The SAILOR 900 Viasat Ka is an advanced 3-axis stabilized Ka-band antenna system and user terminal that is designed for high-speed maritime broadband services on Viasat and Eutelsat Ka-band satellite networks.

Built upon a combination of the proven design of the SAILOR 900 platform and the Viasat second generation broadband terminal, the SAILOR 900 Viasat Ka has created a new industry standard underpinned by ease-of-use, quick deployment ability, and reliable operation. The SAILOR 900 Viasat Ka range is constructed by Cobham SATCOM to the same high quality and high performance that has made SAILOR the industry benchmark for professional maritime communication equipment for more than 40 years.

Unprecedented ease-of-use
The SAILOR 900 Viasat Ka features a fully integrated Ka-band transmit/receive assembly in the ADU, mounted directly behind the reflector - eliminating the need for cable calibration, and extending separation distance between antenna and below deck equipment.

This level of integration provides an unprecedented level of user friendliness for a maritime Ka band terminal. In addition, advanced features such as Automatic Azimuth Calibration significantly reduce installation time further.

Enabling new levels of bandwidth at sea
The SAILOR 900 Viasat Ka delivers high capability, reliable services across North America, Central America, the Caribbean, and Europe – leaving you to enjoy the power of broadband for business applications, vessel operations and crew welfare without fear of interruption.

Integrated management and support system
When you install a SAILOR 900 Viasat Ka, you gain access to industry-leading customer service. Hardware support is provided by Cobham’s worldwide technical service centers. Service support is provided through the well established Viasat and Eutelsat Ka network support.
SAILOR® 900 VIASAT KA

Your All-in-One one-metre Ka-band antenna system and user terminal for high-speed maritime broadband services on Viasat 2 and Eutelsat Ka-Sat

**SYSTEM SPECIFICATIONS**

**Frequency band**
Ka-band: Rx:17.7 to 21.2 GHz, Tx: 27.5 to 31.0 GHz

**Reflector size**
103 cm / 40.6”

**Type approvals**
Viasat / Eutelsat

**Certification**
Compliant with CE 014/53 EU and FCC (part 15 and 25)

**System power supply range**
100-240 VAC, 50-60 Hz

**Total system power consumption**
200W typical, 410W peak

**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 M6M

**Shock**
MIL-STD-810F 516 (Proc. II)

**Temperature (ambient)**
Operational: -25°C to 55°C

**ANTENNA CABLE**
PIU to ADU cable
Single 50 Ω coax for communications and power

**ABOVE DECK UNIT (ADU)**

**Antenna type, pedestal**
3-axis stabilised tracking antenna with integrated GNSS (GPS, GLONASS, Beidou)

**Antenna type, reflector system**
Reflection/sub-reflector, ring focus

**Transmit Gain**
47.1 dBi typ. @ 29.5 GHz (excl. radome)

**Receive Gain**
43.8 dBi typ. @ 19.7 GHz (excl. radome)

**System G/T**
20.5 dBiK typ. @ 19.7 GHz, at 30° elevation and clear sky (incl. radome)

**Forward Link**
10 MSym/sec to 464 Msym/sec

**Return Link**
0.625 Msym/sec to 80 Msym/sec

**Tracking Receiver**
Modern RSSI

**Polarisation**
Circular Cross-Pol (RHCP, 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°/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 / IP56

**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**
1.4 m / 5’ 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

**Dimensions**
Height: H / 150 cm / 5’8”
Diameter: Ø 130 cm / 51.3”

**Weight**
126 kg / 276 lb

**ANTENNA CONTROL UNIT (ACU)**

**Dimensions**
1U 19” ACU
HxWxD: 4.4 x 48 x 33 cm
HxWxD: 1.75” x 19” x 13”

**Weight**
4.5 kg / 10 lb

**Humidity**
EN60945 Protected, 95% (non-condensing)

**IP class**
IP30

**Compass safe distance**
0.3m / 12” to EN60945

**Interfaces**
1 x N-Connector for PIU RF Cable (50 Ω)
2 x F-Connectors (75 Ω) (Not used)
1 x RS-422 (Not used)
1 x RS-232 (Not used)
1 x NMEA 0183 (RS-422 or RS-232) for Gyro/GPS Compass input (future NMEA2000)
1 x RJ-45 Ethernet (PIU modem communication)
3 x RJ-45 Ethernet (Not used)
1 x AC Power Input
1 x Grounding bolt

**Input power**
100 - 240 VAC, 200W typical, 410W peak

**Modem control**
Generic, Custom protocol

**User Interface**
Web MMI, OLED (red) 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

**pTRIA INTERFACE UNIT (PIU) SPECIFICATION**

**PIU Dimensions**
1U 19” Rack Mount
HxWxD: 4.4 x 48 x 33 cm
HxWxD: 1.75” x 19” x 13”

**Weight**
2.3 kg / 5.1 lb

**Humidity**
EN60945 Protected, 95% (non-condensing)

**IP class**
IP30

**Compass safe distance**
0.3m / 12” to EN60945

**Interfaces**
1 x N-Connector (50 Ω) for antenna RF cable
1 x N-Connector (50 Ω) ACU Comm. and Power
1 x RJ-45 Ethernet (ACU modem communication)
1 x RJ-45 Ethernet WAN Connector (Internet access)
1 x Reset toggle switch
1 x LED (Power and Status)

**Modem type**
Viasat (built-in to ADU)

**Temperature control**
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**For further information please contact:**
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