

VIASAT DUAL-BAND SOLUTION

For light aircraft and military applications

Building off our successes in outfitting aircraft with our GAT-5530, a dual-band, airborne SATCOM terminal, Viasat is introducing a new, alternative dual-band solution for light aircraft and military applications. Having access to both Ku-band and Ka-band satellites opens doors for aircraft when traveling the globe. That's why we combined two of our mature, proven terminals to create a low SWaP dual-band solution. This solution pairs our Ku-band VMT-1220 terminal with our Ka-band GAT-5510 terminal to form a dual-band terminal that delivers an unrivaled connectivity experience.

Whether you are looking to outfit a brand-new aircraft with our dual-band solution or expand an existing VMT-1220 terminal, the new dual-band terminal is designed to deliver fast speeds globally. The high-capacity, dual-band solution continuously navigates between Ka- and Ku-band networks bringing an industry-leading SATCOM experience to aircraft.

How it works

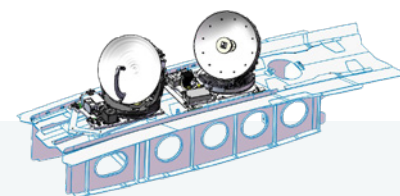
The solution shifts connectivity between Ka- and Ku-band networks as needed, creating a global, high-speed SATCOM experience. Capable of operating on full ITU Ka-band spectrum, our multi-band terminal achieves speeds up to 55 Mbps* FL and up to 12 Mbps* RL, enabling in-flight secure networking, VPN, VOIP, streaming media, and web browsing.

Forward compatible

Protect your investment. Viasat's Ka-band equipment will work with our enhanced satellite technology of tomorrow allowing you to accommodate the increased demand for speed, capacity and performance. This dual-band solution will be able to simultaneously operate over Ku- & Ka- satellite networks for enhanced throughput. In addition, the terminal is built to operate over ViaSat-3, a global satellite constellation that will offer 3 Tbps total capacity, for an even faster connectivity experience to aircraft traveling anywhere in the world.

Specifications

| ANTENNA SPECIFICATIONS | Ku-band (VMT-1220) | Ka-band (GAT-5510) |
|------------------------------|--|---|
| Class | Tail mount, parabolic reflector Tx/Rx airborne antenna | Tail mount, parabolic reflector TX/RX airborne antenna |
| Aperture | Cross-pol | Circular polarization, electronically switchable, all combinations of R, L, co-pol, or cross-pol |
| Transmit Frequency | 14.0 – 14.5 GHz | Full ITU Ka, 27.5 - 31.0 GHz |
| Receive Frequency | 10.95 – 12.75 GHz | Full ITU Ka, 17.7 to 21.2 GHz |
| EIRP | 42.5 dBW min. | 49.6 dBW |
| G/T | 9 dB/K min. | 10.6 dB/K |
| Coverage | <ul style="list-style-type: none"> > Elevation: 5° to 85° > Azimuth: 0° to 360° continuous | <ul style="list-style-type: none"> > Elevation: 0° to 90° > Azimuth: 0° to 360° |
| Swept Volume | Ø12.4 x 13.1 in.; Ø31.5 x 33.3 cm | Ø 12.5 x 13.1 in.; Ø 31.7 x 33.3 cm |
| Weight | 22 lb; 10 kg | 26.4 lb, 12 kg |
| Operating Temperature | -55°C to +70°C | -55°C to +70°C |



Viasat Dual-Band Solution At-a-Glance

- > Low SWaP, tail-mounted dual-band terminal
- > Enables access to Ku- and high-capacity Ka-band satellites
- > Supports the full ITU Ka-band spectrum
- > Up to 55 Mbps* shared forward link
- > Up to 12 Mbps* return link
- > DO-160 qualified antennas
- > ARSTRAT-certifiable antenna and modems
- > Flexible service plans with predictable monthly costs
- > 24/7 global technical support

COMPRISED OF

- > VR-12 Antenna, VMBR 1500 Modem/MBR 4020 Modem (VMT-1220)
- > G-12 Antenna and MBR-5502 Modem (GAT-5510)

Viasat Dual-Band Solution for light aircraft

| ANTENNA CONTROL UNIT (ACU) | Ku-band (VMT-1220) | Ka-band (GAT-5510) |
|------------------------------|---|--|
| Power Source | 28 VDC | |
| Power Consumption | 350 W max. | |
| Dimensions (LxWxH) | 11.0 x 8.0 x 3.4 in.; 28.0 x 20.3 x 8.6 cm | ACU is antenna mounted on the GAT-5510 |
| Weight | 5.5 lb; 2.9 kg | |
| Operating Temperature | -55°C to +70°C | |
| ANTENNA POWER SUPPLY (APSU) | | |
| Power Source | | 115 VAC, 400 Hz, single phase or 28 VDC |
| Power Consumption | | 377 W for 10 W SSPA mode, 432 W for 20 W SSPA mode |
| Dimensions (LxWxH) | ACU acts as the power supply for the VMT-1220LA | 10.8 x 8.0 x 3.3 in.; 27.4 x 20.3 x 8.4 cm |
| Weight | | 7.9 lb; 3.6 kg |
| Operating Temperature | | -55°C to +70°C |
| MODEM | | |
| Form Factor | ARINC 600 4 MCU or 19" 1U Rackmount | ARINC 600 4 MCU |
| Power Source | 28 VDC or 100 VAC to 240 VAC, 50/60 Hz | 115 VAC, 400 Hz, single phase or 28 VDC |
| Power Consumption | 130 W max. or 120 W max. | 175 W |
| Dimensions (LxWxH) | 4.6 x 4.9 x 7.7 in.; 37.1 x 12.4 x 19.6 cm or 17 x 13.75 x 1.72 in.; 43.18 x 34.93 x 4.37 cm | 14.6 x 4.9 x 7.6 in.; 37.0 x 12.5 x 19.4 cm |
| Weight | 10 lb; 4.5 kg or 9 lb; 4.08 kg | 17.0 lb; 7.7 kg |
| Operating Temperature | -20°C to +60°C | -40°C to +70°C |
| BASEBAND INTERFACES | | |
| Data | 10/100BASE-T Ethernet | 10/100BASE-T Ethernet |
| Console | RS-232 and Ethernet | RS-232 and Ethernet |
| Navigation Data | ARINC 429, RS-422 | ARINC 429, RS-422 |
| CERTIFICATIONS | | |
| | RTCA/DO-160G | RTCA/DO-160G ARSTRAT-certifiable |

*Actual data rates achieved on individual platforms are a function of the satellite, modem, mobile antenna, and subscription plan. Service pricing is dependent upon our SLA.

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