AIS AIS/IRIDIUM Marking and Tracking Buoy AIS class B transponder and / or IRIDIUM 9602 SBD transponder



TRACKING & MONITORING

AIS/IRIDIUM Marking and Tracking Buoy 4950B.AIS/IR-F. This second generation AIS Drifter Buoy with optional IRIDIUM transponder is designed to mark and track oil spill and other floating objects. The marker buoy is designed for quick and easy deployment in an event and its robust design allows for drop launching this marker from up to 30 meters above sea surface, i.e. from helicopters, platforms or elevated decks.

Improvements over the previous generation include a magnetic activation switch also indicating AIS status, low self-discharge rechargeable NiMh batteries and an optional integrated LED strobe (for the -F versions) and the optional IRIDIUM transponder.

Upon activation, the buoy acts as an AIS class B transponder and starts to transmits GPS position, drift speed and drift direction via VHF using the standard AIS class B protocol. The IRIDIUM option allows a combination of continuous AIS and configurable, periodic IRIDIUM SBD transmissions. AIS can be disabled/reenable via the IRIDIUM-link for extended deployment duration.

The AIS system is VHF based with no transmission cost compared to satellite transition system where certain service charges apply for activation and







data transfer. By using the AIS system, the buoy will show up on the map plotter of all ships in the coverage area. No special onboard infrastructure is required for reception of data.

IRIDIUM communication is especially useful for tracking in remote regions or if the drifters are not to be followed permanently. It is also possible to operate the drifter in IRIDIUM only mode significantly extending the lifespan up to one year making it suitable for applications in marine research like surface current tracking.

The AIS Marking and Tracking Buoy is developed based on specifications according to the requirements from The Norwegian Clean Sea Association for Operating Companies (NOFO).

Information from the buoy is transferred by AIS and displayed on the electronic chart system onboard any vessel that has up-to-date ECDIS software according to IMO standards. The buoy is proven after extensive tests in the North Sea as well as in the Barents Sea.

TECHNICAL SPECIFICATIONS

COMMUNICATION / INFORMATION

- AIS class B transponder and / or IRIDIUM 9602 SBD transponder
- · via AIS: position, speed and heading,
- via Iridium: Water temperature, optional barometric pressure

TRANSMITTING RANGE (AIS)

- Buoy to ship: 7-10Nm
- Buoy to base station: 25+ Nm

MECHANICAL PROPERTIES

- · Drop launch: max 30 meters height
- · Weight: 8kg
- · Diameter: 30cm

OPERATION

- Operation time: 7 days (AIS with NiMh) to 365 days (Iridium/AIS disabled)
- · Activation: Magnetic Power Switch with status display

BATTERY OPTIONS:

- NiMh rechargeable (standard for AIS and AIS/IR models),
- Alkaline or Lithium Primary cells in refillable battery container

MMSI NUMBER

Programmable via configuration interface. The number is to be requested by costumer from the country's authorities

