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Sternula MMS Proxy Ship

The World's First MMS Edge Router

The Sternula MMS Proxy Ship stands as the pioneer shipside MMS Edge router, encased in robust hardware, designed according to the RTCM MMS specification 13900.0 for Maritime Messaging Service and Protocol, and IALA guideline G1117.

The Sternula MMS Proxy Ship directs maritime communications to exchange data and messages between authenticated maritime users such as maritime administrations, port authorities, and services, ship crew, captains, pilots, and personal equipment, in an efficient, policy-governed, and seamless manner.

The Sternula MMS Proxy Ship allows any means of communication systems to provide data exchange with the bridge equipment.

What is it?

The Maritime Messaging Service (MMS), as defined in the RTCM MMS specification 13900.0, is a messaging component that allows authenticated maritime stakeholders to send and receive messages in an efficient, reliable, and seamless manner using the Maritime Connectivity Platform (MCP). MMS solves the problems of the current maritime wireless data communication system.

How does it work?

The Sternula MMS Proxy Ship enables the transfer of digital "messages", i.e., arbitrary digital data, organized in a predefined, known way to be used by digital applications. The Sternula MMS Proxy Ship provides a non-synchronous data exchange that can be realized over varying, intermittent, and diverse digital connectivity.

The Sternula MMS Proxy Ship supports both secure transport through internet connectivity and through VDE-TER and VDE-SAT connections. As a result, it addresses the need for secure transportation of trusted services and private communication among maritime stakeholders over VDES or IP connectivity. Sternula MMS Proxy Ship's software is compatible with 2,3,4G, VDES, VSAT, Iridium, BGAN, Starlink, etc. technology, ensuring the exchange of secure maritime communication.

sternula.com
info@sternula.dk

Danalien 1, 2.tv
9000 Aalborg, Denmark

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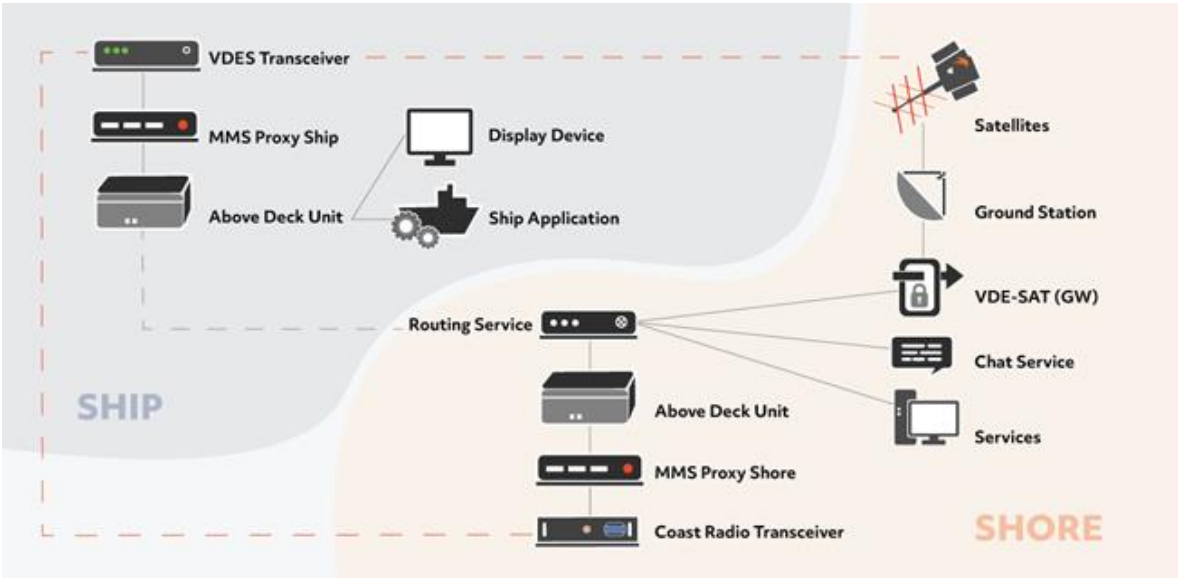
The Sternula MMS Proxy Ship allows all maritime stakeholders to create their own highly scalable applications based on preferred software or platforms to get the maximum benefit in exchanging the needed data.

Create Your Own Application

- Navigational Warnings
- Weather Forecasts
- Ice Charts
- Route exchange
- Virtual AtoN

Features

- Enables e-navigation services
- Designed to meet new advanced AIS 2.0 communication modes
- Designed to follow IALA guideline G1117
- Designed in line with RTCM MMS specification 13900.0
- Designed to integrate with AIS (ITU-R M.1371) and VDES (ITU-R M.2092) equipment



Technical Specifications

Dimensions/ Weight

Dimensions H x W x D	50 x 250 x 170 mm
Weight (without cabling)	1370 g

Power Input

Power Supply Voltage	10-32 Volt
Power Consumption typ/max.	3 / 18 Watt
With ADU	6 / 24 Watt
Absolute Maximum Power Consumption	24 Watt
Recommended Fuse for 12 / 24V	2 / 1 A

Other Functionality

Remote device management: firmware upgrade, feature unlock, configuration, application installation
Secure maritime application execution platform

Environmental

Designed to comply with	IEC 60945

Interfaces

Sensor Inputs	IEC 61162-450
VDES Transceiver	IEC 61162-450, IEC VG 63514
Sternula LTE ADU	100 Mbit/s Ethernet with prop. PoE
Other IP Connectivity	100 Mbit/s Ethernet WAN interface
MMS Application/ ECDIS/MFD	100 Mbit/s Ethernet LAN interface
Screen, Keyboard, Firmware	HDMI, 2x USB-A

VDES Functionality

VDE-SAT	Messages via Satellite
VDE-TER	Messages via Sho

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