The Viasat Mobile Terminal 1820 (VMT-1820) is a complete airborne satellite communication terminal with an 18 in. antenna and lightweight equipment delivering broadband IP communications-on-the-move. With this mobile terminal and Viasat’s worldwide Ku-band network and broadband service, aircraft operators can send live, full-motion high-definition video over the horizon, make secure phone calls, conduct video conferences, access classified and public networks, and perform mission-critical communications while in flight.

Equipped with integrated technologies and robust waveforms, this terminal delivers streaming data rates up to 30* Mbps with a bandwidth-efficient 18 in. antenna. This terminal leverages in-vehicle equipment that has logged hundreds of thousands of flight hours on deployed government aircraft.

True broadband communications-on-the-move is a reality, and made affordable with Viasat’s VMT-1820 terminal and worldwide Ku-band satellite network.

**MOBILE BROADBAND COMMUNICATIONS FOR LIGHT AIRCRAFT**

- Live HD ISR Video from the Aircraft
- Office-in-the-Sky Connectivity for VIP Transport
- Enroute Video/Voice Conferencing

**AIRCRAFT MOBILE SATCOM AT-A-GLANCE**

**Secure High-Speed Communications**
- Protected IP traffic with optional HAIPE® Type 1 encryption
- Up to 30* Mbps streaming return link
- Up to 60* Mbps shared forward link

**FCC/ITU-Compliant**
- Authorized in over 100 countries
- Mitigates adjacent satellite interference with spread spectrum waveforms
- Optimized capacity with closed loop power control and advanced network management
- DO-160 qualified antenna, antenna control unit, and modem

**Flexible Design for Aircraft Requirements**
- 18 in. antenna mounts on fuselage of aircraft
- Flexible modem installation locations (near or far from antenna)
- Accurate satellite tracking in all mission phases with GPS-aided Inertial Reference Unit (IRU)
- 28 VDC or 120 VAC powered modem options

**Global Network & Services**
- Worldwide broadband SATCOM
- Optimized for mobile applications
- High-capacity regional and enroute coverage
- Annual service plans for predictable budget planning
- Technical support with tiered service levels
- Customizable service plans to meet your mission requirements
Viasat Mobile Terminal VMT-1820

SPECIFICATIONS

ANTENNA
- Class: Tail or fuselage mount, parabolic reflector Ku-band Tx/Rx airborne antenna
- Aperture: Parabolic reflector, linear horizontal or vertical polarization with tracking
- Transmit Frequency: 14.0 to 14.5 GHz
- Receive Frequency: 10.95 to 12.75 GHz
- EIRP: 46 dBW min.
- G/T: 12 dB/K min. for > 11.55 GHz
- RF Electronics: Integrated into antenna assembly
- Elevation coverage: 5° to 85°
- Azimuth coverage: 0° to 360° continuous
- Swept Volume (D x H): ø19.0 x 19.3 in.; ø48.3 x 49.0 cm
- Weight: 26.5 lb.; 12.0 kg
- Operating Temperature: -55 °C to +70 °C

ANTENNA CONTROL UNIT
- Power Source: 28 VDC
- Power Consumption: 350 W max.
- Dimensions (L x W x H): 11.0 x 8.0 x 3.4 in.; 28 x 20.3 x 8.6 cm
- Weight: 5.5 lb.; 2.5 kg
- Operating Temperature: -55 °C to +70 °C

BASEBAND INTERFACES
- Data: 10/100/1000*BASE-T Ethernet
- Console: RS-232 and Ethernet

MODEM OPTIONS
Model Number: VMBR-1500
- Form Factor: ARINC 600 4 MCU
- Power Source: 28 VDC
- Power Consumption: 130 W max.
- Dimensions (L x W x H): 14.6 x 4.9 x 7.7 in.; 37.1 x 12.4 x 19.6 cm
- Weight: 10 lb.; 4.5 kg
- Operating Temperature: -20 °C to +60 °C

Model Number: MBR-4020
- Form Factor: 19" 1U Rackmount
- Power Source: 100 VAC to 240 VAC, 50/60 Hz
- Power Consumption: 120 W max.
- Dimensions (L x W x H): 17 x 13.75 x 1.72 in.; 43.18 x 34.93 x 4.37 cm
- Weight: 9 lb.; 4.08 kg
- Operating Temperature: -30 °C to +60 °C

INERTIAL REFERENCE UNIT
- Power Source: 28 VDC
- Power Consumption: 21 W max.
- Dimensions (L x W x H): 7.5 x 7.5 x 6.0 in.; 19.0 x 19.0 x 15.2 cm
- Weight: 9.0 lb.; 4.1 kg
- Operating Temperature: -32 °C to +60 °C

OPTIONAL FEATURES
- Encryption: Type 1 HAIPE® (KG-250X) AES-256 FIPS 140-2
- Acceleration: TCP/IP Performance Enhancing Proxy
- Integrated Router/Video Compression: Multiple Options

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