

SAILOR® 500 FLEETBROADBAND

Second Generation Maritime Broadband Communications



The fast, cost-effective broadband that SAILOR 500 FleetBroadband enables for thousands of users has positively changed ship operation and crew welfare. After becoming the de-facto industry standard Inmarsat FleetBroadband solution, the best has just gotten better, as the second generation SAILOR 500 FleetBroadband is here.

With Thrane & Thrane's unrivalled experience in maritime satcoms you can be confident of both quality equipment and support. With this as a basis, extensive hardware and software enhancements including sophisticated new antenna technology combine to provide second generation SAILOR 500 FleetBroadband users with high-reliability and extensive functionality.

- Internet – connect ship and office, access to all internet sites and applications
- Telephony – call anywhere with unprecedented quality

Technology Evolution

The second generation SAILOR 500 FleetBroadband is an evolution in technology. It offers the same data speeds of up to 432 kbps and performance that has positioned SAILOR as the leading FleetBroadband solution but with extensive enhancements to improve operation. As the leading FleetBroadband solution, it offers:

- IP connection for e-mail and internet/intranet access including secure VPN capabilities
- Streaming IP (Quality of Service for data sessions or applications requiring a dedicated bandwidth of 8, 16, 32, 64, 128 or 256 kbps)

- ISDN 64kbps
- Telephony and data simultaneously
- Remote Access to the user terminal from shore
- Local Exchange – up to 16 IP Handsets manageable directly by user terminal

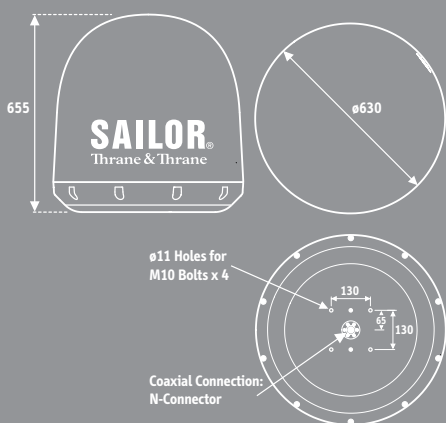
The all new SAILOR 500 FleetBroadband antenna, a fully stabilized 3-axis antenna with rate sensors for improved performance and fast, intelligent satellite tracking is the foundation of the second generation SAILOR 500 FleetBroadband solution.

The Thrane IP Handset and Local Exchange

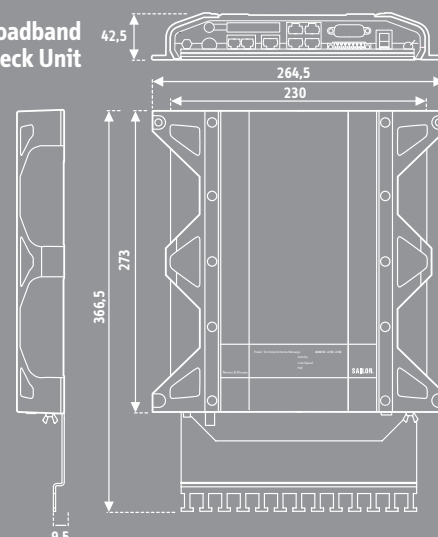
The second generation SAILOR 500 FleetBroadband can be transformed into a highly flexible multi-station voice solution by adding additional Thrane IP Handsets. These rugged plug-and-play handsets feature a highly intuitive user interface on a 2.2" TFT color screen and cutting-edge technology, including a state-of-the-art echo canceller and noise suppression software.

The SAILOR 500 FleetBroadband Below Deck Unit (BDU) can manage up to 16 IP Handsets. Each IP Handset can be called individually from shore, as well as locally from the vessel. This unique feature eliminates the requirement for an extra PABX phone system on most vessels.

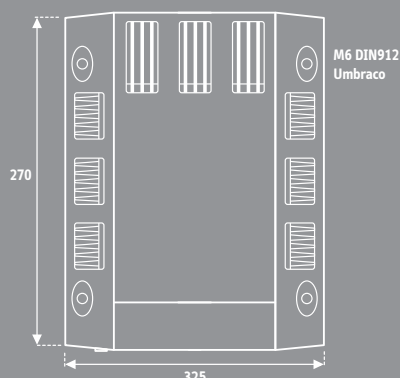
SAILOR 500 FleetBroadband Above Deck Unit



SAILOR 500 FleetBroadband Below Deck Unit



SAILOR 6080 AC/DC Power Supply



Specifications

Inmarsat FleetBroadband approved
Compliant to RTTE, CE Marked

Frequency Band

Rx	1525.0 - 1559.0 MHz
Tx	1626.5 - 1660.5 MHz
Ch. spacing	10.5 - 189 kHz, Rx 21 - 189 kHz, Tx

Recommended Antenna Cable

Cable loss max/min	20 dB at 1,62 GHz and 1.0 Ω DC loop resistance 3 dB at 36 MHz -4 dB at 54 MHz
--------------------	--

Global Services

ISDN Voice	4kbps AMBE+2 3,1 kHz Audio
Data	64 kbps UDI/56 kbps RDI
Standard IP	432/432 kbps
Streaming IP	8, 16, 32, 64, 128, 256 kbps
SMS	Up to 160 characters

Antenna Connector

ADU	50 Ω N, female
BDU	TNC-socket, female

BDU Interfaces

Power On/Off button
DC heavy duty power input connector with Remote on/off and locking mechanism
4 10/100Mbit Ethernet LAN user ports with Power over Ethernet (PoE)
1 Euro ISDN
Sim card
Factory default reset button
2 Independent RJ-11 phone 2-wire connectors
5 I/O connector with General Purpose I/Os
L-band output
Status LEDs

Power Supply and Consumption

DC input range (isolated)	10 to 32V DC
Power (max), incl. antenna & PoE output	150 W @ 10 - 32V

Environmental Conditions

Ambient Temperature	-25 to +55°C
ADU Storage	-40 to +85°C
Survival (power on, non functional)	-40 to +80°C
Automatic thermal surveillance shuts down terminal gradually at +85°C PCB temperature	

ADU enclosure	IPX6
ADU operating humidity	"Exposed" according to EN60 945
BDU enclosure	IP31
BDU operating humidity	95% non-condensing at +40°C
Icing (survival)	Max 25 mm

Vibration (ADU)

Vibration, operational	Random spectrum 1.05 g rms x 3 axes: 5 to 20 Hz: 0.02 g2/Hz 20 to 150 Hz: -3 dB/octave
Vibration, non-operational (survival)	Random spectrum 1.7 g rms 2 h x 3 axes (6 h total): 5 to 20 Hz: 0.05 g2/Hz 20 to 150 Hz: -3 dB/octave

Mechanical Shock

20g/11 half-sine

Telephone Functionality

Phone book
Message indication
Restricted dialling
Traffic logging
Local exchange
16 handsets

Set-up and Router Functionality

Web server
Built-in NAT router
Network management
SIP server
11 PDP contexts

Ship Motion

Roll	+/- 30 deg. per. 4 s, max. 0.7 g tan.
Pitch	+/- 15 deg. per. 3 s, max. 0.6 g tan.
Yaw	+/- 10 deg. per. 5 s, max. 0.3 g tan.
Surge	+/- 0.5g
Sway	+/- 0.5g
Heave	+/- 0.7g
Turning rate	+/- 36°/s; Acc. 12°/s²
Headway speed	22 m/s (42 knots)
Wind	100 knots

Dimensions and Weight

ADU	655 x Ø630 mm, 19 kg
BDU	42.5 mm/264.5 mm/273mm, 2.5 kg

©Copyright. PT Dini Nusa Kusuma 2012. All rights reserved. DNK and brand logo are registered trademarks of PT Dini Nusa Kusuma. All others trademarks and/or intellectual property rights in this document is the exclusive property of their respective owners or respective holders. Information in this document is subject to change from time to time without any prior notice.