

SAILOR® 700 VSAT

A Total VSAT Solution



The SAILOR 700 VSAT takes a novel approach to simplify choosing and installing a VSAT system aboard a commercial vessel, which can be an expensive, time and labour intensive project. It is a straightforward, complete hardware and airtime solution, from a trusted supplier with a truly global distribution and service network.

SAILOR 700 VSAT makes the whole process of dealing with VSAT infinitely easier. It simplifies the procurement of advanced satcoms, whilst at the same time is a sophisticated, high quality hardware solution with inherent reliability and user friendly operation. Benefits range from reliable technology and easy installation through to lower costs and improved crew welfare:

- A Total Solution from one single supplier
- Cost effective hardware, installation, maintenance
- Airtime from the same hardware dealer
- Maximum international multi-region VSAT coverage
- Smaller and lighter than most common Ku-band VSAT antennas
- True broadband speeds at sea with fixed costs
- High quality and reliable simultaneous voice
- Affordable crew welfare for web access as well as call service

At just 70 cm, the SAILOR 700 VSAT antenna is smaller than the most common Ku-band VSAT antennae – by 85% in volume and

75% in weight (27kgs compared to up to 120kgs). This simple fact enables it to be a more cost-effective installation proposition whilst still providing lightning fast broadband internet, with data rates up to 2 Mbps shore-to-ship and 512 Kbps ship-to-shore.

State-of-the-art

The SAILOR 700 VSAT can be integrated with SAILOR FleetBroadband and Fleet solutions to ensure that a vessel can easily utilise the best connection wherever it is in the world. It is operated via a state-of-the-art web front-end and features automatic beam switching technology where the system will hand-over to the next satellite beam without user intervention. The small antenna which enables the simple installation also offers fully stabilized tracking and at the same time the rugged below deck hardware is easy to integrate to shipboard networks.

A total VSAT solution

The high technology behind the SAILOR 700 VSAT enables a wealth of real world benefits. The foundation for this is the small, lightweight antenna, which enables a significant reduction in hardware and installation costs, without compromising performance. However, by offering uniform airtime through a global network of dealers, the SAILOR 700 VSAT becomes the first true VSAT solution for commercial vessels.

Specifications

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|--------------------------------|--|
| VSAT band category | Ku-band |
| Technology | ViaSat's unique Code Reuse Multiple Access (CRMA) technology |
| Certification | Compliant with CE, R&TTE |
| Supported satellites and areas | AMC21 satellite at 125°W (Caribbean) AMC6 satellite at 72°W (Continental US) Telstar14 satellite at 63°W (North Atlantic) Atlantic Bird 2 satellite at 8°W (Europe & ME) GE23 satellite at 172°E (North Pacific) |
| Total System Power Consumption | 500 Watt Maximum |

Frequency Band

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|----|--------------------|
| Rx | 11.70 to 12.75 GHz |
| Tx | 14.00 to 14.50 GHz |

Recommended Antenna cables

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|--------------------------|---|
| Power Cable | 100 ft (30 m) supplied 150 ft (45m) optional |
| Data Cable | 100 ft (30 m) supplied 150 ft (45m) optional |
| RF Cables (2 pcs, Rx/Tx) | 15-50 ft (5-15 m): RG-11 50-100 ft (15-30 m): LMR-400-75 100-150 ft (30-45 m): LMR-600-75 Custom Cable: Maximum RF loss: < 6.5 dB / Maximum 1.5 DC Resistance |

Antenna Connectors

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| ADU | female F-Connectors for the RF cables |
| VMU | female F-Connectors for the RF cables |
| ACU | Terminal Block (supplied) for the power and data cable |

Services

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|--------------------------------|--|
| Service Options | Copper: 128/128 kbps Bronze: 256/128 kbps Silver: 512/256 kbps Gold: 1024/512 kbps Platinum: 2048/512 kbps |
| Service utilization principles | Data: Shared bandwidth, equivalent to traditional contention ratio of 8:1 Voice: Voice over IP (VoIP) Fax: Fax over IP (Optional) |
| Service charging principles | Data: Flat fee per month up to service plan limit, additional data paid per MB. Voice: Paid per minute Charges for service activation and change may apply |

Above Deck Unit (ADU)

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|---------------------------------|--|
| Antenna Type | Mechanically gyro-stabilized tracking antenna with integrated GPS |
| Gain | RX-band, min: 35.6 dBi |
| BUC Output Power | 4 Watt |
| LNB | Universal |
| Tracking sensor | Conical scan, two gyros, 3 accelerometers |
| Elevation Range | 5° to 80° |
| Azimuth Range | 720° rotation |
| Drive System | 2-axes plus skew |
| Ship motion | Meets full Inmarsat motion specifications |
| Satellite acquisition | Fully automatic |
| Operational, survival and shock | Meets or exceeds Inmarsat operational, survival and shock specifications |
| Temperature | Operational: -25°C to 55°C; Storage: -35°C to 70°C |
| Humidity | IEC 60945; up to 95% (non-condensing) |
| Rain | Precipitation rate of 100L/min, w/wind speeds up to 100 knots |
| Dimensions | Height x Diameter: 69,5 x 66,5 cm / 27,36" x 26,2" |
| Weight | 27,2 kg / 60 lbs |

Antenna Control Unit (ACU)

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|-----------------------------|---|
| Dimensions | 1.5U 19" Rack Mount, HxWxD (6,6x42,5x28,7)cm, 2.61"x16.75"x11.31" |
| Weight (ACU & VMU) | 6,8 kg / (15 lbs) |
| Temperature | Operational: 0°C to 55°C; Storage: -35°C to 70°C |
| Humidity | IEC 60945; up to 95% (non-condensing) |
| Interfaces | 1x Power & Data (ADU) 1x BUC 20V/2.5A Power output (VMU) 1x DB9 RS422 Data (VMU) 1x DB9 RS232 Maintenance Port |
| Input Power | 90-240 VAC, 3A max |
| Man Machine Interface (MMI) | LCD, four pushbuttons and LEDs |
| RF Radiation Hazard Zones | Programmable |

VSAT Modem Unit (VMU)

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|--------------------|--|
| Dimensions | 1.5U 19" Rack Mount, HxWxD (6,6x42,5x28,7)cm, 2.61"x16.75"x11.31" |
| Weight (ACU & VMU) | 6,8 kg / (15 lbs) |
| Temperature | Operational: 0°C to 55°C; Storage: -35°C to 70°C |
| Humidity | IEC 60945; up to 95% (non-condensing) |
| Interfaces | 1x female F-connector RxRF input 1x female F-connector TxRF output 1x BUC Power input (ACU) 1x RJ-45 Ethernet 100/10 (ACU) 1x DB9 RS422 Data (ACU) 1x RJ-45 Ethernet 100/10 LAN (CMU) |
| Input Power | 90-240 VAC, 2A max |

Subject to change without further notice.