

SAILOR® 120 XTR TVRO

For the ultimate TV experience at sea
Available as TV for Ku-band and TVHD for Ku- & Ka-band

Product Sheet

**COBHAM
SATCOM**
Connecting the future



Built on decades of continuous research and development, the new SAILOR XTR TVRO combines the field-proven reliability and RF performance of Sea Tel satellite television systems with the rapid deployment technology, unmatched uptime and ultimate serviceability of the new SAILOR XTR platform. With the new SAILOR XTR TVRO line, you will never miss the breaking news or that vital match-winning moment again.

Industry leading performance

Enhanced pointing accuracy, incredible satellite tracking, unique blocking zones capabilities and improved radar immunity, as well as the best Ku Band or DirectTV Ka Band coverage available today ensure SAILOR XTR TVRO delivers an incredible viewing experience, whether stationary or on the move. Electronic band switching maintains seamless coverage when transiting between satellite TV regions too.

Unmatched serviceability

With fewer antenna modules than any other TVRO in the market, the new SAILOR XTR TVRO line offers simplified and streamlined servicing. Rapid Deployment Technology ensures fast and hassle-free roll-out, accelerating operational readiness on single vessels or across entire fleets while maintaining the highest reliability factor. Full IP integration – an industry-first innovation – optimizes serviceability further and accelerates time to fix.

Full portfolio available now

The SAILOR XTR TVRO line is part of a complete satellite TV portfolio for all vessel types, including 1m Ku and Ku-Ka TVHD antennas as well as the 1.2m Ku and the unique, industry first 1.2m Ku-Ka TVHD antenna joining existing 2.4m and 3.7m systems.

SAILOR® XTR™ – One platform for all antennas

- **Enhanced serviceability** with unique IP integration opportunity for easy diagnosis for quick and remote problem solving
- **Electronic switchable feed** seamlessly switches between Linear and Circular Ku Band for full flexibility when changing between regions or services
- **Superior RF performance for maximum footprint coverage** delivers high availability of services globally and an incredible viewing experience at all times
- **Built-in Satellite Library** with over 60 satellite TV profiles to choose from and the ability to create or modify new satellite profiles
- **Simplified hybrid and remote connectivity** including an industry-first built in ethernet port to enable 3rd party devices such as a cellular or other Wi-Fi device.

SAILOR® 120 XTR TVRO

For the ultimate TV experience at sea
Available as TV for Ku-band and TVHD for Ku- & Ka-band



SYSTEM SPECIFICATIONS

Reflector size	129.5 cm / 51"
Certification	Compliant with CE (Maritime), ETSI
System power supply range	100 - 240 VAC, 50-60 Hz
Total system power consumption	50 W typical, 80 W max

FREQUENCY BAND

	Ku-band	Ka-band
TV	10.7 to 12.75 GHz	N/A
TVHD	10.7 to 12.75 GHz	18.3 to 18.8 GHz, 19.7 to 20.2 GHz

ANTENNA CABLE & CONNECTORS

ADU to BDU & Multi-switch cables	Five 75 Ω cables with F-Connectors
Antenna connections	One 50Ω N-Connection for Antenna Control Four 75Ω F-Connections Two 50Ω to 75Ω adapters for Antenna Control Connections included. (ADU-BDU)

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
Minimum EIRP	Ku-band: 40.5 dBW Ka-band: N/A
TV	40.5 dBW
TVHD	40.5 dBW
LNB Type	
TV	Ku-band: Dual-band worldwide programmable
TVHD	Ku-band only: Dual-band worldwide programmable Ku/Ka-band: Dual-band programmable and DIRECTV
Polarization	Linear / Circular selectable
Skew control	Automatic
Tracking receiver	Internal "all band/modulation type" including e.g. Power and DVB-S2X
Satellite acquisition	Automatic, with and without Gyro/GPS Compass input
Satellite verification	NID or DSS
Stabilization accuracy	Peak error <0.2° under specified ship motion
Elevation range	-15° to +115°
Azimuth range	680°
Ship motion, angular	Roll ±30° (in 6 sec.), Pitch ±15° (in 6 sec.), and Yaw ±10° (in 6 sec.)
Ship, turning rate and acceleration	15°/s and 15°/s ²
Vibration, operational	Sine: EN 60945 (8.7.2)
Vibration, survival	Sine: EN 60945 (8.7.2) dwell
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%, condensing
Rain / IP class	EN 60945 Exposed / IPx6
Wind	80 knots operational / 110 knots Survival
Ice, survival	25 mm / 1"
Solar radiation	1120 W/m ² to MIL-STD-810F 505.4
Compass safe distance	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 178.3 cm / 70.2" Diameter: Ø 166.9 cm / 65.7"
Weight	179 kg / 394.6 lb

SAILOR XTR BELOW DECK UNIT (BDU)

Dimensions	1U 19" rack mount HxWxD: 4.4 x 48 x 33 cm / 1.73" x 18.9" x 13"
Weight	3.6 kg / 8 lbv
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	EN 60945 Protected, 95% (non-condensing)
IP class	IP30
Compass safe distance	0,3 m / 7" to IEC EN 60945
Interfaces	1 x Male N-Connector for antenna control cable (50Ω) 3 x Ethernet (User) 1 x Ethernet (Remote access) 1 x Ethernet on front for Service and Configuration 1 x RJ-45, NMEA 0183 (RS-422 / RS-232) for Gyro/ GPS Compass input and external GPS input 1 x RJ-45, 4 x General purpose GPIO 1 x Universal AC Power Input 1 x Grounding bolt
User Interface	Webserver, OLED display, 5 pushbuttons, 3 discrete indicator LEDs and ON/OFF switch
Temperature control	Built-in fan
Blocking zones	Programmable, 8 zones with azimuth and elevation
Remote management and IoT	HTTPS, SSH, Telnet, SNMP Traps, Syslog, CLI, Diagnostic, Statistic, RESTful, MQTT



Mackay Marine, Global Commercial Sales
+1 281 479 1515 marinesales@mackaymarine.com
Mackay Communications, Satellite Solutions
+1 919 850 3100 satserv@mackaycomm.com
Mackay World Service (MWS) 24/7
+1 282 478 6245 service@mackaymarine.com

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

www.cobhamsatcom.com