SAILOR® 800 XTR Ku

Your future-proof mid-size VSAT antenna for any Ku-band service globally

COBHAM SATCOM
Connecting the future

Product Sheet

Unlock the power to optimize delivery and performance of broadband at sea for business applications, vessel operations and crew welfare with SAILOR 800 XTR Ku. The sophisticated, future-ready antenna system offers fast, budget-friendly installation, easy hybrid and multi-antenna network integration, with smart, secure remote access functionality.

HIGH PERFORMANCE. LOW FOOTPRINT

SAILOR 800 XTR Ku is an advanced new antenna system that leverages Cobham Satcom's next generation XTR VSAT platform to deliver improvements across all areas of operation. Equipped with an 83cm reflector dish and a choice between 8W or 16W BUCs, it can match or exceed the performance of some competing one-meter antennas despite being 20% smaller.

With network performance maximized across frequencies, in-port service and maintenance minimized to ensure high uptime, and full readiness to transition to new satellite constellations – SAILOR 800 XTR Ku secures real-time maritime communications on

global Ku-band VSAT services, enabling vessels and fleets to keep pace with growing data needs and new communication services.

FEATURE RICH, QUICK & EASY TO DEPLOY

Designed to provide a new level of performance, reliability and intelligence, the new SAILOR XTR™ software-controlled antenna platform enables the SAILOR 800 XTR Ku to take real-time satellite communication and data transfer at sea to a whole new level. For quick and trouble-free deployments on single vessels or across a fleet, it features new Rapid Deployment Technology including a true one-cable solution, dynamic motor brakes, and the user-friendly SAILOR XTR™ Installation Wizard.
Key technical features include the new SAILOR XTR Antenna System Control Module located inside the Above Deck Unit (ADU) with a lightning-fast processor and deep self-diagnostics capabilities. Further developments include IoT protocols providing on-demand antenna health and performance data, and unique 'in-dome' Ethernet port for simple integration of third-party devices such as cellular modems.

ONE PLATFORM FOR ALL ANTENNAS

- **Rapid deployment** – true one-cable, software-controlled solution
- **Best-in-class RF performance** – VSAT service providers can deliver more bandwidth, in larger coverage areas
- **Powerful new controller and motors** – improved antenna performance even in very heavy seas
- **Built-in flexibility –** ready to deliver now and on future satellite constellations
- **Dual antenna operation** – reliable and quick automatic switching between two antennas from a single modem
- **New secure software platform** – protects against physical hacking
- **New lighter pedestal design** – simpler and more rigid - improves mechanical performance in heavy seas
- **Easy servicing and operation** – enabling higher QoS and business continuity

SAILOR® 800 XTR™ Ku

Your future-proof mid-size VSAT antenna for any Ku-band service globally

SYSTEM SPECIFICATIONS

Reflector size	83 cm / 33"
Certification	Compliant with CE (Maritime), ETSI
System power supply range	100-240 VAC, 50-60 Hz
Total system power consumption	8W: 155 W typical, 185W max (excl. modem)
	16W: 240 W typical, 280W max (excl. modem)

FREQUENCY BAND

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

ANTENNA CABLE & CONNECTORS

BDU to ADU cable	Single 50 Ω Coax cable (for Rx, Tx, MoCA and DC power)
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	40.0 dBi typ. @ 14.25 GHz (incl. radome)
Receive Gain	37.9 dBi typ. @ 11.70 GHz (incl. radome)
System G/T	18.2 dB/K typ. @ 11.70 GHz, at ≥30° elevation and clear sky (incl. radome)
BUC	8W or 16W, LO: 12.8 GHz
EIRP	8W: 49.0 dBW typ. @ 14.0 GHz
	16W: 52.0 dBW typ. @ 14.0 GHz
LNB	2x Cobham multi-band LNBs
Polarization	Linear X-Pol and Co-Pol
Tracking Receiver	Internal "all band/modulation type" including e.g. power, DVB-S2X and modem RSSI
Satellite acquisition	Automatic - with and without Gyro/GPS Compass input
Elevation Range	-20° to +120°
Cross Elevation	-37° to +37°
Azimuth range	Unlimited (rotary joint)
Ship motion, angular	Roll ±25° (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: IEC EN 60945 (8.7.2), DNV 2.4A, MIL-STD-167-1 (5.1.3.3.5). Random: Maritime
Vibration, survival	Sine: IEC EN 60945 (8.7.2) dwell, MIL-STD-167-1 (5.1.3.3.5) dwell. Random: IEC EN 60721-3-6 class 6M3 mod. by EN60721-4-6
Shock	IEC EN 60721-3-6 class 6M3 mod. by IEC EN 60721-4-6. MIL-STD-810F 516.5 (Proc. II)
Temperature (ambient)	Operational: -25°C to +55°C / -13°F to +131°F Storage: -40°C to +85°C / -40°F to +185°F
Humidity	95%, non-condensing
Rain / IP class	IEC EN60945 Exposed / IPx6
Wind	80 knots operational, 110 knots survival
Ice, survival	25 mm /1"
Solar radiation	1120 W/m2 to MIL-STD-810F 505.4
Compass safe distance	1.5 m / 59" to IEC 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	Height: H 123.5 cm / 48.6" Diameter: Ø 108 cm / 42.4"
Weight	102 kg / 224 lb

## BELOW-DECK UNIT (BDU)

Dimensions	1U 19" rack mount; HxWxD: 4.4 x 48 x 33 cm
Weight	3.6 kg / 8 lb.
Temperature (ambient)	Operational: -25°C to +55°C / -13°F to +131°F Storage: -40°C to +85°C / -40°F to +185°F
Humidity	EN60945 Protected, 95% (non-condensing)
IP class	IP30
Compass safe distance	0.3 m / 12" to EN60945
Interfaces	1 x N-Connector for antenna RF Cable (50 Ω) with automatic cable loss compensation 2 x F-Connectors (75 Ω) for Rx and 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 RJ-45, NMEA 0183 (RS-422 / RS-232) for Gyro/GPS Compass and external GPS input 1 x RJ-45, 4 x 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 protocol SatLink roaming protocol Viasat Linkway S2 Generic modem with optional analogue RSSI input and GPS output Other: On Request

NATO STOCK NUMBERS

Cobham: 407580A-00500	NATO NSN: 5985-22-637-1587
Cobham: 407580B-00500	NATO NSN: 5985-22-637-1589
Cobham: 407508A-00500	NATO NSN: 5985-22-637-1590
Cobham: 407508B-00500	NATO NSN: 5985-22-637-1592
Cobham: 407516A-00500	NATO NSN: 5895-22-636-1012
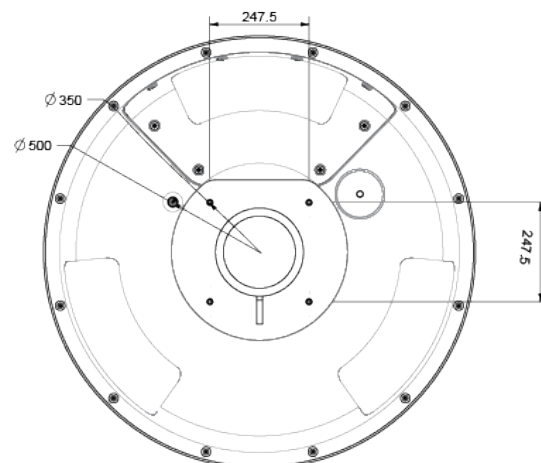
247.5
Ø 350
Ø 500
247.5

For further information please contact:
satcom.maritime@cobhamsatcom.com

www.cobhamsatcom.com