SAILOR® 600 XTR Ka

Your future-proof Ka-band system for satellite services such as Telenor THOR 7 and similar - available in 4.5W and 9W

Product Sheet

COBHAM SATCOM
Connecting the future

Mackay MARINE
www.mackaymarine.com

Unlock the power to optimize delivery and performance of broadband for business applications, vessel operations and crew welfare, in any maritime environment with the new SAILOR 600 XTR Ka; the most advanced 3-axis stabilized antenna system available.

A FUTURE-PROOF KA PLATFORM

Integrating the best of SAILOR VSAT Technology and SAILOR XTR™, the new cutting-edge technology platform at the heart of all next generation SAILOR antenna systems, SAILOR 600 XTR Ka represents the state-of-the-art for leveraging the full capabilities of Ka services today, and tomorrow.

The SAILOR 600 XTR Ka's advanced RF package with new Ka-band transceiver (XCVR) and feed horn supports dual-polarization and wide-band Ka, making it ready to take advantage of existing and future Ka-band satellite constellations. It also features sophisticated Tracking Receiver technology to ensure fast satellite acquisition at start-up and after blockages caused by e.g., atmospheric conditions or vessel superstructure.

FEATURE RICH, QUICK & EASY TO DEPLOY'

SAILOR 600 XTR Ka utilizes sophisticated Rapid Deployment Technology to reduce installation complexity and cost. This is a combination of mechanical and software elements such as a true one-cable solution, Dynamic Motor Brakes, the XTR™ Installation Wizard enabling quick and trouble-free deployments.

Technical features include the new XTR Antenna System Control Module located inside the Above Deck Unit (ADU) with a lightning-fast processor, enabling new modular star network component topology, deep self-diagnostics capabilities and extended, highly secure remote access contribute to optimize every aspect of operation and management of SAILOR XTR™ antennas.

Further developments include IoT protocols providing on-demand antenna health and performance data, and unique 'in-dome' Ethernet for simple integration of third-party devices such as cellular.

ONE PLATFORM FOR ALL ANTENNAS

- **Rapid deployment** – true one-cable, software-controlled solution
- **Best-in-class RF performance** – end-users get more value from their investment
- **Powerful new controller and motors** – improved performance on all levels
- **Built-in flexibility** – ready to deliver now and on future satellite constellations
- **Dual antenna operation** – reliable automatic switching between two antennas
- **New secure software platform** – protects against cyber security risks
- **New lighter pedestal design** – simplicity improves mechanical performance
- **Easy servicing and operation** – enable higher QoS and business continuity

SAILOR® 600 XTR KA

Your future-proof Ka-band system - available in 4.5W and 9W

COBHAM SATCOM
Connecting the future

SYSTEM SPECIFICATIONS

Reflector size	ø65 cm
Type Approvals	Telenor Satellite
Certification	Compliant with CE (Maritime), ETSI, FCC
System power supply range	100 - 240 VAC, 50-60 Hz
Total system power consumption	4.5W: 135 W typical, 185 W max (excl. modem) 9.0W: 180 W typical, 215 W max (excl. modem)

FREQUENCY BAND

FREQUENCY BAND	Ka-Band
Rx	17.7 to 20.2 GHz
Tx	27.5 to 30.0 GHz

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)

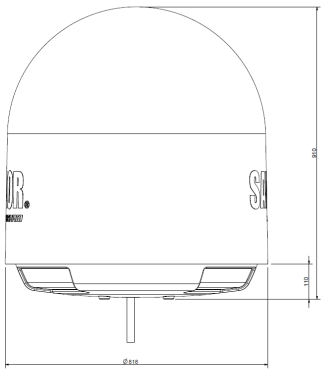
Antenna type, pedestal	3-axis stabilized tracking antenna with integrated GNSS supporting GPS, GLONASS and Beidou
Antenna type, reflector system	Reflector/sub-reflector, ring focus
Transmit Gain	43.6 dBi typ. @ 29.5 GHz (Incl. radome)
Receive Gain	39.1 dBi typ. @ 19.7 GHz (Incl. radome)
System G/T	16.4 dB/K typ. @ 19.7 GHz, at ≥10° elevation and clear sky (incl. radome)
Ka-band transceiver output	4.5W or 9W
EIRP	4.5W: 50.1 dBW typ. @ 29.5 GHz (incl. radome) 9.0W: 53.1 dBW typ. @ 29.5 GHz (incl. radome)
Polarization	Circular (RHCP, LHCP) independent controlled for Rx and Tx
Tracking Receiver	Internal “all band/modulation type” including e.g., power, DVB-S2X, GSC and modem RSSI
Satellite acquisition	Automatic - with and without Gyro/GPS Compass input. Support for gyro free operation.
Elevation Range	-20° to +128°
Cross Elevation	-42° to +42°
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°/s2
ADU motion, linear	Linear accelerations +/-2.5 g max any direction
Vibration, operational	Sine: EN 60945 (8.7.2), DNV 2.4A, 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: EN60721-3-6 class 6M3 mod. by EN60721-4-6
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
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/m2 to MIL-STD-810F 505.4
Compass safe distance	1.5 meters (IEC EN 60945)
Maintenance, scheduled	None
Maintenance, unscheduled	All modules, motor, RF parts and belts are replaceable
Built In Test	Power On Self-Test, Person Activated Self-Test and Continuous Monitoring w. error logging
Dimensions (over all)	Height: H 91 cm Diameter: Ø 82 cm
Weight	35 kg

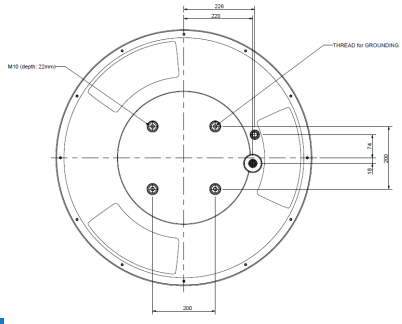
BELOW DECK UNIT (BDU)

Dimensions	1U 19” rack mount HxWxD: 4.4 x 48 x 33 cm
Weight	3.6 kg
Temperature (ambient)	Operational: -25°C to +55°C Storage: -40°C to +85°C
Humidity	EN 60945 Protected, 95% (non-condensing)
IP class	IP30
Compass safe distance	0.3 meters 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 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	Generic, OpenAMIP, OpenBMIP, Custom protocol
Modem hardware	Telenor X7, Telenor MDM3315





Subject to change without further notice.

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