Thrane & Thrane

SAILOR® TT-3000LRIT

Long Range Identification and Tracking System

With its proven track record in both maritime distress and security the Inmarsat C system has now become the preferred satellite system for Long Range Identification and Tracking. Many of the existing transceivers originate from Thrane & Thrane.

The SAILOR TT-3000 LRIT is a stand-alone LRIT solution that fully meets the performance standard for LRIT as described in document MSC81/210 and is separated from other services such as GMDSS or SSAS. It is an easy-to-install fit-and-forget system, which does not even require a crew interface. The only requirement is power and as the entire package consists of just 3 parts, the mini-C transceiver, a pole mount and a connection cable (20/50m), it can be installed almost everywhere any time.

New Regulation from IMO

The International Maritime Organization (IMO) has adopted an amendment to Chapter V of the International Convention for the Safety of Life at Sea 1974 (SOLAS), which introduces new mandatory position reporting obligations for SOLAS ships. It is called Long Range Identification and Tracking (LRIT) and requires vessels to automatically transmit identity and position with date/time at 6-hour intervals.

Vessels required to comply

LRIT came into force on January 1st 2008 with compliance required by December 31st 2008. Vessels required to comply are:

- Passenger ships, including high-speed craft
- Cargo ships, including high-speed craft, of 300 gross tonnage and upwards
- Mobile offshore drilling units

Ship LRIT equipment must be capable of being configured to transmit the following minimum information in an Automatically Generated Position Report (APR):

- Ship identity
- Ship position
- Date and time of the position

Ship LRIT equipment must also be able to respond to requests from member states and LRIT data centres for immediate position reports and be able to change the time interval between reports to a maximum frequency of every 15 minutes.

As there is no type approval process or any other formal certification, it is left to the flag-state administration to test and certify LRIT terminals for their given flag. This is done in relation to the stringent LRIT performance standard set by IMO. It is done remotely and will, in most cases, only require the ship owner/operator to supply Inmasat C information upon request.

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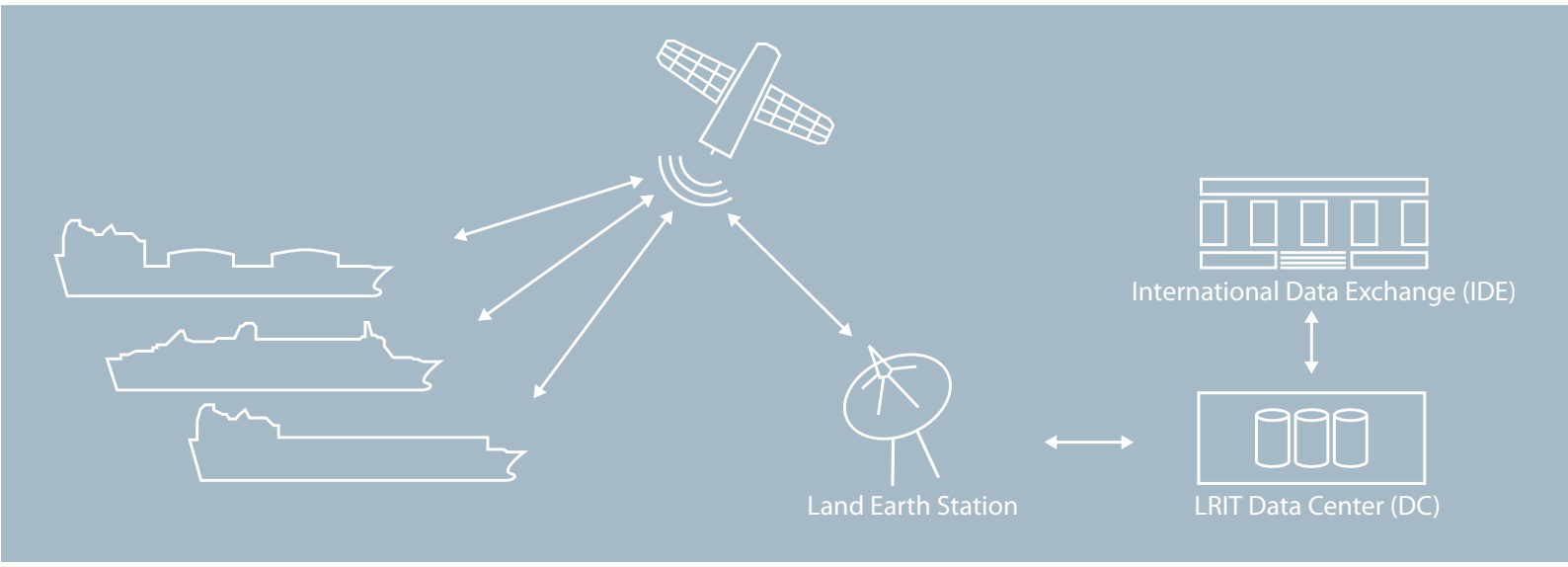

GENERAL

General specifications	Meets Inmarsat maritime specifications and SOLAS Resolution XI-2/6 requirements
	Meets LRIT performance standard

INMARSAT mini-C TRANSCEIVER

Antenna specifications	Inmarsat-C/GPS omni-directional antenna
	RHC polarised
	G/T: -23.7dB/K at 5° elevation
	EIRP: 7dBW at 5° elevation
	Elevation angle: -15° to 90°
Operating frequencies	Rx: 1525.0 – 1559.0MHz*
	Tx: 1626.5 – 1660.5MHz*
	GPS: 1575.42MHz
	* Inmarsat frequencies:
	Rx: 1525.0 – 1545.0MHz
	Tx: 1626.5 – 1646.5MHz
GPS module	12-Channels. 1 sec update rate
	15m RMS accuracy
Solar radiation	Maximum flux density: 1200W/m^2
Precipitation	Up to 100 mm/hour, droplet size 0.5 to
	to 4.5mm at wind speed up to 200km/h
	(124mph)
Ice	Up to 25 mm
IP rating	Lloyds approved for IP66
	Tested for IP68 by Thrane & Thrane
Temperature range	Operating: -35°C to 55°C
	Storage: -40°C to 80°C
Fuse	Self recovering poly fuse

POWER SPECIFICATIONS

Power source, floating	Operating: 10.5V – 32V
	DC Nominal: 12V – 24V
	(at max. 20m cable)
Power consumption	Rx: 1.8W (stand by)
	Tx: 23W (at 12V DC supply)

SATELLITE COVERAGE SPECIFICATIONS

General	Compatible with the new Inmarsat I4 satellite generation. Automatic ocean shift for global coverage. 24 hour scanning for strongest signal; scanning on signal loss

DIMENSIONS AND WEIGHT

TT-3026M mini-C Transceiver	Widest diameter: 163mm (6.4")
	Height: 146mm (5.7")
	Weight: 1.1kg (2.4lbs)

Specifications subject to change without prior notice.

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