

SAILOR® 900 VSAT KA

Harness the true power of THOR 7 with the SAILOR 900 Ka antenna

Product Sheet

COBHAM
SATCOM
Connecting the future

Now with Universal ACU, GNSS module and new software features

The SAILOR 900 VSAT Ka is the world's most advanced and reliable 3-axis stabilized Ka-band antenna system for the Telenor THOR 7 satellite network. It's unique design and technology streamlines the deployment process, introducing significant installation benefits. While in operation, SAILOR 900 VSAT Ka enables service providers to deliver unmatched reliability and link uptime.

The game-changing operational and installation attributes of the SAILOR 900 VSAT Ka are made possible through the power of the proven SAILOR VSAT technology platform. Highly regarded by satcom service providers worldwide, the ease-of-use, quick deployment and reliable operation enabled by SAILOR VSAT technology has created a new industry standard.

The benchmark for Ka performance

SAILOR 900 VSAT Ka is built to withstand the toughest sea conditions and still deliver high bandwidth connectivity. It is the fastest tracking antenna available, with superior dynamic performance in all axes; roll, pitch and yaw. This high performance means that even smaller vessels more affected by rough seas can make the most of THOR 7 services.

A simple revolution in VSAT deployment

Advanced SAILOR VSAT technology antenna systems like SAILOR 900 VSAT Ka completely simplify the once complex process of VSAT antenna procurement and installation. This saves time and money. Cobham SATCOM has achieved this revolution not through a

single design breakthrough, but with a wealth of features and details unique to the SAILOR VSAT technology platform. For instance, a single cable between antenna and below deck equipment for RF, power and data combined with Automatic Azimuth Calibration and Automatic Cable Calibration enable unique 'One touch commissioning'. Dynamic Motor Brakes inside the antenna remove the requirement for mechanical brake straps, ensuring the antenna is kept in balance during no-power situations at sea or in transport.

Re-defining maritime broadband

Integrating SAILOR 900 VSAT Ka with the iDirect X7 Satellite Router is the smart-

est, most cost-effective way to access ground-breaking new High Throughput Satellite (HTS) services on THOR 7. Higher speeds, more reliability and class-leading installation savings, means this combination of state-of-the-art hardware and next generation services offers the ultimate support for business applications, vessel operations and crew welfare.

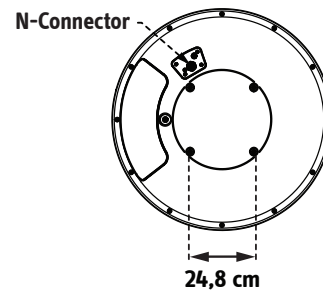
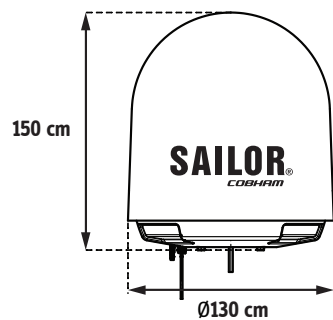
Streamlining remote access and diagnostics

SAILOR 900 VSAT Ka is incredibly easy to manage, ensuring service providers can offer the best possible support to customers anywhere in the world. Easy remote access and diagnostic features



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SYSTEM SPECIFICATIONS

Frequency band	Ka-Band
Reflector size	103 cm / 40.6"
Certification	Compliant with CE (Maritime), ETSI, FCC
Type approvals	Telenor Satellite
System power supply range	100-240 VAC, 50-60 Hz
Vibration, operational	Sine: EN60945 (8.7.2), DNV A, MIL-STD-167-1 (5.1.3.3.5). Random: Maritime
Vibration, survival	Sine: EN60945 (8.7.2) dwell, MIL-STD-167-1 (5.1.3.3.5) dwell. EN60721-3-6 6M3
Shock	MIL-STD-810F 516.5 (Proc. II)
Temperature (ambient)	Operational: -25°C to 55°C Storage: -40°C to 85°C

FREQUENCY BAND

Rx	19.2 to 20.2 GHz
Tx	29.0 to 30.0 GHz

ANTENNA CABLE

ACU to ADU cable	Single 50 Ω coax for Rx, Tx and power
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ANTENNA CONNECTORS

ADU	Female N-Connector (50 Ω)
ACU	Female N-Connector (50 Ω)

ABOVE DECK UNIT (ADU)

Antenna type, pedestal	3-axis stabilised tracking antenna with integrated GPS
Antenna type, reflector system	Reflector/sub-reflector, ring focus
Transmit Gain	47.5 dBi typ. @ 29.5 GHz (incl. radome)
Receive Gain	43.7 dBi typ. @ 19.7 GHz (incl. radome)
System G/T	20.1 dB/K typ. @ 19.7 GHz, at ≥10° elevation and clear sky (incl. radome)
BUC output power	5 W BUC
EIRP	≥53.5 dBW (incl. radome) max. 36.0 dBW/40KHz
LNB	Ka single band LNB
Tracking Receiver	Internal "all band/modulation type" including e.g. narrow band, DVB-S2, GSC and modem RSSI
Polarisation	Circular Cross-Pol (TX: RHCP, RX: LHCP)
Elevation Range	-25° to +125°
Cross Elevation	+/-42°
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
Satellite acquisition input	Automatic - with or without Gyro/GPS Compass
Humidity	100%, condensing
Rain / IP class	EN60945 Exposed / IPX6
Wind	80 kt. operational 110 kt. survival
Ice, survival	25 mm / 1"
Solar radiation	1120 W/m ² to MIL-STD-810F 505.4
Compass safe distance	1.4 m / 55.1" to EN60945
Maintenance, scheduled	None
Maintenance, unscheduled	All electronic, electromechanical modules and belts are replaceable through service hatch
Built In Test	Power On Self Test, Person Activated Self Test and Continuous Monitoring w. error logging
Power OFF	Automatic safe mode
Dimensions (over all)	Height: H 150 cm / 58.9" Diameter: Ø 130 cm / 51.3"
Weight	126 Kgs. / 276 lbs.

ANTENNA CONTROL UNIT (ACU)

Dimensions, Rack Mount	1U 19" ACU HxWxD: 4.4 x 48 x 33 cm HxWxD: 1.75" x 19" x 13"
Weight, Rack Mount	4.5 kgs. / 10 lbs.
Interfaces	1 x N-Connector for antenna RF Cable (50 Ω) w. automatic cable loss compensation 2 x F-Connectors (75 Ω) for Rx / Tx to Modem 1 x Ethernet (Modem Control) 1 x RS-422 (Modem Control) 1 x RS-232 (Modem Control) 1 x NMEA 0183 (RS-422 or RS-232) for Gyro/GPS Compass input (future NMEA2000) 2 x Ethernet (User) 1 x Ethernet (ThraneLink, service, set-up etc.) 1 x AC Power Input 1 x Grounding bolt
Input power	100-240 VAC, 175 W typical, 370 W peak
Modem interface (control)	Generic, OpenAMIP, Custom protocol
Display	Web MMI, OLED (red) display, 5 pushbuttons, 3 discrete indicator LEDs and ON/OFF switch
No transmit zones	Programmable, 8 zones with azimuth and elevation
Humidity	EN60945 Protected, 95% (non-condensing)
IP class	IP30
Compass safe distance	0.3 m / 12" to EN60945

For further information please contact:
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