SAILOR® 600 VIASAT KA

Your superlight All-in-One antenna system and user terminal for high-speed maritime broadband services on Viasat and Eutelsat Ka-band satellite networks

Product Sheet

The SAILOR 600 Viasat Ka is an advanced superlight 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 superlight SAILOR 600 platform and the Viasat second generation broadband terminal, the SAILOR 600 Viasat Ka has created a new industry standard underpinned by ease-of-use, quick deployment ability, and reliable operation.

The SAILOR 600 Viasat Ka 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 600 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 600 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 600 Viasat Ka, you gain access to industry-leading customer service. Cobham’s worldwide technical service centres provide hardware support. Service support is provided through the well-established Viasat and Eutelsat Ka network support.
SAILOR® 600 VIASAT KA
Your All-in-One 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
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: 135W typical, 240W peak
Vibration, operational: Sine: EN60945 (B.7.2), DNV A, MIL-STD-167-1 (5.1.3.3.5), Random: Maritime
Vibration, survival: Sine: EN60945 (B.7.2) dwell, MIL-STD-167-1 (5.1.3.3.5) dwell, EN60721-3-6 class 6M3 mod. by EN60721-4-6
Shock: EN60721-3-6 class 6M3 mod. by EN60721-4-6
Temperature (ambient): Operational: -25°C to 55°C, Storage: -40°C to 85°C

ANTENNA CABLE

PIU to ADU cable: Single 50 Ω coax for MoCA, modem 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: 43.0 dBi typ. @ 29.5 GHz (incl. radome)
Receive Gain: 39.8 dBi typ. @ 19.7 GHz (incl. radome)
System G/T: 16.5 dBi/K typ. @ 19.7 GHz, at 30° elevation and clear sky (incl. radome)
Forward Link: 10 Msym/sec to 464 Msym/sec, Supports up to 100 Mbps accelerated TCP
Return Link: 0.625 Msym/sec to 80 Msym/sec, Supports up to 20 Mbps accelerated TCP
Tracking Receiver: Modern RSSI
Polarisation: Circular Cross-Pol (RHCP, LHCP)
Elevation Range: -28° to +120°
Cross Elevation: +/-42°
Azimuth Range: Unlimited (Rotary Joint)
Ship motion, angular: Roll +/-25° (6 sec), Pitch +/-15° (5 sec), Yaw +/-10° (8 sec)
Ship, turning rate and acceleration: Roll +/-5°/s and 15°/s, Pitch +/-5°/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 505.4
Compass safe distance: 0.3 m / 12” to EN60945

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 lbs.
Humidity: EN60945 Protected, 95% (non-condensing)
IP class: IP30
Compass safe distance: 1.0 m / 40” 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 (ACU modem communication), 1 x RJ-45 Ethernet (Internet access)
1 x Grounding bolt
1 x Reset toggle switch
1 x LED (Power and Status)
Modern type: Viasat (built-in to ADU)
Temperature control: Built-in fan

Built In Test: Power On Self Test, Person Activated Self Test and Continuous Monitoring w. error log
Dimensions: Height: H 91 cm / 36”, Diameter: D 82 cm / 32”
Weight: 37 Kg / 82 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: 43 kg / 95 lb
Humidity: EN60945 Protected, 95% (non-condensing)
IP Class: IP30

For further information please contact:
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