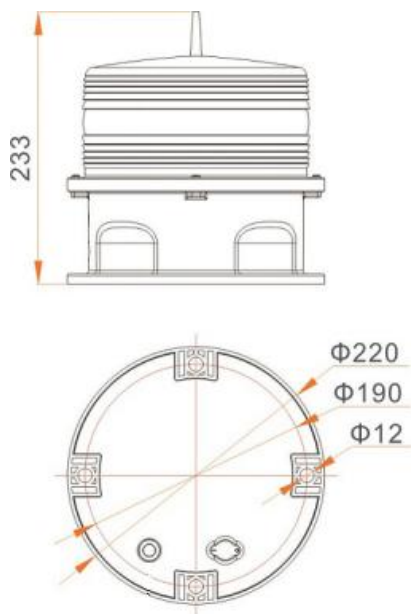
APPLICATION



LED Marine Navigation Lanterns

AL-LS-P2

Dimension(mm)



Production Flow Chart



SPECIFICATIONS

AL-LS-P2 LED Marine Navigation Lanterns

Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue
Visible Range(NM)	4-8 (AT@0.74)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	10
Flash Characteristics	Adjustable Steady/Flash mode(others optional)
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

Electrical Characteristics

Operating Voltage	110-240VAC, 12VDC, 48VDC or others
Circuit Protection	Integrated

Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated Die-casting aluminum
Mounting(mm)	190×190×Φ12
Dimension(mm)	220×220×233
Weight(kg)	2.5
Product Life Expectancy	Average 5 years

Environmental Factors

Humidity	0~100%
Wind Speed	80m/s
Waterproof	IP68

Compliance

IALA	Signal colors compliance to IALA E-200-1
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Options Available

Wireless Remote Control
GSM Monitoring
GPS sync flashing
RS232 485 port
Charging port
IALA 256 Light characters adjustable
Solar panel & battery



LED Solar Powered Marine Lanterns

AL-LS-C1

This LED Marine Lanterns is completely self-contained lantern, adopting insert high efficient solar panels integrated design, cooperate with solar dedicated lithium ion battery as power supply.

There is two rotatory switch on PCB, user could change the light flashing characteristics(IALA 256 flashes) easily.



Compliance

- IALA E-200-1

Features

Electrical

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

Physical

- Integrated design, enabling a rugged and completely waterproof seal capable of prolonged and deep immersion (IP68).
- PC housing, UV resistance, shockproof and corrosion proof.
- Bird deterrent spike
- Powder coated die casting aluminum base
- Built-in monocrystalline silicon solar panel, conversion efficiency is better than polycrystalline silicon

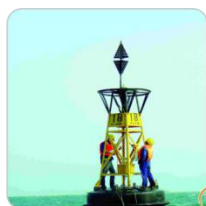
System design

- Built-in photocell for day/night operation(dusk to dawn operation)
- Rotary switches for adjust 256 flash characteristics comply with IALA
- ON/OFF button interface located under base

Optional

- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- External battery charger
- Bluetooth remote control
- GSM Monitoring
- RS232 485 port
- GPS sync flashing

APPLICATION



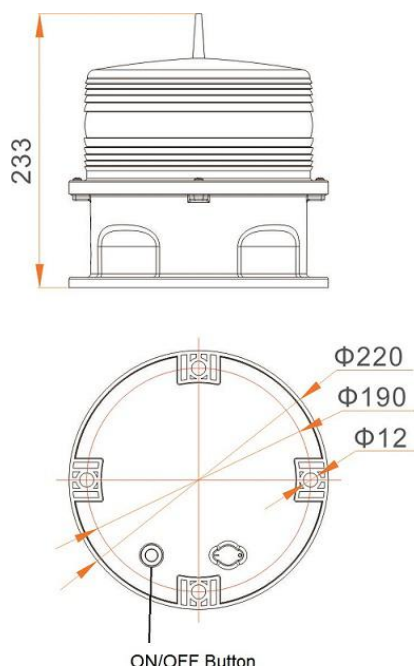
Application

- AL-LS-C1 Solar Marine Lantern is used on buoy, light house and any other off shore site for marine/river safe navigation.

LED Solar Powered Marine Lanterns

AL-LS-C1

Dimension(mm)



Production Flow Chart



SPECIFICATIONS

AL-LS-C1 LED Solar Powered Marine Lanterns

Light Characteristics

Light Source	LED
Available Colors	Red, Green, Yellow, White, Blue
Visible Range(NM)	3 km (AT@0.74)
Horizontal Output(degrees)	360
Vertical Divergence(degrees)	10
Flash Characteristics	Adjustable IALA 256 flash characters
Operation Mode	Dusk-to-dawn Automatically (Built-in photocell)
LED Life Experience(hours)	>100,000

Electrical Characteristics

Operating Voltage	3.7Vdc
Circuit Protection	Integrated

Solar Characteristics

Solar Module Type	Mono crystalline Silicon
Output(watts)	3
Charging Regulation	Microprocessor controlled

Battery Characteristics

Battery type	Lithium ion battery
Battery Capacity (Ah)	Depends on different visible range
Nominal Voltage (V)	3.7
Battery Service Life	Average 3 years
Autonomy (hours)	Steady: 60 Flashing: 150

Physical Characteristics

Body Material	UV protected Polycarbonate
Base Material	Powder-coated Die-casting aluminum
Mounting(mm)	190×190×Φ12
Dimension(mm)	220×220×233
Weight(kg)	2.5
Product Life Expectancy	Average 5 years

Environmental Factors

Humidity	0~100%
Wind Speed	80m/s
Waterproof	IP68

Compliance

IALA	Signal colors compliance to IALA E-200-1
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Options Available

Bluetooth Remote Control
GSM Monitoring
GPS sync flashing
RS232 485 port
Charging port