

Product Sheet

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



SAILOR® 1000 XTR KU



SPECIFICATIONS

| | |
|--------------------------------|------------------------------------|
| Frequency band | Ku-Band |
| Reflector size | 103 cm |
| Certification | Compliant with CE (Maritime), ETSI |
| System power supply range | 100-240 VAC, 50-60 Hz |
| Total system power consumption | 480 W peak, 320 W typical |

FREQUENCY BAND

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

ANTENNA CABLE & CONNECTORS

| | |
|---------------------|---|
| ACU 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) |
| ACU cable connector | Female N-Connector (50 Ω) |

ABOVE DECK UNIT (ADU)

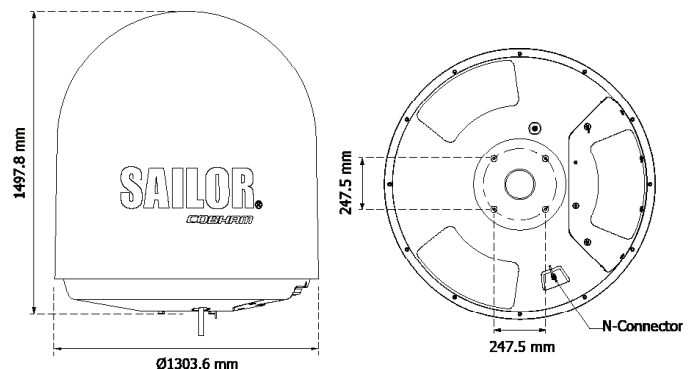
| | |
|---|---|
| Antenna type, pedestal | 3-axis (plus auto skew) stabilized tracking antenna with integrated GNSS supporting GPS, GLONASS and Beidou |
| Antenna type, reflector system | Reflector/sub-reflector, ring focus |
| Transmit Gain | 41.6 dBi typ. @ 14.25 GHz (excl. radome) |
| Receive Gain | 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 | 50.1 dBW (8 W) or 53.1 dBW (16 W), 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 | -18° to +118° |
| Azimuth Range | Unlimited (Rotary Joint) |
| Ship motion, angular | Roll +/-30°, Pitch +/-15°, Yaw +/-10° |
| 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 | MIL-STD-810F 516.5 (Proc. II), IEC EN 60721-4-6 |
| Temperature (ambient): With SAILOR SMART heater option: P/N: 407090-001 | Operational: -25°C to +55°C / -13°F to +131°F Operational: -55°C to +55°C / -67°F to +131°F Storage: -40°C to +85°C / -40°F to +185°F |
| 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 | 1.7 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 | 120 kgs |

BELOW DECK UNIT (BDU)

| | |
|-----------------------|---|
| Dimensions | 1U 19" Rack Mount HxWxD: 4.4 x 48 x 33 cm |
| Weight | 4.5 kgs. |
| 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 | 0.3m / 12" 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 RJ-45, NMEA 0183 (RS-422 / RS-232) for Gyro/GPS Compass input 1 x RJ-45, 4 x General purpose GPIO, Tx mute and Rx lock 1 x AC Power Input 1 x Grounding bolt |
| Input power | 100 - 240 VAC, 320 W typical, 480 W peak |
| Display | OLED (red) display, 5 pushbuttons, 3 discrete indicator LEDs and ON/OFF switch |
| No transmit zones | Programmable, 8 zones with azimuth and elevation |

VSAT Modem Support

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|-----------------|--|
| 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 |



For further information please contact:
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