

# Iridium GMDSS – An Improved, Truly Global Solution

NOW! Mariners have a Choice for a Feature-Rich, GLOBAL Safety & Security System at Sea!

**What's Changed?**

**Increased COVERAGE • Enhanced CAPABILITY • Lower COST**

System Comparison Features	Iridium GMDSS	Inmarsat C GMDSS	Comments
IMO/SOLAS Recognized GMDSS	YES	YES	Iridium 2018; Inmarsat 1999
<b>SATELLITE COVERAGE</b>	<b>GLOBAL Incl. Polar Region</b>	<b>From 72° N to 72° S</b>	<b>01/24 - Dual IR GMDSS Eliminates A4</b>
Number of Satellites & Type	66 + Spares - LEO	4 - GEO	Outage Impact > When Fewer Satellites
<b>GMDSS - FREE SAFETY FEATURES</b>			
Distress Alert & Relay to RCC*	YES	YES	PRIORITY Alert: ID, Status & GPS
Distress Voice Call to RCC	Auto-Dials VOICE Call After ALERT Text Sent to RCC	NO Voice Capability	VOICE Enables Sharing Critical Details
Maritime Safety Info (MSI) (Navigation, Weather, Safety Broadcasts)	Iridium <i>SafetyCast</i> Stored on LT-3100S for Future Review**	Inmarsat <i>Safety/RescueNET</i> PRINTED for Future Review	Iridium GMDSS Enables MSI Access via PC Browser-Accessible Web Interface
<b>SAFETY VOICE CALLS:</b> SAR Emergency, Medical Assistance, NAV Danger Reporting	YES	NO Voice Capability	
<b>NON-GMDSS SAFETY &amp; SECURITY FEATURES</b>			
SSAS	YES w/ SSAS Interface	YES w/ SSAS Accessories	
LRIT	YES	YES	Fully Supported in Control Unit
Position Reporting and Tracking	YES Built-In	YES w/ DNID & 3rd Party Svc	Local & Remote Management
Alert & Information Outputs (BAM & INS)	Distress Alerts, GNSS, MSI, Status	Distress Alerts	LT-3100S Outputs on RS-422 & LAN Interface
<b>STANDARD MARITIME COMMS FEATURES</b>			
Global Voice	YES Non-Priority	NO Voice Capability	SIP Server Enables Up to 8 Devices
SMS & Email	YES	Limited/Restricted Access	
<b>COST COMPARISONS (typical)</b>			
MSRP Basic Unit	\$6,100	\$5300 - \$9500	
Annual Subscription	\$250	\$780 w/ Inmarsat NAF	For Non-GMDSS Iridium Voice
Activation (One-Time Fee)	\$75	\$250	Some Flag States Charge Higher Fees
Annual Accounting Authority	NOT Required	\$180 per Vessel	
Printer & Materials	Supported, NOT Required	Est. \$1800 + Materials	**MSI & Alerts Stored on LT-3100S & Printable
Arctic Region MF/HF Radio Requirement	ONLY 1 After 01/24	2 ALWAYS Required	Typically \$10k / Radio
Voice Charges	FREE Distress & Medical, Fee-based Voice Bundles	Not Available	IR Basic, Monthly & Annual Bundles
SMS & Email	Integrated, Simple	Limited & Costly Messaging	
Power Usage	Less than any Inmarsat-C	Varies with Model	No Change to GMDSS Backup Power
Installation Time & Cost	Simple (Compact)	Complicated (Multi-Devices)	Warranty w/ Certified Installer

\* RCC Rescue Coordination Centers - 14 Current & 39 More in the Near Future to Increase Response Time & Linguistic Clarity

## Lars Thrane LT-3100S



**LARS**  
**Thrane**  
communication systems

GMDSS is a set of protocols, equipment, & communication systems (satellite & radio) mandated by the IMO in the 1990's to ensure no matter where a ship is in distress, aid can be dispatched. The Safety of Life at Sea (SOLAS) Convention requires ships over 300 gross tons carry specified GMDSS equipment, to send & receive distress & safety communications.\*\*\*

For decades, Inmarsat was the only approved GMDSS satellite service provider, albeit technology advances & increased vessels at sea. Iridium & partners persistently worked with regulatory & rescue entities, while perfecting their services & products.

In a 2018 watershed announcement, the IMO's Maritime Safety Committee's Resolution MSC.451(99) recognized Iridium as a GMDSS satellite service provider, followed by the approval of Lars Thrane LT-3100S Iridium GMDSS Terminal.

**iridium**<sup>®</sup>

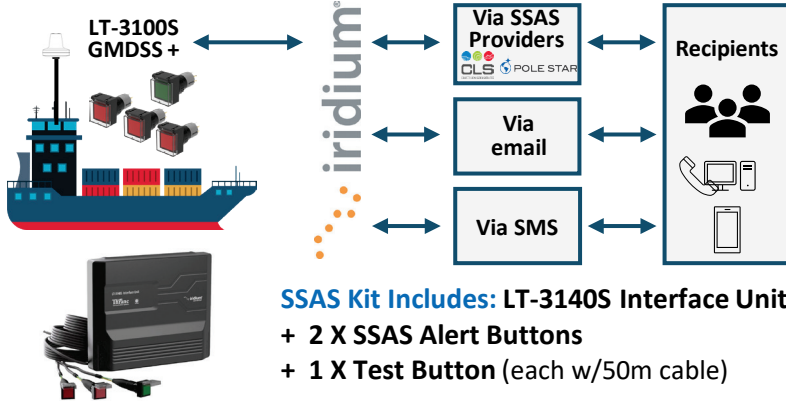
**Mackay**

Marine Electronics & Satellite Communications  
www.mackaymarine.com

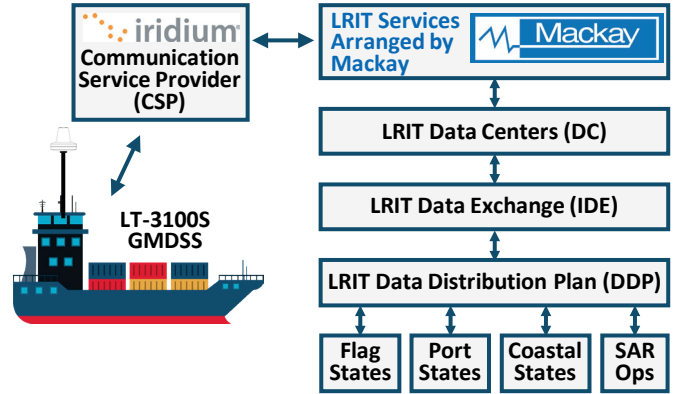
\*\*\*Paraphrased from Iridium GMDSS FACTS documents; Displays adapted from Lars Thrane presentation.

# Iridium GMDSS System – Additional Features & Configurations

## SSAS for LT-3100S GMDSS



## LRIT for LT-3100S GMDSS



### BONUS Lars Thrane LT-3100S FEATURES

#### LAN Port & Interface Connect to any Network Device

- Access enables MSI, SMS, email & web interface
- Connect multiple voice devices

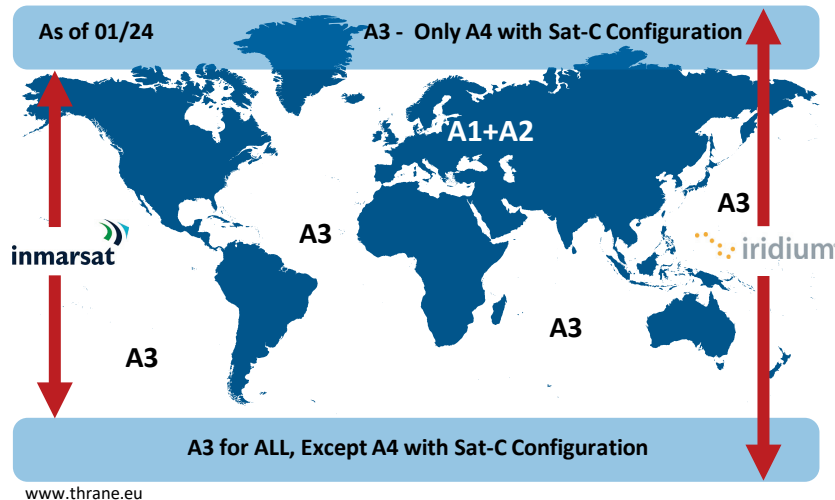
**SINGLE COAX Cable Installation** (up to 500m)

- Iridium's certified GLOBAL GMDSS Service is available via a compact integrated Iridium Connected terminal at reduced costs.
- Provides SOLAS & non-SOLAS vessels with reliable access to critical life-saving services and assured SafetyVoice connection + added communication features.

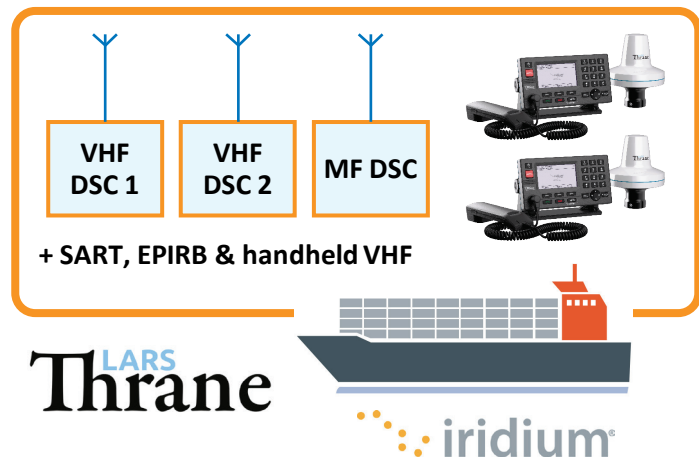


### MSC.496(105) IMO GMDSS Resolution Effective January 2024

- **Sea Area 3** (ex. A1+A2) "recognized satellite service provider"; (A4 exists ONLY w/ Sat-C use)
- **A3: MF Radio** (DSC/Voice) **or HF Radio** (DSC); **if Sat-C (A4)** Requires 2<sup>nd</sup> MF/HF
- **NO Printer** if have Display Screen & Memory



### 100% Global Iridium A1-3 Solution + Lars Thrane LT-3100S



**SOLAS Approved OPTIONS for GMDSS Configuration for Vessels > 300 GWT:**  
**2 X Inmarsat C or 2 X Iridium GMDSS, or 1 each Inmarsat C & IR GMDSS**

Contact Mackay for GMDSS System Details, Installation/Service\*\*, Activation, LRIT, SSAS, Voice, & Data Services: [marinesales@mackaymarine.com](mailto:marinesales@mackaymarine.com)  
 +1 919 850 3100

rev A4 01/24.2

\*\* To-Date, 70+ Certified Iridium GMDSS LT-3100S Mackay Technicians

