AirSea TECHNOLOGY

Marine Navigation Lighting

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Reliable Marine Navigation Lighting for Safe and Clear Guidance

Lighthouses and marine navigation lights play a vital role in maritime safety, guiding vessels by clearly indicating water conditions through internationally recognized colors. Each light color provides immediate visual information to help captains navigate confidently and safely.

- Green light (G) identifies safe water, guiding vessels along secure routes.
- White light (W) is used for general navigational beacons, marking areas without specific hazards or where no preferential route is required.
- Red light (R) signals dangerous areas, warning vessels that the water is unsafe or marking the starboard side of a channel.

MARINE RED ALL IN ONE Beacon – Compact, Powerful, and Compliant

The AirSea Technology MARINE RED ALL IN ONE beacon is a high performance multi LED marine navigation light, fully compliant with applicable marine guidelines. Designed for lighthouses, docks, and critical navigation points, it delivers exceptional visibility and reliability in demanding marine environments.
Its compact and lightweight design allows for quick and flexible installation on horizontal surfaces using its base or on vertical surfaces with the included mounting bracket. A carefully engineered balance of patented lenses, advanced electronics, and robust mechanical components ensures long term durability and outstanding performance.

The ideal solution for marking hazardous waters, protecting navigation routes, and ensuring maximum maritime safety—day and night.

TABLE OF CONTENTS

3nM RED LIGHT NIGHT MODE

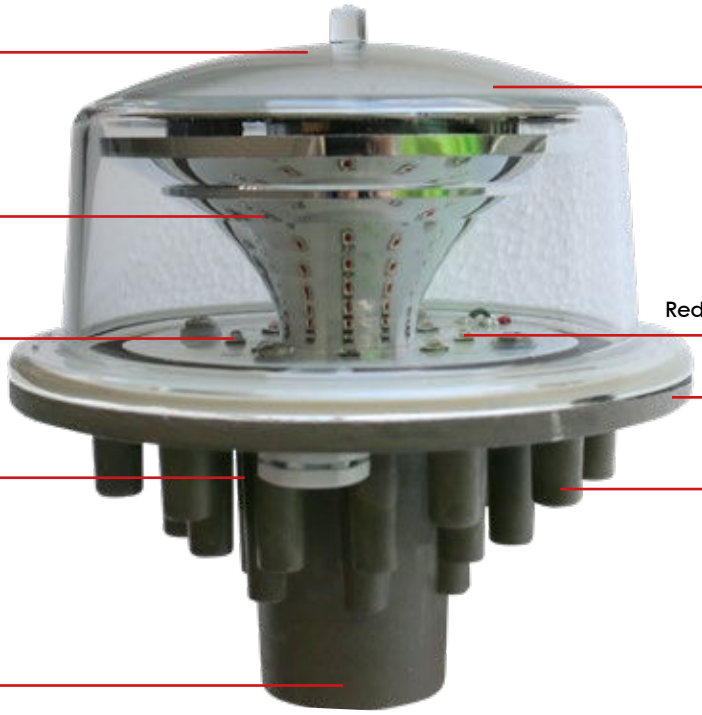
Policarbonate UV resistant dome

Stabilised light output
LIOL-A: >10cd
LIOL-B: >32cd
LIOL-E: >32cd

- Standard circuits or TWIN*
- Infrared version*

Anti-condensation
Gore-Tex valve

Thread ¾" F NPT



Twilight sensor*

Based on LED technology
Red flashing light (FAA)
Red steady burning light (ICAO-FAA)

Polyurethane foam

Anodised aluminium body
with heat-sink pins

***as option**

SEVERAL INTERNATIONAL PATENTS: GRANTED AND PENDING

The Auxiliary night beacons "**MNL-LXS-3NM**" is used for structures located in a safe area, to support Primary beacons to defining the obstacle.
The Auxiliary signaling beacons are installed at the ends of the structures only if the primary signaling beacons are not sufficient (for example, connection bridges between several platforms).

The structures that are generally signalled with these night lights, which provide visibility from 3 nautical miles away, are: large offshore platforms and other individual structures placed in navigable waters.

CERTIFICATIONS

FEATURES

BASE AL · DOME PC · -20°C +50°C · IP66 · ON · SELF extinguishing · LED SM · W(DC) · Photometric Test 4 · GORA - TEX · Tested at 24km/h (150mph) · EASY INSTALL

TYPICAL APPLICATION

3nM RED LIGHT NIGHT MODE
TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- 3nM (nautical mile) night mode, red flashing (Morse Letter "U")
- Long life time >10 years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device
- Patented beacon: (Germany 20 2011 107 787.3; France 1160162)

OPTICAL FEATURES

- Horizontal beam radiation 360°
- Vertical beam spread >2,5°
- PMMA lens

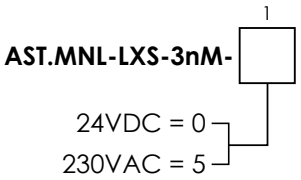
OPTIONS

- Power supply AC or DC

ELECTRICAL FEATURES

- Power supply for external control panel
- Average power consumption for night mode: 2W
- LED feeded at constant current
- Lightning protection inside controller

ORDER CODE



MECHANICAL FEATURES

- Anodised aluminium body with heat-sink pins on the bottom
- Policarbonate UV Resistant Dome
- Silicon gasket
- Degree of protection: IP66
- Operating temperature: -20°C to +50°C
- Storage temperature: -20°C to +50°C
- Lamp unit weight: 1kg

APPLY TO

- Offshore structures classifield as safe areas.
  Use as subsidiary light located to mark the horizontal extremities of the structure excepting those mark with white lights as well as interconnecting bridges.

CERTIFICATIONS

- IALA Maritime Buoyage System (MBS)
- IALA Recommendation O-139 2nd Edition, December 2013
- Standard marking schedule for offshore installations, Decc 04/11
- CE marking

5nM RED LIGHT NIGHT MODE

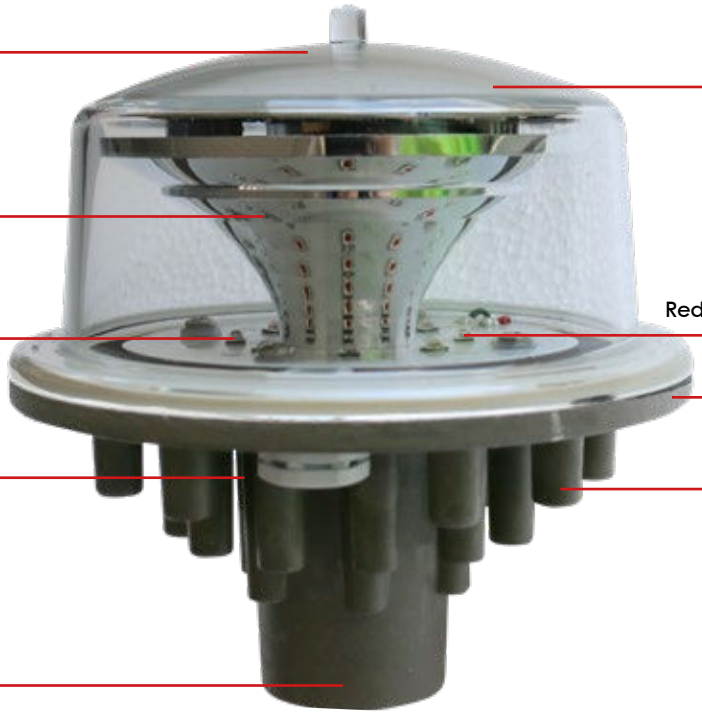
Policarbonate UV resistant dome

Stabilised light output
LIOL-A: >10cd
LIOL-B: >32cd
LIOL-E: >32cd

- Standard circuits or TWIN*
- Infrared version*

Anti-condensation
Gore-Tex valve

Thread ¾" F NPT



Twilight sensor*

Based on LED technology
Red flashing light (FAA)
Red steady burning light (ICAO-FAA)

Polyurethane foam

Anodised aluminium body
with heat-sink pins

***as option**

INTERNATIONAL PATENTS: GRANTED AND PENDING

The Auxiliary night beacons "**AST.MNL-LXS-5NM**" is used for structures located in a safe area, to support Primary beacons to defining the obstacle.
The Auxiliary signaling beacons are installed at the ends of the structures only if the primary signaling beacons are not sufficient (for example, connection bridges between several platforms).

The structures that are generally signalled with these night lights, which provide visibility from 5 nautical miles away, are: large offshore platforms and other individual structures placed in navigable waters.

CERTIFICATIONS

FEATURES

BASE AL · DOME PC · -20°C +50°C · IP66 · ON · SELF extinguishing · LED SM · W(DC) · Photometric Test 4 · GORA - TEX · Tested at 24km/h (150mph) · EASY INSTALL

TYPICAL APPLICATION

5nM RED LIGHT NIGHT MODE
TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- 5nM (nautical mile) night mode, red flashing (Morse Letter "U")
- Long life time >10 years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device
- Patented beacon: (Germany 20 2011 107 787.3; France 1160162)

OPTICAL FEATURES

- Horizontal beam radiation 360°
- Vertical beam spread >2,5°
- PMMA lens

OPTIONS

- Power supply AC or DC

ELECTRICAL FEATURES

- Power supply for external control panel
- Average power consumption for night mode: 4W
- LED feeded at constant current
- Lightning protection inside controller

ORDER CODE

AST.MNL-LXS-5nM- □ (1)

24VDC = 0

230VAC = 5

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink pins on the bottom
- Policarbonate UV Resistant Dome
- Silicon gasket
- Degree of protection: IP66
- Operating temperature: -20°C to +50°C
- Storage temperature: -20°C to +50°C
- Lamp unit weight: 1kg

APPLY TO

- Offshore structures classifield as safe areas.
  Use as subsidiary light located to mark the horizontal extremities of the structure excepting those mark with white lights as well as interconnecting bridges.

CERTIFICATIONS

- IALA Maritime Buoyage System (MBS)
- IALA Recommendation O-139 2nd Edition, December 2013
- Standard marking schedule for offshore installations, Decc 04/11
- CE marking

10nM WHITE LIGHT NIGHT MODE TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- 10nM (nautical mile) night mode, white flashing (Morse Letter "U")
- Long life time >10 years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device
- Patented beacon (EU 001929910-0001; Canada 145 189; USA D673,474)

OPTICAL FEATURES

- Horizontal beam radiation 360°
- Vertical beam spread >2,5°
- PMMA lens

OPTIONS

- Power supply AC or DC

ELECTRICAL FEATURES

- Power supply for external control panel
- Average power consumption for night mode: 6W
- LED feeded at constant current
- Lightning protection inside controller

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink for natural draft air cooling
- RAL7035 painted aluminium body lamp
- Bottom wind collector for central heat-sink cooling
- Borosilicate glass cover protection
- Silicon gasket
- Degree of protection: IP66
- Operating temperature: -50°C to +80°C
- Storage temp. range: -20°C to +45°C
- Lamp unit weight: 6kg

APPLY TO

- Offshore structures classifield as safe areas
- Isolated wind turbine, beacon is located at not less than 6m and not more than 30m above Highest Astronomical Tide (HAT)
- Meteorological mast
- Other individual structure
- Used as main light to ensure that at least one light is visible upon approaching the structure from any direction

INTERNATIONAL REGULATION

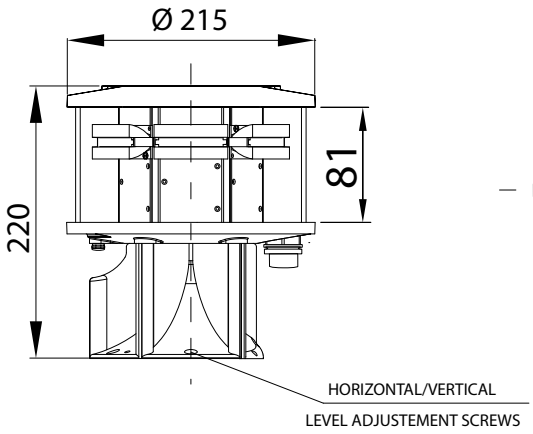
- IALA Maritime Buoyage System (MBS)
- IALA Recommendation O-139 2nd Edition, December 2013
- Standard marking schedule for offshore installations, Decc 04/11
- CE marking

PART NUMBER

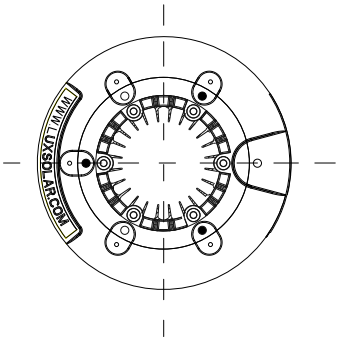
- Part number:
- **AST.MNL-LXS-10nM-230VAC**
- **AST.MNL-LXS-10nM-24VDC**

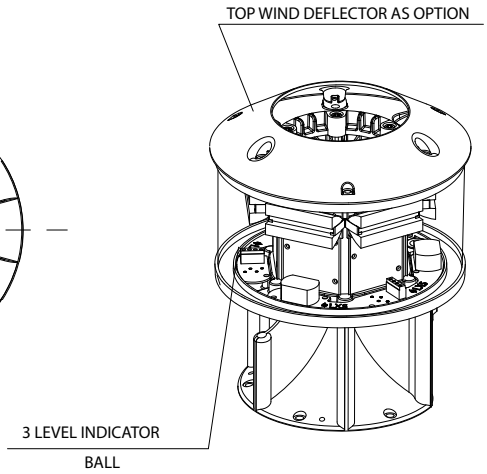
10nM WHITE LIGHT NIGHT MODE

SIDE VIEW

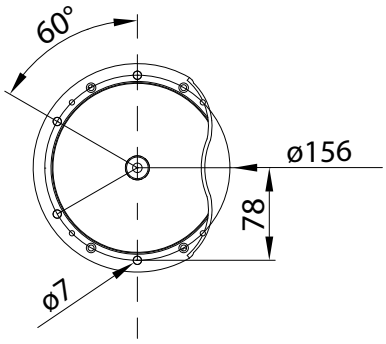


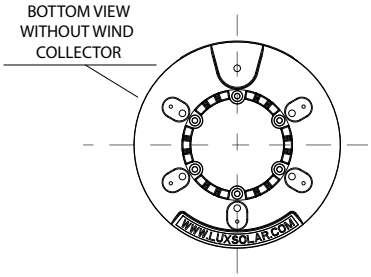
TOP VIEW

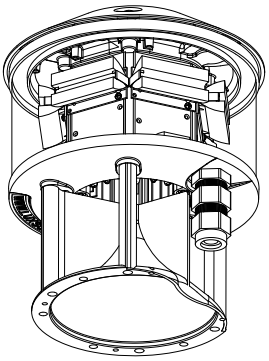




BOTTOM VIEW







CERTIFICATIONS

FEATURES

TYPICAL APPLICATION

MARINE NAVIGATION AIDS

15nM WHITE LIGHT NIGHT MODE
TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- 15nM (nautical mile) night mode, white flashing (Morse Letter "U")
- Long life time >10 years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device
- Patented beacon (EU 001929910-0001; Canada 145 189; USA D673,474)

OPTICAL FEATURES

- Horizontal beam radiation 360°
- Vertical beam spread >2,5°
- PMMA lens

OPTIONS

- Power supply AC or DC

ELECTRICAL FEATURES

- Power supply for external control
- Average power consumption for night mode: 18W
- LED feeded at constant current
- Lightning protection inside controller

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink for natural draft air cooling
- RAL7035 painted aluminium body lamp
- Bottom wind collector for central heat-sink cooling
- Borosilicate glass cover protection
- Silicon gasket
- Degree of protection: IP65
- Operating temperature: -50°C to +80°C
- Storage temp. range: -20°C to +45°C
- Lamp unit weight: 6kg

APPLY TO

- Offshore structures classifield as safe areas
- Isolated wind turbine, beacon is located at not less than 6m and not more than 30m above Highest Astronomical Tide (HAT)
- Meteorological mast
- Other individual structure
- Used as main light to ensure that at least one light is visible upon approaching the structure from any direction

INTERNATIONAL REGULATION

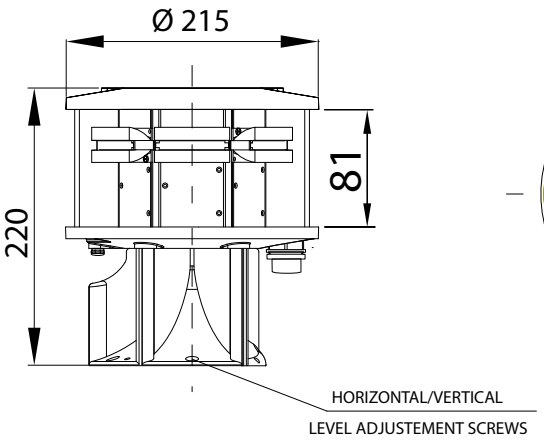
- IALA Maritime Buoyage System (MBS)
- IALA Recommendation O-139 2nd Edition, December 2013
- Standard marking schedule for offshore installations, Decc 04/11
- CE marking

PART NUMBER

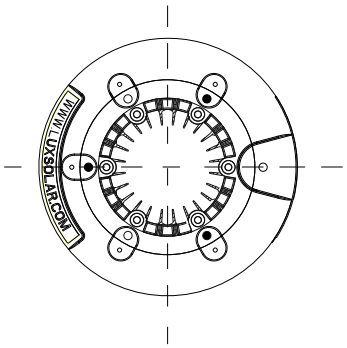
- Part number:
  - **MNL-LXS-15nM-230VAC**
  - **MNL-LXS-15nM-24VDC**

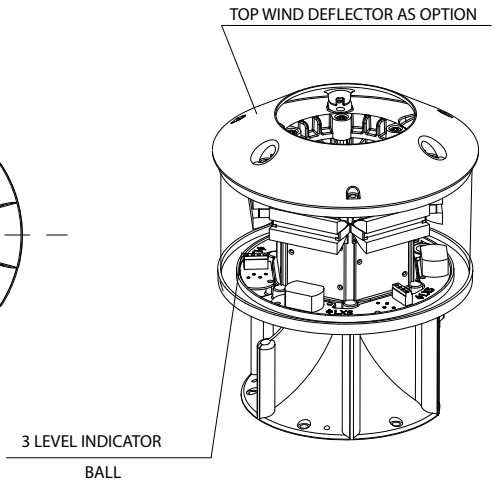
15nM WHITE LIGHT NIGHT MODE

SIDE VIEW

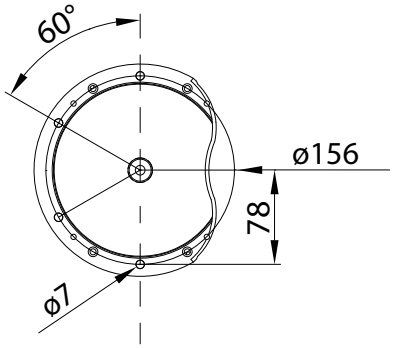


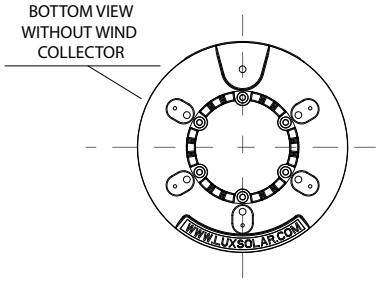
TOP VIEW

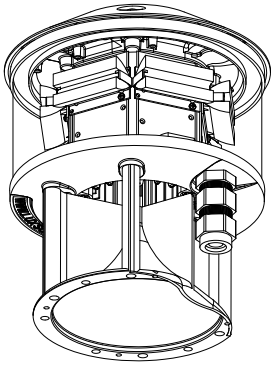




BOTTOM VIEW







CERTIFICATIONS

FEATURES

TYPICAL APPLICATION

GREEN LIGHTHOUSE LIGHT
TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- Night mode, green flashing (Isophase or occulting)
- Long life time >10 years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device

OPTICAL FEATURES

- Horizontal beam radiation 360°
- PMMA lens
- Luminous range for 74% (0,74T) atmospheric transmissivity

OPTIONS

- Twin version: two galvanically separated circuits in the same fixture
- Anti bird protection
- Beacon support bracket
- Power supply AC or DC
- GPS (Global Position System) syncro
- Available with solar battery system
- Available for 7nM,10nM, 12nM, 17nM

ELECTRICAL FEATURES

- Average power consumption for isophase flashing (ISO W): 25W
- Average power consumption for occulting flashing (Oc. W): from 30W to 50W
- LED feeded at constant current
- Lightning protection

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink for natural draft air cooling
- RAL7035 painted aluminium body lamp
- Bottom wind collector for central heat-sink cooling
- Borosilicate glass cover protection
- Silicon gasket
- Degree of protection: IP65
- Operating temperature: -50°C to +80°C
- Storage temp. range: -20°C to +45°C
- Lamp unit weight: 6kg

APPLY TO

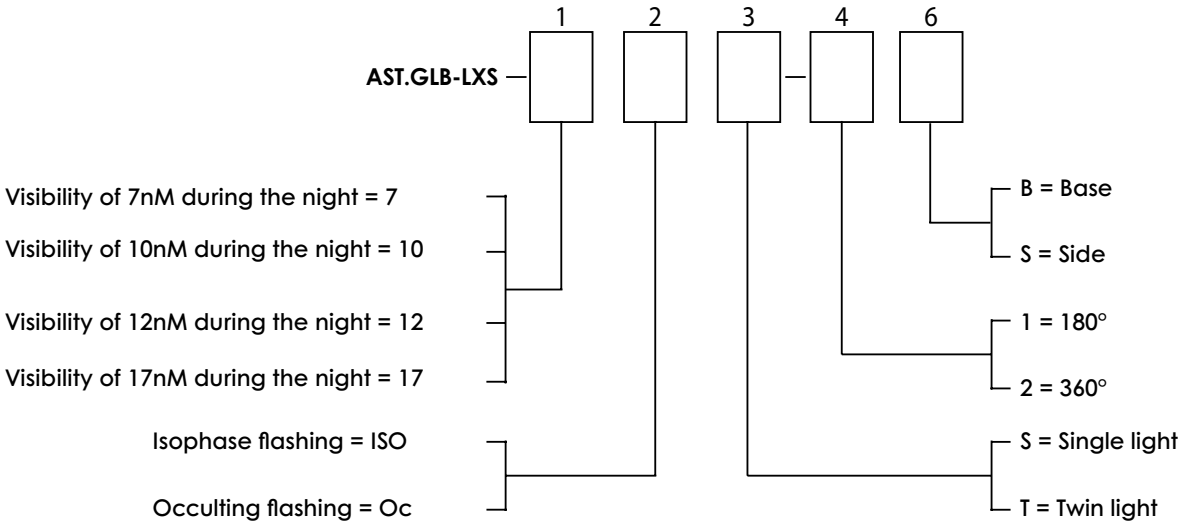
- Lighthouse:
  • Green light is used to identify safe waters (G)
  • Green light is used to identify the port (left) side of a channel (G)

INTERNATIONAL REGULATION

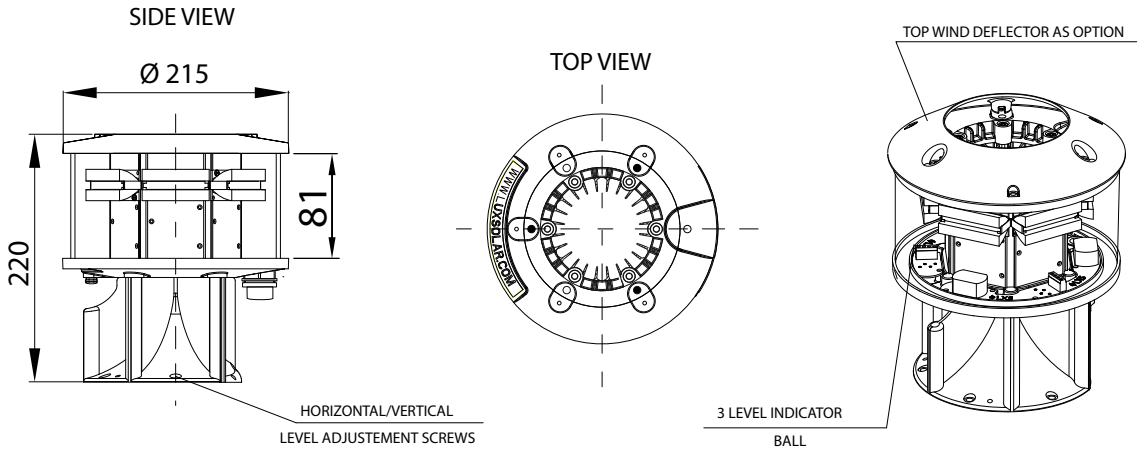
- IALA Maritime Buoyage System and other aids to navigation
- IALA guideline No. 1049, Edition 2, December 2007
- CE marking

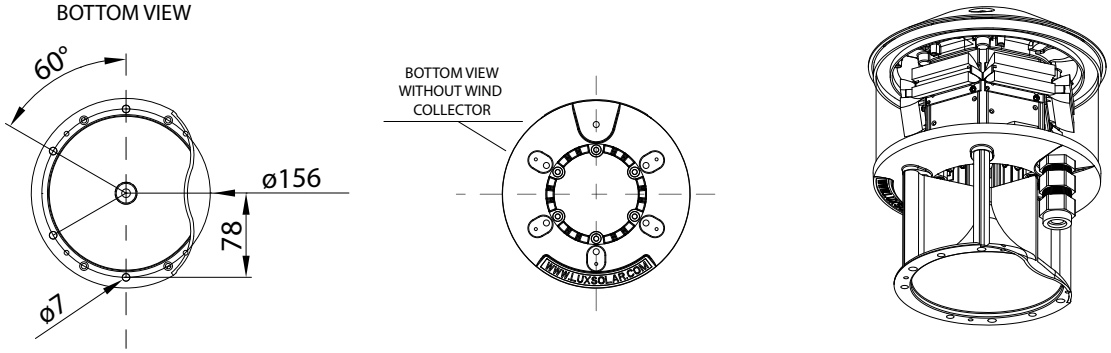
GREEN LIGHTHOUSE LIGHT

ODER CODE



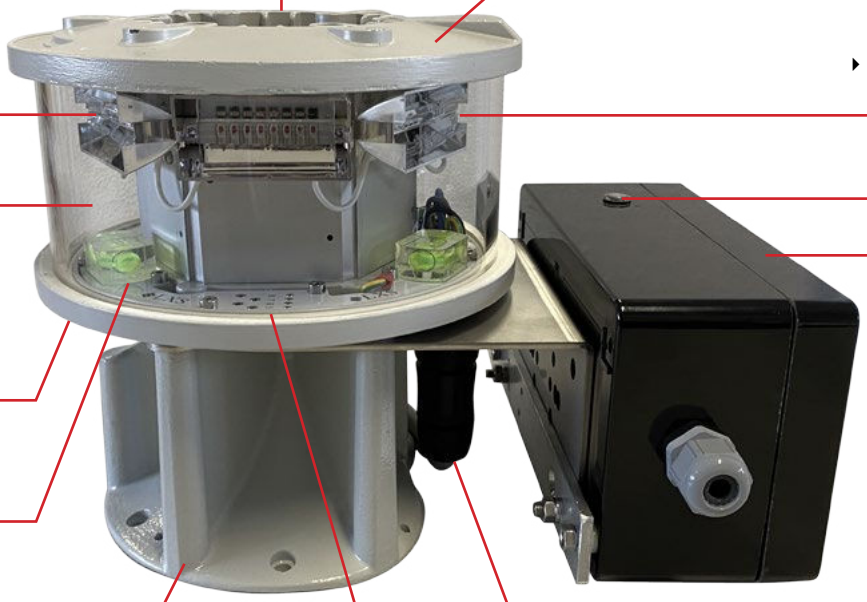
BASE APPLICATION





LIGHTHOUSE-DOC LIGHT

RED LIGHTHOUSE-DOCK LIGHT7-10nM



CERTIFICATIONS

COMPLIANCE

FEATURES

BASE AL · COVER BOROSILICATE · -20°C +45°C · IP66 · ON · SELF extinguishing · LED SMD · nM 7 · nM 10 · TWIN OPERATIONS · GORA-TEX · EASY INSTALL

TYPICAL APPLICATION

RED LIGHTHOUSE-DOCK LIGHT 7-10nM TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- Night mode, RED flashing (Isophase or Occulting)
- Long life time >10+ years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device
- Twin version: two separate circuits in the same light fixture
- Automatic changeover from normal to backup light

ELECTRICAL FEATURES

- Power supply 24Vdc (18-32Vdc)
- Average power consumption for Isophase flashing (ISO R): 25W
- Average power consumption for Occulting flashing (Oc. R): from 30W to 50W
- LED feeded at constant current

OPTICAL FEATURES

- Horizontal beam radiation: 360° or 180°
- PMMA lens
- Light intensity for luminous range for 74% (0,74T) atmospheric transmissivity

MECHANICAL FEATURES

- Borosilicate glass cover protection
- RAL7035 painted aluminium body lamp
- Silicon gasket
- Bottom wind collector for central heat-sink cooling
- Degree of protection: IP66
- Anti-condensation Gore-Tex valve
- Photocell (twilight sensor)
- Operating temperature: -20°C to +45°C
- Storage temperature: -20°C to +45°C
- Lamp unit weight: 7kg approx

OPTIONS

- GPS (Global Position System) syncro
- Solar battery system

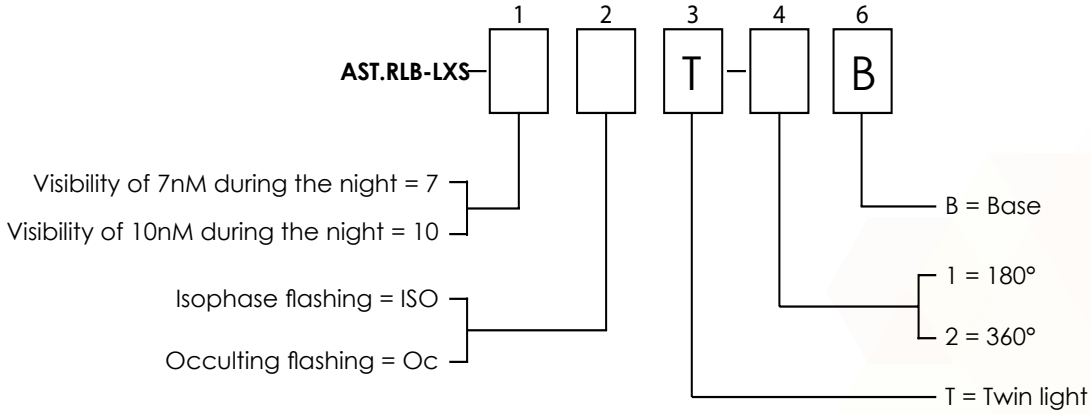
APPLY TO

- Lighthouse; Docks:
  - Red light is used to identify dangerous areas and warn ships that the waters are not safe
  - Red light is used to identify the starboard (right) side of a channel

INTERNATIONAL REGULATION

- IALA Maritime Buoyage System and other aids to navigation
- IALA guideline No. 1049
- CE marking

ORDER CODE



LIGHTHOUSE-DOC LIGHT

RED LIGHTHOUSE-DOCK LIGHT 12-17nM
TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- Night mode, red flashing (Isophase or occulting)
- Long life time >10+ years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device

ELECTRICAL FEATURES

- Average power consumption for isophase flashing (ISO W): 25W
- Average power consumption for occulting flashing (Oc. W): from 30W to 50W
- LED feeded at constant current
- Lightning protection surge arrester

OPTICAL FEATURES

- Horizontal beam radiation 360° or 180°
- PMMA lens
- Light intensity for luminous range for 74% (0,74T) atmospheric transmissivity

OPTIONS

- Twin version: two galvanically separated circuits in the same fixture
- Anti bird protection
- Beacon support bracket
- Power supply AC or DC
- GPS (Global Position System) syncro
- Available with solar battery system
- Available for 7nM,10nM, 12nM, 17nM

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink for natural draft air cooling
- RAL7035 painted aluminium body lamp
- Bottom wind collector for central heat-sink cooling
- Borosilicate glass cover protection
- Silicon gasket
- Degree of protection: IP66
- Operating temperature: -50°C to +80°C
- Storage temp. range: -20°C to +45°C
- Lamp unit weight: 6kg

APPLY TO

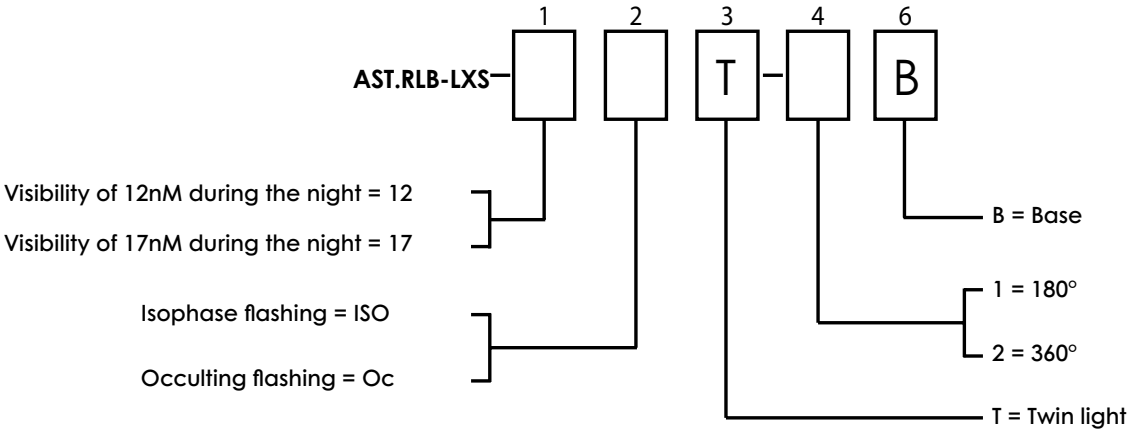
- Lighthouse:
  ° Red light is used to identify dangerous areas and warn ships that the waters are not safe (R)
  ° Red light is used to identify the starboard (right) side of a channel (R)

INTERNATIONAL REGULATION

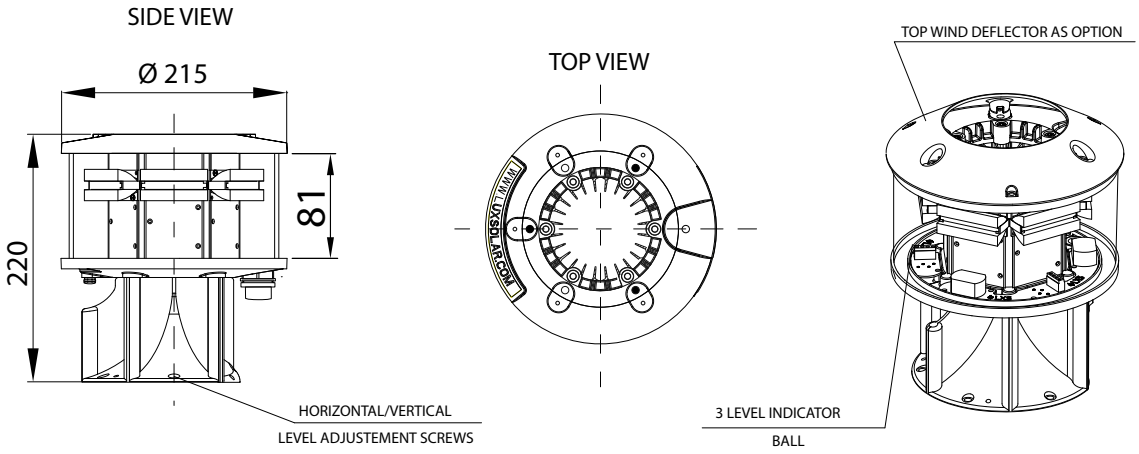
- IALA Maritime Buoyage System and other aids to navigation
- IALA guideline No. 1049, Edition 2, December 2007
- CE marking

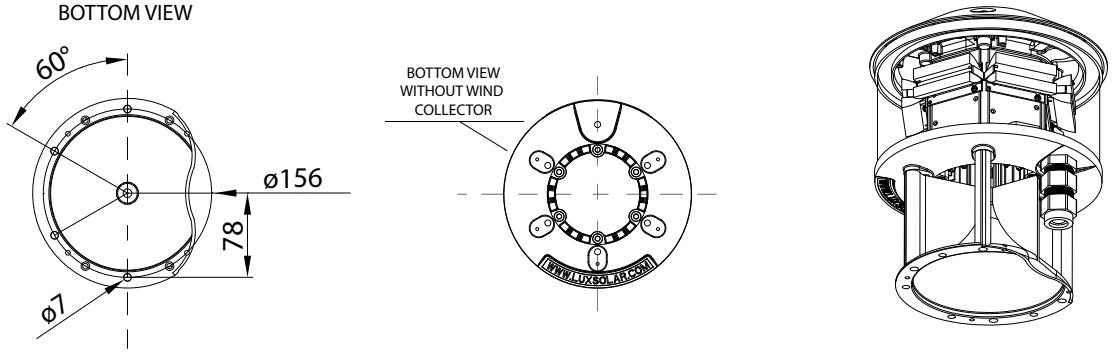
RED LIGHTHOUSE-DOCK LIGHT 12-17nM

ORDER CODE



BASE APPLICATION





LIGHTHOUSE LIGHT

AirSea TECHNOLOGY

WHITE LIGHTHOUSE LIGHT
TECHNICAL SPECIFICATIONS

KEY FEATURES

- Based on LED technology
- Night mode, white flashing (Isophase or occulting)
- Long life time >10+ years life expectancy
- Low consumption
- Stabilised light output
- Lightweight and compact
- Low wind load factor
- Alarm/remote status control
- Easy to install
- No RF-radiations
- Light output alignment device

OPTICAL FEATURES

- Horizontal beam radiation 360°
- PMMA lens
- Luminous range for 74% (0,74T) atmospheric transmissivity

OPTIONS

- Twin version: two galvanically separated circuits in the same fixture
- Anti bird protection
- Beacon support bracket
- Power supply AC or DC
- GPS (Global Position System) syncro
- Available with solar battery system
- Available for 7nM,10nM, 12nM, 17nM

ELECTRICAL FEATURES

- Average power consumption for isophase flashing (ISO W): 25W
- Average power consumption for occulting flashing (Oc. W): from 30W to 50W
- LED feeded at constant current
- Lightning protection

MECHANICAL FEATURES

- Anodised aluminium body with heat-sink for natural draft air cooling
- RAL7035 painted aluminium body lamp
- Bottom wind collector for central heat-sink cooling
- Borosilicate glass cover protection
- Silicon gasket
- Degree of protection: IP65
- Operating temperature: -50°C to +80°C
- Storage temp. range: -20°C to +45°C
- Lamp unit weight: 6kg

APPLY TO

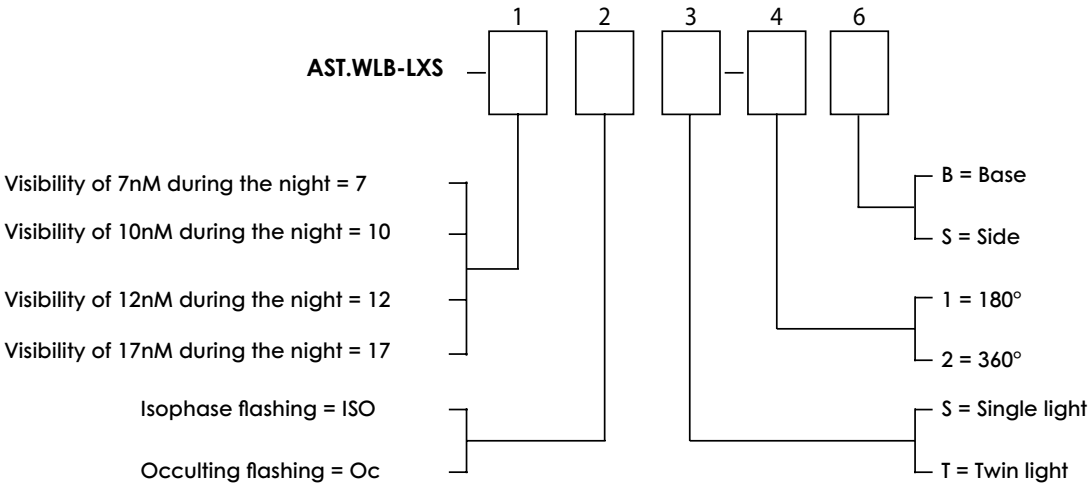
- Lighthouse:
  • White light is used to identify navigational beacons (W)

INTERNATIONAL REGULATION

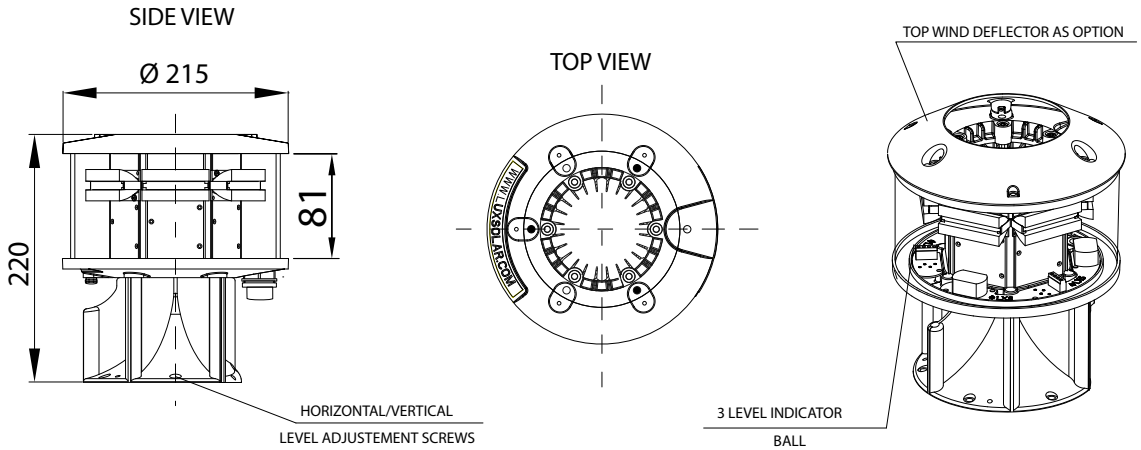
- IALA Maritime Buoyage System and other aids to navigation
- IALA guideline No. 1049, Edition 2, December 2007
- CE marking

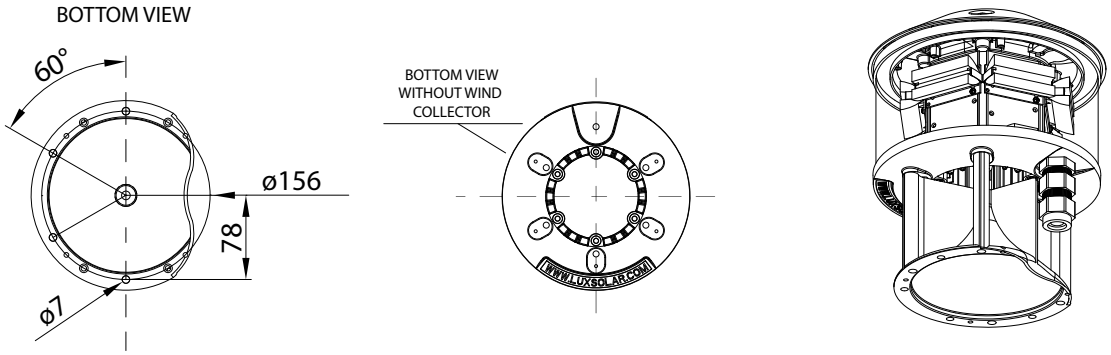
WHITE LIGHTHOUSE LIGHT

ORDER CODE



BASE APPLICATION





For more information

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