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 the Viasat 2 and Eutelsat Ka-Sat satellite networks.

It is built upon a design that comes directly from the SAILOR 900 Viasat Ka range of proven antenna systems, which 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 fully integrated electronics from Viasat including the newest mobile “pTRIA” and multimedia-over-coax. This level of integration provides an unprecedented level of user friendliness for a maritime Ka band terminal. The mpTRIA is a transmit/receive integrated assembly and VSAT modem, all in a compact package mounted directly in the antenna for best performance.

In addition to the Viasat-specific features, the system uses a single cable between antenna and below deck equipment for power and data. Advanced features such as Automatic Azimuth Calibration and Automatic Cable Calibration significantly reduce installation time further.

Enabling new levels of bandwidth at sea
The SAILOR 900 Viasat Ka delivers high-capability, reliable access to the Viasat 2 high throughput satellite services in North America and the Eutelsat KA-Sat services in Europe – leaving you to enjoy the power of broadband for business applications, vessel operations and crew welfare without fear of interruption.

Remote access and diagnostics
When you install a SAILOR 900 Viasat Ka, you get industry-leading customer service. In order to offer the best support to system integrators, SAILOR 900 Viasat Ka offers a number of features for remote access and remote diagnostics, including monthly statistics logging, SNMP traps, and Syslog functionality. These remote maintenance features are supported at every one of Cobham SATCOM’s worldwide network of technical service centres that spans every continent.
**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

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**SYSTEM SPECIFICATIONS**

- **Frequency band**: Ka-band (Viasat-2)
- **Reflector size**: 103 cm / 40.6"
- **Type approvals**: Viasat / Eutelsat
- **Certification**: Compliant with CE (2014/53 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, EN60723-3-6 M43
- **Shock**: MIL-STD-810F 516.5 (Proc. II)
- **Temperature (ambient)**: Operational: -25°C to 55°C, Storage: -40°C to 85°C

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**FREQUENCY BAND**

- **Rx**: 17.7 to 21.2 GHz
- **Tx**: 27.5 to 31.0 GHz

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**ANTENNA CABLE**

- **PIU to ADU cable**: Single 50 Ω coax for MoCA, modem and power

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**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 dB/K typ. @ 19.7 GHz, at 30° elevation and clear sky (incl. radome)
- **BUC**: Viasat mpTRIA
- **LNB**: Viasat mpTRIA
- **Tracking Receiver**: Viasat mpTRIA RSSI
- **Polariisation**: Circular Cross-Pol (RHCP, LHCP)
- **Elevation Range**: -25° to +125°
- **Cross Elevation**: +/-42°
- **Azimuth Range**: Unlimitted (Rotary joint)
- **Ship motion, angular**: Roll +/-30°, Pitch +/-15°, Yaw +/-10°
- **Ship, turning rate and acceleration**: 15 /5 and 15°/S
- **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 S05.4
- **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 log
- **Dimensions**: Height: H 150 cm / 59.1", Diameter: Ø 130 cm / 51.3"
- **Weight**: 126 kgs. / 276 lbs.

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**ANTENNA CONTROL UNIT (ACU)**

- **Dimensions**: 1U 19” ACU
- **Weight**: 45 kgs. / 100 lbs
- **Humidity**: EN60945 Protected, 95% (non-condensing)

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**IP class**

- **IP30**

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**Compass safe distance**

- **0.3m / 12” to EN60945**

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**Interfaces**

- **1 x N-Connector for PIU/RF Cable (50 Ω)**
  - w. automatic cable loss compensation
- **2 x F-Connectors (75 Ω)**
- **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 RI-45 Ethernet (Not used)**
- **1 x AC Power Input**
- **1 x Grounding bolt**

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**Input power**

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

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**Modem control**

- **Generic, Custom protocol**

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**User Interface**

- **Web MML, OLED (red) display, 5 pushbuttons, 3 discrete indicator LEDs and ON/OFF switch**

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**Temperature control**

- **Built-in fan**
- **Blocking zones**: Programmable, 8 zones with azimuth and elevation

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**pTRIA INTERFACE UNIT (PIU) SPECIFICATION**

<table>
<thead>
<tr>
<th>PIU Dimensions</th>
<th>1U 19” Rack Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>2.3 kgs. / 5.1 lbs.</td>
</tr>
<tr>
<td>Humidity</td>
<td>EN60945 Protected, 95% (non-condensing)</td>
</tr>
<tr>
<td>IP class</td>
<td>IP30</td>
</tr>
<tr>
<td>Compass safe distance</td>
<td>0.3m / 12” to EN60945</td>
</tr>
</tbody>
</table>

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**Interfaces**

- **1 x N-Connector (50) for antenna RF cable**
- **1 x N-Connector (50) ACU Comm. and Power**
- **1 x RI-45 Ethernet (ACU modern communication)**
- **1 x RI-45 Ethernet WAN Connector (Internet access)**
- **1 x Grounding bolt**
- **1 x Reset toggle switch**
- **1 x LED (Power and Status)**

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**Modern type**

- **Viasat (Built-in to ADU)**

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**Temperature control**

- **Built-in fan**

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For further information please contact: satcom.ohc@cobham.com

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**ANTENNA CONNECTORS**

<table>
<thead>
<tr>
<th>Interfaces</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x LED (Power and Status)</td>
<td>1 x RS-232 Data (VSAT Modem Control)</td>
</tr>
<tr>
<td>1 x RS-422 Data (VSAT Modem Control)</td>
<td>1 x RS-232 (Not used)</td>
</tr>
<tr>
<td>1 x N-Connector (50) ACU Comm. and Power</td>
<td>1 x AC Power Input</td>
</tr>
<tr>
<td>1 x RJ-45 Ethernet (PIU modem communication)</td>
<td>1 x Grounding bolt</td>
</tr>
<tr>
<td>1 x RJ-45 Ethernet WAN Connector (Internet access)</td>
<td>1 x Reset toggle switch</td>
</tr>
<tr>
<td>1 x AC Power Input</td>
<td>1 x Grounding bolt</td>
</tr>
</tbody>
</table>

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**PIU**

- **Dimensions**: Height: H 150 cm / 59.1", Diameter: Ø 130 cm / 51.3"
- **Weight**: 126 kgs. / 276 lbs.

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**For further information please contact:**

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