

A large cargo ship is shown from a high-angle perspective, sailing on the ocean. The ship's deck is filled with numerous white and red shipping containers. The sky is a mix of blue and orange, suggesting a sunset or sunrise. The water is dark blue with white wake.

# SAT-201i-LRIT

## long range identification and tracking

The SAT-201i-LRIT is designed to fully comply with the IMO's mandatory SOLAS V/19-1, Long Range Identification & Tracking (LRIT) Regulations. These regulations state that vessels over 300 gross tonnes - venturing in international waters - must send regular reports to their designated flag authority identifying:

- Ship ID
- Ship position
- Date and time of the ship position

All vessels must have compliant equipment installed by their first radio survey in 2009.

SAT-201i-LRIT is the lowest cost stand-alone solution available today, ideal for those vessels that either do not have compliant equipment or the cost of upgrading existing equipment is prohibitive. The equipment utilizes the Inmarsat IsatM2M protocol which is one of the most cost-effective satellite services on the market and therefore ensures complete compliance at the lowest cost for both the vessel operator and the Flag State.

SAT-201i-LRIT is pre-configured out-of-the-box ready for LRIT operation and includes the satellite modem, mounting bracket and a 20m cable – everything you need for a successful installation. There are no hidden extras.

The SAT-201i-LRIT terminals have the lowest profile on the market, making them ideal for discreet maritime

### Why the SAT-201i-LRIT?

- Fully compliant with the SOLAS V19.1 regulations for Long Range Identification & Tracking (LRIT)
- Proven technology
- Lowest cost standalone solution available today – no hidden extras
- Easy to install
- Low profile for discreet installation
- Inmarsat IsatM2M protocol
- Seamless global coverage across all ocean regions

installations where security is paramount.

Unlike other satellite systems, SAT-201i-LRIT will automatically roam between geostationary satellites, allowing complete, seamless and uninterrupted global coverage across all ocean regions of the world.

Satamatics have been successful in the maritime market for many years, providing solutions to both the commercial and private sectors. All of our maritime solutions are easy to install and are fully certified for marine environments.

# specification



**SAT-201i-LRIT** Product code A121B01

## Physical

<b>Dimensions</b>	112 mm x 45.75 mm (diameter x height)
<b>Weight</b>	350g

## Environmental

<b>Temperature</b>	-40C to +70C (requires special cable below -25C)
<b>Marine</b>	Climatic, Shock & Vibration EN60945: 2002
<b>Ingress Protection</b>	IP66

## Power Supply Requirements

<b>Supply Voltage</b>	10V to 32V DC
<b>Power Consumption (typical @ 12V)</b>	
Receive (incl. GPS)	1.5W
Transmit	6W

## Communication

<b>Frequency Range</b>	
Transmit	1626.5 MHz to 1660.5 MHz
Receive	1525.0 MHz to 1559.0 MHz
GPS	1575.42 ± 1.0 MHz
<b>Elevation Angle</b>	0° to 90°
<b>Transmitter</b>	
EIRP	0 - 9dBW
Modulation	2 level FSK, 256Hz tone spacing
Tx burst duration	2s or 8s
<b>Receiver</b>	
G/T	≥ -25dB/K at EL = 30°
Modulation	32-ary FSK, 32Hz tone spacing
User data rate	~36 bits per second

## GPS

<b>Sensitivity</b>	-159dBm (Tracking)
<b>Channels</b>	20
<b>Time To First Fix (Typical)</b>	
Cold start	<35s
Hot start	<1s (GPS was off for less than 2 hours)
<b>Accuracy (SA Off)</b>	
Position (CEP, 2D)	2.5m (Typical)
<b>Dynamic Capability</b>	
Maximum update rate	1s

## Control & Monitoring

<b>Interface</b>	Asynchronous serial RS232
<b>Baud rate</b>	9600 bps
<b>Parity/data bits/stop bits</b>	N,8,1

## Certification

Inmarsat Type Approved  
FCC Compliant  
EN60945  
CE

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