

# 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



**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



## 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

	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)

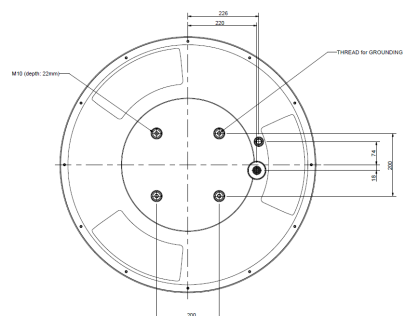
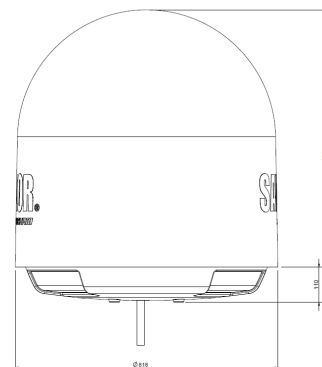
Antenna type, pedestal	3-axis stabilized tracking antenna with integrated GNSS supporting GPS, GLONASS and Beidou
Antenna type, reflector system	Reflector/sub-reflector, ring focus
Transmit Gain	43.6 dBi typ. @ 29.5 GHz (Incl. radome)
Receive Gain	39.1 dBi typ. @ 19.7 GHz (Incl. radome)
System G/T	16.4 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°/s <sup>2</sup>
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/m <sup>2</sup> 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



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