

# DC (Solar) NEC Class 1 Division 2 Nav aids

## Universal Navigational Aids Systems

Tideland have created a suite of SOLACHAN<sup>™</sup> products specifically to meet the exacting needs of Saudi Aramco for marking of their new and existing Offshore installations. These products fulfil the requirements for their AC supported and DC (Solar) systems but are equally suited to other similar applications. NEC Class 1 Division 2 Certified DC (Solar) Solutions are designed to directly replace existing Saudi Aramco Nav aids installations with like for like Certification levels and provide a good value solution where the application is in a gas hazardous area. They provide the same performance of the other variants but include certification to an equivalent level of existing hazardous area installations. An NEC Class 1 Division 2, UL Certified version of Tideland's NOVA-65 Lantern is used for this application and consists of a plastic housing and toroidal lens with integral photocell, to provide a 5 Nautical Mile Range as standard. A 5 degree vertical divergence is specified as the lights are on fixed structures and this gives the highest range for the lowest power, typically 1.1w peak. The lights run independently from the 12v 100Ah VRLA Gel Battery which provides the best possible power source for very small, long duration loads such as Nav aids. The Battery is maintained by a 12v 50w Solar Module with a dedicated Solar Voltage Regulator housed in the weatherproof Exd Enclosure.



### TECHNICAL

- Suitable for NEC Class 1, Division 2 Hazardous Areas.
- Maintenance free Tideland Nova-65 UL 5 degree lantern (5NM Standard)
- 12v 100Ah Gel Battery in ventilated and insulated enclosure
- 12v 50w Class 1 Division 2 UL Certified Solar Module on fully adjustable bracket
- Separate Array and Battery Circuit Breakers mounted in a Painted Exde Enclosure

- Wired with GSWB Fire Resistant Cables and Nickel Plated Brass Cable Glands
- Pedestals Galvanised Steel and Painted to APCS-26T (EU) in RAL 1023 Yellow
- Hard Wire and GPS Sync standard
- >200 Days Autonomy for standard light at Morse U 15s

### CHARACTERISTICS

- Separated Power and Sync field cable Junction boxes for safety
- Solar Powered Stand Alone – No External Power required
- 360 Degree Rotation of Charger/Junction Box Panel and Solar Module Possible
- Options for 3NM Red and 10NM white lights
- kit is also available to convert the DC (Solar Powered) Stations to AC Stations by replacing/adding just 3 components. A kit is also available to convert from AC to DC variants

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