

SAILOR® 1000 XTR KU

Frequency Flexibility. Platform Scalability. A Heritage of Reliability.
Any Orbit. Any Network. Anywhere.

Product Sheet

**COBHAM
SATCOM**
Connecting the future



Unlock the power to optimise VSAT delivery and performance in any maritime environment with the new SAILOR 1000 XTR Ku antenna system. Integrating the best of SAILOR VSAT Technology, SAILOR 1000 XTR Ku is the first of a new antenna generation to deliver pioneering features that represent the state-of-the-art.

Take control of your antennas

Designed for maritime connectivity services operating on GEO satellites as well as forthcoming NGSO networks, the SAILOR 1000 XTR Ku is one metre of pure innovation. It offers deep IoT capabilities which allow service technicians to take control with visibility into antenna health and performance on demand.

Leveraging Cobham SATCOM's unique R&D facilities and VSAT antenna leadership, the SAILOR 1000 XTR Ku is a technology-leap that enables diverse global satellite

connectivity services with unrivalled reliability for safer, greener and more efficient digital ship and fleet management.

A future-proof platform

SAILOR XTR™ is the cutting-edge technology platform at the heart of all new SAILOR antenna systems. Its new capabilities can maximise performance and optimise customer service, resulting in industry-leading up time on Ka- and Ku-band satellite networks in any orbit.

Technical features including a new type of control box located inside of the Above Deck Unit with a super-fast processor, new modular star network component topology, deep self-diagnostics capabilities and extended, highly secure remote access contribute to optimise every aspect of operation and management of SAILOR XTR™ antennas.

One antenna platform for the future - SAILOR XTR™ USPs

- **Rapid deployment technology** with a true one-cable solution and software-enabled functions replace mechanical intervention during installation and operation
- **Best-in-class RF performance** ensures that customers get the most out of their VSAT subscription
- **Built-in flexibility** ready for future satellite networks
- **Dual antenna operation** for reliable automatic switching between two antennas
- **New secure software platform** reduces risk of hacking
- **New pedestal design** simplicity improves mechanical performance

 **Mackay**
Marine Electronics &
Satellite Communications
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SPECIFICATIONS

Reflector size	103 cm
Certification	Compliant with CE (Maritime), ETSI
System power supply range	100-240 VAC, 50-60 Hz
Total system power consumption	8.0W: 155 W typ. 240 W max (excl. modem) 16.0W: 240W typ. 280W max. (excl. modem)

FREQUENCY BAND: Ku-Band

Rx	10.70 to 12.75 GHz
Tx	13.75 to 14.50 GHz (extended band)

ANTENNA CABLE & CONNECTORS

BDU to ADU cable	Coax cable (50 Ω) for Rx, Tx, MoCA and DC power on a single cable
ADU cable connector	Female N-Connector (50 Ω)
BDU cable connector	Female N-Connector (50 Ω)

ABOVE DECK UNIT (ADU)

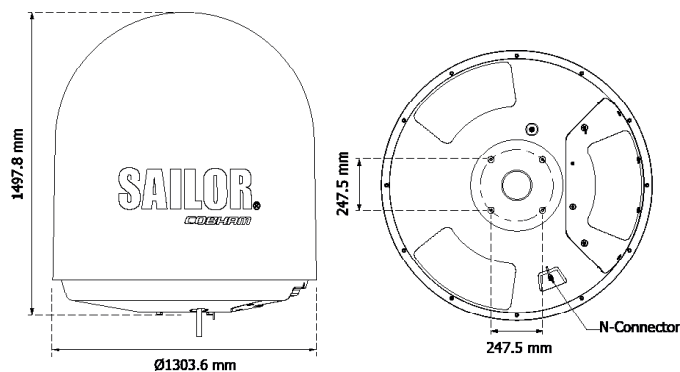
Antenna type, pedestal	3-axis (plus auto skew) stabilized tracking antenna with integrated GNSS supporting GPS, GLONASS and Beidou
Antenna type, reflector system	Reflector/sub-reflector, ring focus
Transmit Gain	41.6 dBi typ. @ 14.25 GHz (excl. radome)
Receive Gain	40.6 dBi typ. @ 11.70 GHz (excl. radome)
System G/T	19.9 dB/K typ. @ 12.75 GHz, at ≥30° elevation and clear sky (incl. radome)
BUC	8 W or 16 W, extended frequency, LO: 12.8 GHz
EIRP	8W: 50.1 dBW (incl. radome) 16W: 53.1 dBW (incl. radome)
LNB	2x multi-band LNBs
Polarisation	Linear X-Pol and Co-Pol
Tracking receiver	Internal "all band/modulation type" and VSAT modem RSSI
Satellite acquisition	Automatic - with Gyro/GPS Compass input. Support for gyro free operation
Elevation range	-20° to +120°
Cross elevation	-37° to +37°
Azimuth range	Unlimited (Rotary Joint)
Ship motion, angular	Roll +/-30° (6 sec), Pitch +/-15° (5 sec) Yaw +/-10° (8 sec)
Ship, turning rate and acceleration	15°/s and 15°/s ²
ADU motion, linear	Linear accelerations +/-2.5 g max any direction
Vibration, operational	Sine: EN 60945 (8.7.2), DNV A, MIL-STD-167-1 (5.1.3.3.5). Random: Maritime
Vibration, survival	Sine: EN 60945 (8.7.2) dwell, MIL-STD-167-1 (5.1.3.3.5) dwell. Random: Maritime survival. IEC EN 60721-4-6
Shock	EN60721-3-6 class 6M3 mod. by EN60721-4-6. MIL-STD-810F 516.5 (Proc II)
Temperature (ambient):	Operational: -25°C to +55°C Storage: -40°C to +85°C
With SAILOR SMART heater option:	Operational: -55°C to +55°C
P/N: 407090-001	
Humidity	95%, condensing
Rain / IP class	EN 60945 Exposed / IPX6
Wind	80 knots operational / 110 knots Survival
Ice, survival	25 mm
Solar radiation	1120 W/m ² to MIL-STD-810F 505.4
Compass safe distance	1.5 metres to EN 60945
Maintenance, scheduled	None
Maintenance, unscheduled	All modules, motor, RF parts and belts are replaceable through service hatch
Built In Test	Power On Self-Test, Person Activated Self-Test and Continuous Monitoring w. error logging
Dimensions (over all)	Height: H 150 cm Diameter: Ø 130 cm
Weight	105 kgs

BELOW DECK UNIT (BDU)

Dimensions	1U 19" Rack Mount HxWxD: 4.4 x 48 x 33 cm
Weight	3.6 kgs.
Temperature (ambient)	Operational: -25°C to +55°C Storage: -40°C to +85°C
Humidity	EN60945 Protected, 95% (non-condensing)
IP class	IP30
Compass safe distance	0.3m to EN60945
Interfaces	1 x Male N-Connector for antenna RF Cable (50Ω) with automatic cable loss compensation 2 x F-Connectors (75 Ω) for Rx/Tx to VSAT Modem 1 x Ethernet Data (VSAT Modem Control) 2 x Ethernet (User) 1 x Ethernet (Remote access) 1 x Ethernet for Service and Configuration 1 x RJ-45, RS-422 Data (VSAT Modem Control) 1 x RJ-45, RS-232 Data (VSAT Modem Control) 1 x NMEA 0183 (RS-422 / RS-232) for Gyro/GPS Compass input and external GPS input 1 x RJ-45, 4x General purpose GPIO, Tx mute and Rx lock 1 x AC Power Input 1 x Grounding bolt
User interface	Webserver, OLED display (red), 5 pushbuttons, 3 discrete indicator LEDs and ON/OFF switch, TX Mute and Modem Lock indicator.
Temperature control	Built-in fan
No transmit zones	Programmable, 8 zones with azimuth and elevation. Real-time blocking map recorder.
Remote management and IoT	HTTPS, SSH, Telnet, SNMP Traps, Syslog, CLI, Diagnostic, Statistic, RESTful, MQTT

VSAT MODEM SUPPORT

Modem protocols	OpenAMIP SatLink roaming protocol Generic modem with optional analogue RSSI input and GPS output
Modem hardware	iDirect X7 iDirect iQ200 Newtec MDM2510 SatLink 2900/2910



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