

SAILOR® 150 FLEETBROADBAND

COBHAM

The flexible global connectivity and voice solution

2013 Product Sheet

The most important thing we build is trust

SAILOR 150 FleetBroadband is a compact, lightweight, easy to install and affordable communication system that provides reliable internet access, email and multiple voice lines. Using the same proven technology as SAILOR's heavy-use FleetBroadband solutions, SAILOR 150 FleetBroadband combines internet connectivity with simultaneous voice calling, ideal for single users and general IP applications.

Stay connected

With SAILOR 150 FleetBroadband you always have a 150 kbps data connection available, so you can receive weather data and charts, or submit reports to shore at the same time as making calls or sending text messages. SAILOR 150 FleetBroadband helps you achieve increased efficiency; commercial owners can expand the opportunities for profit while reliable connectivity for cruisers provides safety and convenience anywhere in the world.

Simple and secure installation

SAILOR 150 FleetBroadband is easy and cost-effective to install, so professional and recreational users can be up and running within just a few hours. You'll have everything you need to get started in the box and because the system is based on standard IP services and clear user interface, connecting your computer or phone system is simple and safe.

A world of applications

In addition to single user connectivity, enabling you to stay in touch with friends, family and colleagues regardless of your location or the weather, SAILOR 150 FleetBroadband can be used for dedicated tracking and telemetry applications.

This advanced functionality helps to enhance efficiency by ensuring your support on shore has all the information they need, from real-time engine data for maintenance to position data for vessel tracking.

Multiple voice lines

With up to four simultaneous voice lines possible using the Inmarsat FleetBroadband Multi-voice service, you can turn your SAILOR 150 FleetBroadband into a multi-user voice solution. Combined with the Thrane IP Handset you get an even more flexible solution with access to a multitude of value added services.

Communicate with confidence

SAILOR products are highly regarded by maritime professionals for their design and build quality, which results in excellent reliability. To support this, we guarantee fast and dependable service through our established network of On Board Service Centers (OSC). With OSC locations all around the world, service and support is always available, whenever and wherever it is needed.

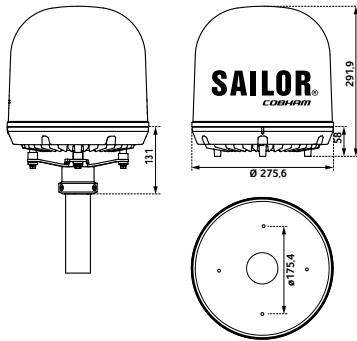


SAILOR® 150 FLEETBROADBAND

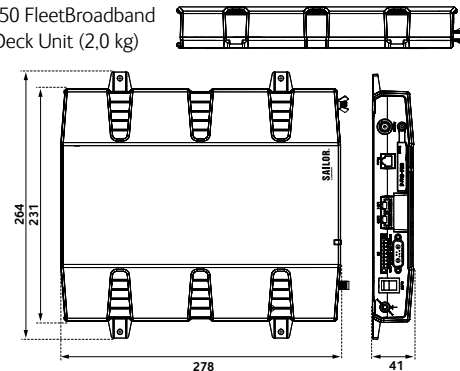
The flexible global connectivity and voice solution



SAILOR 150 FleetBroadband
Above Deck Unit (3,9 kg)



SAILOR 150 FleetBroadband
Below Deck Unit (2,0 kg)



APPROVALS

Inmarsat FleetBroadband approved. Compliant to RTTE, CE Marked. Testet to FCC part 25

FREQUENCY BAND

Rx	1525.0 - 1559.0 MHz
Tx	1626.5 - 1660.5 MHz
Ch. width	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 - 4 dB at 54 MHz
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POWER SUPPLY AND CONSUMPTION

DC input range (isolated)	10 to 32V DC
Power (max).	120 W @ 10-32 V
incl. antenna & PoE output	

ENVIRONMENTAL CONDITIONS

Ambient Temperature	-25 to +55°C
Storage	-40 to +85°C
Survival (power on, non functional)	-40 to +80°C
Automatic thermal surveillance	shuts down system gradually in ease of own temperature
BDU operating humidity	95% non-condensing at +40°C
ADU enclosure	IPX6
ADU operating humidity	"Exposed" according to EN60 945
BDU enclosure	IP31
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 ² /Hz 20 to 150 Hz: -3 dB/octave
Vibration, non-operational	Random spectrum 1.7 g rms 2 h x 3 axes (6 h total): 5 to 20 Hz: 0.05 g ² /Hz, 20 to 150 Hz: -3 dB/octave

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 ²
Headway speed	22 m/s (42 knots)
Wind	100 knots

MECHANICAL SHOCK

20g/11 half-sine

ANTENNA CONNECTOR

ADU	TNC, female
BDU	TNC, female

COMPARISON CHART

	SAILOR 500 FleetBroadband	SAILOR 250 FleetBroadband	SAILOR 150 FleetBroadband
Standard IP	Up to 432 kbps	Up to 284 kbps	Up to 150 kbps
Streaming IP	8, 16, 32, 64, 128, 256 kbps	8, 16, 32, 64, 128 kbps	-
ISDN Data	64 kbps	-	-
Fax	G4 via UDI, G3 fax via 3.1 kHz Audio	G3 fax via 3.1 kHz Audio	G3 fax via 3.1 kHz Audio
SMS (standard 3G)	160 characters	160 characters	160 characters
Standard Voice	4 kbps	4 kbps	4 kbps
Premium Voice	3.1 kHz Audio, 64 kbps	3.1 kHz Audio, 64 kbps	3.1 kHz Audio, 64 kbps
Multi-voice	9 voice lines simultaneously	6 voice lines simultaneously	4 voice lines simultaneously
Ethernet/PoE	4 ports	4 ports	2 ports
Phone/Fax (2-wire)	2 ports	2 ports	1 port
ISDN	1 port (data/3.1 kHz Audio)	1 port (3.1 kHz Audio)	-
I/O Connector	1 connector with 5 configurable inputs/outputs	1 connector with 5 configurable inputs/outputs	1 connector with 5 configurable inputs/outputs
L-Band Output	1 port for L-Band Broadcast service	1 port for L-Band Broadcast service	1 port for L-Band Broadcast service
Status LED	Full status LED panel	Full status LED panel	Full status LED panel
SIM Card Slot	1 SIM Card slot for BGAN SIM card	1 SIM Card slot for BGAN SIM card	1 SIM Card slot for BGAN SIM card
Router	Integral DHCP/NAT router	Integral DHCP/NAT router	Integral DHCP/NAT router
PBX	Built-in PBX	Built-in PBX	Built-in PBX

For further information please contact:

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SAILOR® 250 FLEETBROADBAND

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The high-performance, affordable global connectivity and voice solution

2013 Product Sheet

The most important thing we build is trust

With data speeds up to 284 kbps from a compact, lightweight and simple to install antenna, SAILOR 250 FleetBroadband is the perfect balance between performance and price. It gives you fast data connectivity and voice simultaneously, allowing you to run online operational systems such as remote monitoring, whilst still having access to e-mail, intranet/internet and multiple voice lines.

Optimal connectivity

FleetBroadband offers unrivalled global performance and opens up a world of communication possibilities. With SAILOR 250 FleetBroadband you have fast connectivity between your vessel and shore, regardless of location or conditions. You can ensure the smooth running of your business, increase crew welfare by providing easy to manage internet access and voice calling or simply enjoy your time at sea with high quality internet and voice communication always available.

A world of applications

In addition to complete office communication functionality, VPN and use of IP applications, SAILOR 250 FleetBroadband can be used for dedicated tracking and telemetry applications. This advanced functionality can enhance efficiency by ensuring your support on shore has all the information they need, from real-time engine data for maintenance to position data for fleet tracking and management. Simple and secure installation
SAILOR 250 FleetBroadband is fast and easy to install, so getting connected aboard a single vessel or an entire fleet is straightforward and cost-effective. The system is delivered with everything you need to get started in the box and because it is based on standard IP services

and features a clear user interface, connecting your computer, corporate network or phone system is simple and secure.

Multiple voice lines

With up to six simultaneous voice lines possible using Inmarsat Multi-voice, an important part of the SAILOR 250 FleetBroadband solution is the Thrane IP Handset. This advanced plug-and-play handset provides an intuitive user interface through a 2.2" TFT colour screen and features cutting-edge technology, such as a state-of-the-art echo cancellation and noise suppression software, for excellent audio clarity.

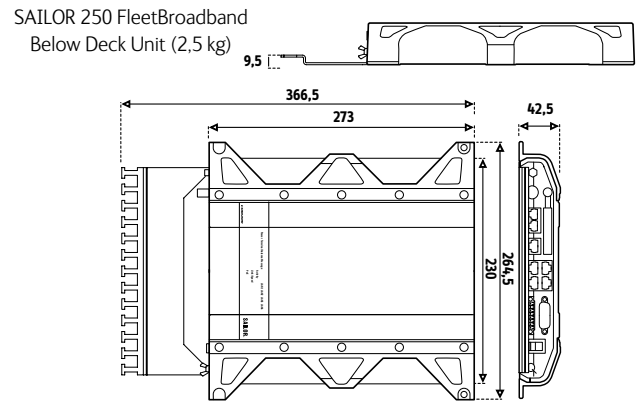
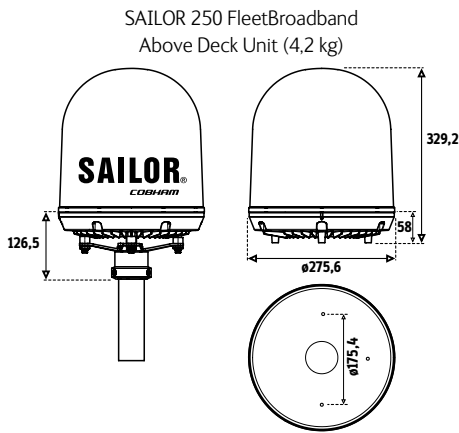
Communicate with confidence

SAILOR products are highly regarded by maritime professionals for their design and build quality, which results in excellent reliability. To support this, we guarantee fast and dependable service through our established network of On Board Service Centers (OSC). With OSC locations all around the world, service and support is always available, whenever and wherever it is needed.



SAILOR® 250 FLEETBROADBAND

The high-performance, affordable global connectivity and voice solution



APPROVALS

Inmarsat FleetBroadband approved. Compliant to RTTE, CE Marked. Testet to FCC part 25

FREQUENCY BAND

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

RECOMMENDED ANTENNA CABLE

Row	20 dB at 1,62 GHz and 1.0 Ω DC loop resistance
Column	3 dB at 36 MHz - 4 dB at 54 MHz

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
Storage	-40 to +85°C
Survival (power on, non functional)	-40 to +80°C
Automatic thermal surveillance shuts down system gradually in ease of own temperature	
BDU operating humidity	95% non-condensing at +40°C
ADU enclosure	IPX6
ADU operating humidity	"Exposed" according to EN60 945
BDU enclosure	IP31
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 ² /Hz 20 to 150 Hz: -3 dB/octave
Vibration, non-operational	Random spectrum 1.7 g rms 2 h x 3 axes (6 h total): 5 to 20 Hz: 0.05 g ² /Hz, 20 to 150 Hz: -3 dB/octave

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 ²
Headway speed	22 m/s (42 knots)
Wind	100 knots

ANTENNA CONNECTOR

ADU	TNC, female
BDU	TNC, female

MECHANICAL SHOCK

20g/11 half-sine

COMPARISON CHART

	SAILOR 500 FleetBroadband	SAILOR 250 FleetBroadband	SAILOR 150 FleetBroadband
Standard IP	Up to 432 kbps	Up to 284 kbps	Up to 150 kbps
Streaming IP	8, 16, 32, 64, 128, 256 kbps	8, 16, 32, 64, 128 kbps	-
ISDN Data	64 kbps	-	-
Fax	G4 via UDI, G3 fax via 3.1 kHz Audio	G3 fax via 3.1 kHz Audio	G3 fax via 3.1 kHz Audio
SMS (standard 3G)	160 characters	160 characters	160 characters
Standard Voice	4 kbps	4 kbps	4 kbps
Premium Voice	3.1 kHz Audio, 64 kbps	3.1 kHz Audio, 64 kbps	3.1 kHz Audio, 64 kbps
Multi-voice	9 voice lines simultaneously	6 voice lines simultaneously	4 voice lines simultaneously
Ethernet/PoE	4 ports	4 ports	2 ports
Phone/Fax (2-wire)	2 ports	2 ports	1 port
ISDN	1 port (data/3.1 kHz Audio)	1 port (3.1 kHz Audio)	-
I/O Connector	1 connector with 5 configurable inputs/outputs	1 connector with 5 configurable inputs/outputs	1 connector with 5 configurable inputs/outputs
L-Band Output	1 port for L-Band Broadcast service	1 port for L-Band Broadcast service	1 port for L-Band Broadcast service
Status LED	Full status LED panel	Full status LED panel	Full status LED panel
SIM Card Slot	1 SIM Card slot for BGAN SIM card	1 SIM Card slot for BGAN SIM card	1 SIM Card slot for BGAN SIM card
Router	Integral DHCP/NAT router	Integral DHCP/NAT router	Integral DHCP/NAT router
PBX	Built-in PBX	Built-in PBX	Built-in PBX

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SAILOR® 500 FLEETBROADBAND

COBHAM

The ultimate global broadband connectivity and voice solution

2013 Product Sheet

The most important thing we build is trust

The SAILOR 500 FleetBroadband is designed for vessels and platforms with demanding requirements for connectivity. It meets the critical needs for voice and data communication of maritime and offshore professionals globally but despite its power, is a compact, lightweight solution. It provides extensive functionality including full access to bandwidth-hungry IP applications, broadband internet/intranet, e-mail, secure VPN and nine simultaneous voice lines.

High-end connectivity

With high-speed internet connectivity, running efficiency enhancing custom IP solutions in parallel with email, VPN and voice calling is all in a day's work for SAILOR 500 FleetBroadband. It enables tracking and telemetry functionality, so colleagues on shore have all the information they need; real-time engine data for maintenance, drilling data for improving production or position data for fleet tracking and management. With SAILOR 500 FleetBroadband, you can also provide communication and internet access for crew, which is vital for ensuring an efficient workforce.

Professional & proven performance

SAILOR 500 FleetBroadband uses a fully stabilized 3-axis antenna with rate sensors for improved performance and fast, intelligent satellite tracking. It's built to the world-renowned SAILOR standards, so you benefit from reliable, always available connectivity at all times, regardless of location and conditions.

Simple and secure installation

SAILOR 500 FleetBroadband is easy to deploy and getting connected is a

straightforward, cost-effective process.

The system is delivered with everything you need to get started in the box and because it is based on standard IP services and features a clear user interface, connecting your computer, corporate network, external sensors or phone system is simple and secure.

Multiple voice lines

With up to nine simultaneous voice lines possible using Inmarsat Multi-voice, an important part of the SAILOR 500 FleetBroadband solution is the Thrane IP Handset. This advanced plug-and-play handset provides an intuitive user interface through a 2.2" TFT colour screen and features cutting-edge technology, such as a state-of-the-art echo cancellation and noise suppression software, for excellent audio clarity.

Communicate with confidence

SAILOR products are highly regarded by maritime professionals for their design and build quality, which results in excellent reliability. To support this, we guarantee fast and dependable service through our established network of On Board Service Centers (OSC). With OSC locations all around the world, service and support is always available, whenever and wherever it is needed.

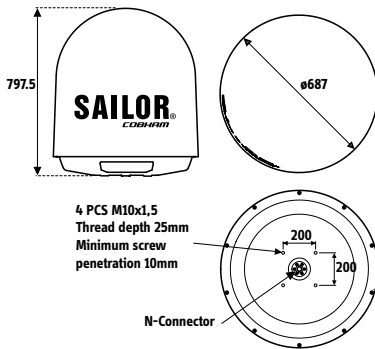


SAILOR® 500 FLEETBROADBAND

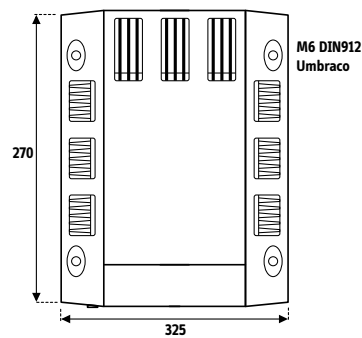
The ultimate global broadband connectivity and voice solution



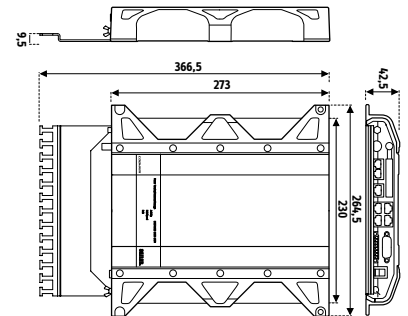
SAILOR 500 FleetBroadband
Above Deck Unit



SAILOR 6080 AC/DC Power Supply



SAILOR 500 FleetBroadband
Below Deck Unit



SPECIFICATIONS

Inmarsat FleetBroadband approved. Compliant to RTTE, CE Marked. Testet to FCC part 25

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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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

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

MECHANICAL SHOCK

20g/11 half-sine

ANTENNA CONNECTOR

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

COMPARISON CHART

	SAILOR 500 FleetBroadband	SAILOR 250 FleetBroadband	SAILOR 150 FleetBroadband
Standard IP	Up to 432 kbps	Up to 284 kbps	Up to 150 kbps
Streaming IP	8, 16, 32, 64, 128, 256 kbps	8, 16, 32, 64, 128 kbps	-
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PBX	Built-in PBX	Built-in PBX	Built-in PBX

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