The SAILOR 900 VSAT is an advanced maritime stabilized Ku-band antenna system built with the same high quality and high performance that has made SAILOR the leading name in professional maritime communication equipment over decades. With hundreds of units shipped worldwide in a very short time truly set a new standard.

A Top Performer
SAILOR 900 VSAT is an easy and quick to deploy three axis stabilized VSAT antenna with the highest RF performance in the 1m antenna class. Verified by extensive Eutelsat tests, you can trust that SAILOR 900 VSAT works with any leading VSAT platforms in the market.

Reduce Cost
Every SAILOR 900 VSAT antenna system comes factory-tested, equipped ready-to-go with standardized top quality RF components (8W BUC, LNBs, OMT/diplexer) - and only one cable between antenna and below-deck. The antenna is shipped fully balanced, configured and does not need work prior to installation. This time and cost saving, plus the top RF performance make SAILOR 900 VSAT the most cost effective Ku-band antenna on the market to deploy.

Increase up Time
The decision to install VSAT on a ship stems from the desire to have always-on broadband connectivity at a simple flat rate fee. These networks are readily available from many providers (list upon request). Regardless of how and where you operate the SAILOR 900 VSAT, you can be confident of maximum availability because the system has several simple features to make sure your broadband connection is up, and stays up.

Two Antennas - One Modem
SAILOR 900 VSAT can operate two antenna systems on a single modem without the need for an extra box to manage that feature. This requirement arises when the vessel needs a satellite connection even when there are obstructions in the way. The two SAILOR antenna controllers manage the connection between satellite and modem.

More Flexibility
During the coming years, new high throughput satellites (HTS) will come online. Most of the new HTS will operate on Ka-bands. The SAILOR 900 VSAT is now prepared for a possible conversion from Ku to Ka band operation. The result is a thoroughly updated electronics, and both a reflector dish and radome which are both tuned to both Ku- and Ka band frequencies already.
SAILOR® 900 VSAT
A new standard - now with more features and flexibility

SPECIFICATIONS
Frequency band Ku / Ka-Band (VSAT)
Reflector size 103 cm / 40.6"
Certification Compliant with CE (Maritime), ETSI
System power supply range 20 - 32 VDC (Start up voltage: 22 VDC guaranteed)
Total system power consumption 370 W peak, 175 W typical

FREQUENCY BAND
Rx 10.70 to 12.75 GHz
Tx 13.75 to 14.50 GHz (extended)

ANTENNA CABLE
ACU to ADU cable Single 50 Ω coax for Rx, Tx, ACU-ADU modem 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 (plus auto skew) stabilised tracking antenna with integrated GPS
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 dBi typ. @ 12.75 GHz, at ≥30° elevation and clear sky (incl. radome)
BUC output power 8 W
EIRP ≥50.1 dBW (incl. radome)
LNB 2 units multi-band LNBFs (band selection by ACU)
Tracking Receiver Internal “all band/modulation type” and VSAT modem RSSI
Polarisation Linear Cross or Co-Pol (selected by ACU)
Elevation Range -25° to +125°
Azimuth Range Unlimited (Rotary Joint)
Ship motion, angular Roll +/- 30°, Pitch +/- 15°, Yaw +/- 10°
Ship, turning rate and acceleration 15°/S ² and 15°/S ²
ADU motion, linear Linear accelerations +/- 2.5 g max any direction
Satellite acquisition Automatic - w. Gyro/GPS Compass input
Vibration, operational Sme: IEC 945 (8.7.2), DNS A, MIL-STD-167-1 (5.1.3.3.5). Random: Maritime
Vibration, survival Sme: IEC 945 (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) Operational: -25°C to 55°C
Storage: -40°C to 85°C
Humidity 100%, condensing
Rain / IP class IEC 945 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 1.7 m / 67" to IEC 945
Maintenance, scheduled None (Tamb > 10 °C )
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

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"
Dimensions, Bulkhead Mount Stand-alone ACU
HxWxD: -3 x 25.5 x 27.8 cm
HxWxD: -1.67" x 10.0" x 10.9"
Weight, Rack Mount 4.5 kgs / 10 lbs.
Weight, Bulkhead Mount 2.7 kgs / 6 lbs.
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 IEC 945 Protected, 95% (non-condensing)
IP class IP20
Compass safe distance 0.1 m / 4" to IEC 945
Interfaces 1 x N-Connector for antenna RF Cable (50 Ohm) w. automatic cable loss compensation
2 x F-Connectors (75 Ω) for Rx / Tx to VSAT Modem
1 x Ethernet Data (VSAT Modem Control)
1 x RS-422 Data (VSAT Modem Control)
1 x RS-232 Data (VSAT Modem Control)
1 x NMEA 0183 (RS-422) and prepared for NMEA 2000 for Gyro/GPS Compass input
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 typical
Modem protocols (ABS) iDirect OpenAMIP and custom protocol
Comtech ROSS Open Antenna Management (ROAM)
ESS Satroaming
STM SatLink
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
Modem types supported iDirect INFINITI 5000 series
iDirect Evolution X5
Comtech CDM-570L/625L
Comtech CDM-570L with ROSS (ROAM)
Generic VSAT Modem
Gilat SkyEdge II
STM SatLink 2900

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