

Small Footprint Terminal with 18 inch Antenna for High Data Rate Airborne Communications



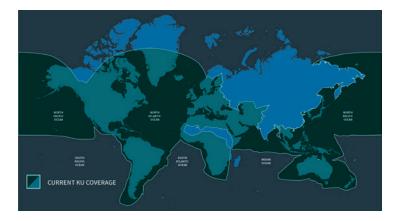
The Viasat Mobile Terminal 1820 (VMT-1820) is a complete airborne satellite communication terminal with an 18 in. antenna and lightweight equipment delivering broadband IP communications-on-the-move. With this mobile terminal and Viasat's worldwide Ku-band network and broadband service, aircraft operators 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

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 11 dB/K min. for < 11.55 GHz

RF Electronics Integrated into antenna assembly

5° to 85° **Elevation coverage**

0° to 360° continuous Azimuth coverage

Ø19.0 x 19.3 in.; Ø48.3 x 49.0 cm Swept Volume (D x H)

26.5 lb.; 12.0 kg Weight -55 °C to +70 °C **Operating Temperature**

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 5.5 lb.; 2.5 kg

» Weight » 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

-20 °C to +60 °C » Operating Temperature

Model Number: MBR-4020

» Form Factor 19" 1U Rackmount » Power Source 100 VAC to 240 VAC,

50/60 Hz

» Power Consumption 120 W max.

17 x 13.75 x 1.72 in.; » Dimensions (L x W x H) 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

28 VDC **Power Source 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 **Navigation Data Interface** ARINC 429

OPTIONAL FEATURES

Encryption Type 1 HAIPE® (KG-250X)

AES-256 FIPS 140-2

Acceleration TCP/IP Performance

Enhancing Proxy

Integrated Router/ Multiple Options Video Compression

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