

# Fleet Broadband 500



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# Fleet Broadband 500

## Technology without limits

The fast, cost-effective broadband that SAILOR 500 FleetBroadband introduces is set to revolutionize ship operation and welfare. It is designed specifically for intensive use on board merchant and offshore vessels whilst being ideally suited to large fishing and workboat applications at the same time.

SAILOR 500 FleetBroadband harnesses the speed and functionality of Inmarsat's FleetBroadband service. It is the ultimate FleetBroadband solution, and with Thrane & Thrane's unrivalled experience in satcoms for sea, land and aerospace applications, you can be confident of both quality equipment and support.

### Fast and Functional

With data speeds of up to 432 kbps, from an antenna that weighs just 16 kg and is only 60 cm in diameter, this compact package provides superior performance, and 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 specific bandwidth – 32, 64, 128 or 256 kbps)
- ISDN
- Voice and data simultaneously

When even the smallest delay or technical problem can result in huge expenses, daily operations can be made more cost-efficient through the services provided by SAILOR FleetBroadband. The solution increases on board efficiency by ensuring an always-on connection to the shore office or suppliers. The cost effective nature and per MB pricing of FleetBroadband also gives crew more freedom to contact home or to study whilst at sea. Because of its high bandwidth and ISDN capabilities, the SAILOR 500 FleetBroadband solution is ideal for the merchant market – giving users all the possibilities of IP while still supporting legacy applications over ISDN.

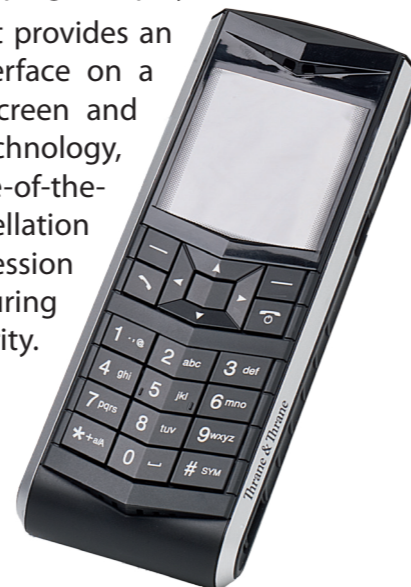
The SAILOR 500 FleetBroadband enables economical tracking, internet and e-mail access for operational and crew use. The high bandwidth and the per MB pricing allow for increased functionalities and usages, and result in a highly efficient communication and reduced cost compared to previous solutions in the market.



### The Thrane IP Handset

The rugged new plug-and-play

Thrane IP Handset provides an intuitive user interface on a 2.2" TFT colour screen and cutting-edge technology, such as a state-of-the-art echo cancellation and noise suppression software ensuring excellent audio clarity.



## 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
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### 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

### 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 enclosure	"Exposed" according to EN60 945
BDU operating humidity 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 g <sup>2</sup> /Hz 20 to 150 Hz: -3 dB/octave
Vibration, non-operational	Random spectrum 1.7 g rms 2 h x 3 axes (survival) (6 h total): 5 to 20 Hz: 0.05 g <sup>2</sup> /Hz 20 to 150 Hz:

Mechanical Shock	-3 dB/octave 20g/11 half-sine
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### 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°/s <sup>2</sup>
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

