Northern Lighthouse Board

Navigational Marking - Oil & Gas Installations

In support of the requirement for Navigational Markings on Offshore Structures the Northern Lighthouse Board has developed a range of solutions to assist in assuring full compliance with current legislation.

The Northern Lighthouse Board offers solutions for:

- Temporary marking during Decommissioning
- Permanent marking of Decommissioned Installations
- Temporary marking of Obstructions
- Monitoring of Aids to Navigation (AtoN)

More than Lighthouses www.nlb.org.uk

Rigwatcher – Helicopter Serviced Solar Powered Aid to Navigation (AtoN Module)

- Self contained solar powered Aid to Navigation (AtoN)
- Light
- Racon option
- AIS option
- Monitor option
- Suitable for deployment as a fixed AtoN
- Performs to IALA requirements
- Installed and Removed from site by helicopter and ship

Rigwatcher is designed for long term and temporary use on decommissioned offshore structures. The unit is constructed from welded marine grade aluminium and configured to be transported from ship to structure underslung by helicopter and is dropped in place onto a previously installed docking pole. For use in some of the most demanding sea conditions in the northern hemisphere.

Based around systems which have had 12 years of operation with proven reliability on a 4 yearly maintenance cycle. Equipment development now makes it possible to have a 10 mile light, racon and monitoring in a self-contained solar powered package in latitudes to 61 deg North. Standby period is dependent on the configuration employed. AtoN AIS can also be installed. Nickel Metal Hydride batteries are installed in the battery compartment with solar charge from marine grade solar modules.

Light: 2 or 3 tier LED Lantern, normally up to 10 miles range. Up to 12 miles is possible but with enhanced battery or absence of Racon. Lights can be synchronised using an externally mountable GPS receiver.

Racon (radar transponder): Tideland Seabeacon 6 or equivalent. ‘X’ and ‘S’ band unit set to specified character for disused structure.

AIS: AtoN AIS is an optional extra.

Monitoring: NLB provide 24 hour monitor service for AtoNs using Sabik Smartlink, Orbcomm Satellite and Webscada display software. Remote monitor input and remote control is possible using the Smartlink RTU.

The Northern Lighthouse Board’s ship NLV PHAROS

The Northern Lighthouse Board is Certificated to:

- BSEN ISO 9001:2000 Quality Management Standard
- International Safety Management Code (ISM Code)
- OHSAS 18001
- BS ISO/IEC 27001:2005

Interim AtoN – Solar Powered AtoN

- Self contained solar powered AtoN
- Racon option
- Monitor option
- Performs to IALA requirements
- Light
- AIS option
- Requires personnel access
- Suitable for deployment on buoys or as a fixed AtoN

The Interim AtoN (IA) is based on the construction used for buoys deployed in some of the most demanding sea conditions in the northern hemisphere. IA is designed for temporary marking during the decommissioning process as services are withdrawn and requires personnel access for installation, service and removal. 12 years of operation have proven the reliability of the unit on a 5 yearly maintenance cycle. For certain configurations making greater power demands the period would reduce to 2 years. Equipment development now makes it possible to have a 10 mile light, racon and monitoring in a self-contained solar powered package in latitudes to 61 deg North. Standby period is dependent on the configuration employed. Lead gel batteries are installed in the battery compartment with solar charge from marine grade solar modules. Waterproof connectors are used throughout to allow easy unit replacement. The unit is constructed from welded marine grade aluminium and can be painted to suit application.

Aids to Navigation -

Light: 2 or 3 tier LED Lantern, normally up to 10 miles range. Up to 12 miles is possible but with enhanced battery or absence of Racon.

Lights can be synchronised using an externally mountable GPS receiver.

Racon (radar transponder): Tideland Seabeacon 6 or equivalent.

'X' and 'S' band unit set to specified character for disused structure.

AIS: AtoN AIS is an optional extra.

Monitoring: NLB provide 24 hour monitor service for AtoNs using Sabik Smartlink, Orbcomm Satellite and Webscada display software. Remote monitor input and remote control is possible using the Smartlink RTU.

NOTE: These units may only be deployed on Hydrocarbon free installations as they do not have an Atex rating.

Rigwatcher – Helicopter Serviced, Solar Powered AtoN module

Mechanical Details

Construction: Welded marine grade aluminium.
Optional double lantern unit available - additional height 900mm.
Size: 5,000 x 1,200 x 1,200, H x W x D mm
Weight: 850 Kg (or 1050Kg)
Fixing: Docking post to be bolted to concrete or metalwork, or welded in place.

Interim AtoN – Solar Powered AtoN

Mechanical Details

Construction: Welded marine grade aluminium
with painted finish.
Optional 12 solar module unit available - additional height 900mm.
Size: 3,400 (with racon) x 1,200 x 1,200, H x W x D mm
Weight: 740 Kg or maximum item weight of 340Kg (structure)
Fixing: Can be bolted to concrete or metalwork, or welded in place.

For more information please contact:-

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