

SICE VISUAL NAVIGATION AID SYSTEM TYPE Ex/SL/LED SOLAR POWERED & ATEX CERTIFIED SYSTEM - SUITABLE FOR ZONE 1 INSTALLATION "U" CODE STANDARD IALA WHITE LIGHT - RANGE 10 NAUTICAL MILES



<u>Available option for</u> <u>Main & Reserve lines configuration</u>

The LED lantern tiers are connected to two overlapped and separated lines that are powered through two separated driver circuits and photocells, one for each line. When an failure occurs, at one led line or at one driver circuit (or photocell), the remaining driver circuit increases automatically the working current of the led line that is still working and restores the lumen output in compliance with the IALA Recommendations. During this phase, when one line is failed, an remote control of failure is available from control circuit. In the worst case, when the failure has occurred, this option requires an minimum solar radiation of 2kWh/m² because the system daily consumption increase of 40%, the battery autonomy is reduced from 20 days to 12 days

SICE Pesaro (ITALY)

Very rugged system with high reliability and long life, 40 years and more life expectancy for the lantern, without maintenance requirements. The system is completely manufactured in compliance with ATEX Directive and all components are ATEX certified by external Authorized European Institutes, auto-certifications are not expected. Equipped with LED technology lantern, PWM solar charge regulator, photocell, high quality battery (suitable for solar system) and protection switches. The signal light body, the support structure and battery box are made in AISI 316L Stainless Steel, not painted. The explosion proof enclosures are made in copper free aluminium, painted internally and externally. Painting and tropicalization are made in compliance with manufacturer procedure suitable for offshore use. Enclosures external colour can be selected from Customer. The lantern range calculation is performed considering also the IALA Guideline no. 1048 "on led technologies and their use in signal lights". Main technical Characteristics (standard):

- Installation: self-standing, suitable for Zone 1 (& 2)
- ✓ Temperature range: from -20°C to +50°C (standard system)
- ✓ Solar panel: 130Wp 12V nominal (polycrystalline type)
- ✓ Solar panel total derating expected: >30% (considered 90W)
- ✓ Minimum solar radiation required: 1.5kWh/m²
- ✓ Battery capacity: 24V 85Ah
- Battery type: VRLA for solar system (made by Sonnenschein)
- ✓ Battery life: 800 cycles at 60% DoD (at 20°C)
- ✓ Temperature compensation: expected in the charge regulator
- ✓ Lantern type SICE LS-10NM-L1 with white led
- ✓ Lantern contr. circuit: SICE 266 constant current driver & coder
- ✓ Available flashing code: everyone, programmable
- ✓ System daily consumption: 80Wh/day (with U code std IALA)
- ✓ Expected activation time for day: 14 hours/day
- ✓ Battery autonomy: >20 days at 20°C (with U code std IALA)
- ✓ Lantern luminous peak power output: >1400cd effective
- ✓ Lantern luminous range: 10 Nautical Miles
- ✓ Lumen output degrades is considered, as for IALA Guideline
- ✓ Lantern synchronization system included
- ✓ Remote controls (status and alarm) included
- ✓ Load disconnection system for low battery voltage included
- ✓ Battery breaker included (manoeuvrable from outside)
- ✓ Solar panel breaker included (manoeuvrable from outside)
- ✓ Lantern breaker included (manoeuvrable from outside)
- ✓ Local visual signalizations available from transparent window of the enclosure, as following:
 - -LED's indicate battery status and faults
 - -DISPLAY indicates the battery voltage
 - -DISPLAY indicates the solar panel charging current
 - -DISPLAY indicates the load consumption current
 - -DISPLAY indicates the load disconnection circuit status
 - -LED indicate the lantern ON/STAND-BY status
 - -LED indicate the lantern OK/FAILURE status
 - ❖ -LED indicate the driver / coder circuit OK/FAILURE
 - -LED that repeat the code flashing

Base dimensions: 741mm x 800mm

Height : 2377mm (all included)

√ Total weight : 274kg