SAILOR® 900 VSAT KA

Your 1m Ka-band system for Telenor THOR 7

2015 Product Sheet

The most important thing we build is trust

The SAILOR 900 VSAT Ka is an advanced 3-axis stabilized Ka-band antenna system designed for the Telenor THOR 7 satellite network. It is built to the same high quality and high performance that has made SAILOR the leading name in professional maritime communication equipment over decades.

SAILOR 900 VSAT Ka is a direct development from the successful SAILOR 900 VSAT antenna system, which has created a new industry standard through innovative design for ease-of-use, quick deployment and reliable operation.

The top performing Ka system

SAILOR 900 VSAT Ka is built to withstand the toughest sea conditions and is probably the fastest tracking antenna with its superior dynamic performance in all axes; roll, pitch and yaw. Combined with tracking performance it is feasible to install the antenna even on smaller vessels which are more affected by rougher sea.

Quick & Easy to deploy

SAILOR 900 VSAT Ka uses a single cable between antenna and below deck equipment for RF, power and data, while advanced features such as Automatic Azimuth Calibration and Automatic Cable Calibration significantly reduce installation time further. The combination of all these unique features makes it possible to do a 'one touch commissioning' without the need for line-up or CPi, making SAILOR 900 VSAT Ka incredibly easy to deploy.

Re-defining maritime broadband

With SAILOR 900 VSAT Ka and the iDirect X7 Satellite Router you have access to the Telenor THOR 7 high throughput satellite services so you can enjoy the power of broadband for business applications, vessel operations and crew welfare.

Remote access and diagnostics

SAILOR 900 VSAT Ka offers a number of features for remote access and remote diagnostic including monthly statistics logging, SNMP traps, Syslog functionality and built-in e-mail clients that automatically can email historical logging of system performance. These remote maintenance features gives the opportunity to offer the best possible support to your customers.

Built for the high seas

SAILOR 900 VSAT Ka is designed and tested to the highest maritime shock and vibration requirements, IEC EN 60721 to ensure reliable service and prolonged life at sea.

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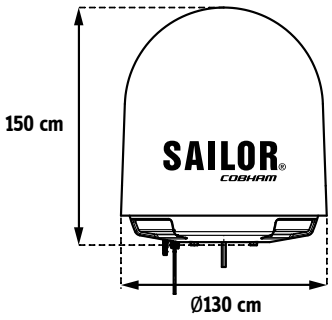

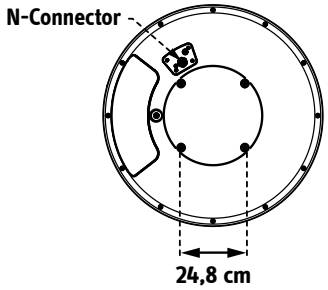

SYSTEM SPECIFICATIONS

Frequency band	Ka-Band
Reflector size	103 cm / 40.6"
Certification	Compliant with CE (Maritime), ETSI, FCC
Type approvals	Telenor
System power supply range	ADU+ACU 20 - 32 VDC
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

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°/S² and 15°/S²
ADU motion, linear	Linear accelerations +/-2.5 g max any direction
Satellite acquisition	Automatic - with or without Gyro/GPS Compass input
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/m2 to MIL-STD-810F 505.4
Compass safe distance	1 m / 40" 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 log
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 DC Power Input 1 x Grounding bolt
Input power	20 - 32 VDC, 370 W peak, 175 W typ
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	0.1 m to EN60945

For further information please contact:

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