# Light Aircraft Terminal VMT-1220LA

## Two-Way Broadband Ku or Ka SATCOM-on-the-Move

Small Footprint Terminal
for High Data Rate
Comms-on-the-Move

Arming mobile missions worldwide, the Viasat Mobile Terminal 1220 for light aircraft (VMT-1220LA) is a complete airborne satellite terminal with an ultra small 12 in. antenna and lightweight equipment delivering broadband IP communications-on-the-move. With this mobile terminal and Viasat's worldwide 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.

The terminal has logged hundreds of thousands of flight hours on deployed government aircraft such as the King Air, PC-12, De Havilland, and Caravan. The terminal is FAA and JITC certified for installation and secure network operation.

Equipped with integrated technologies and robust waveforms, this terminal has been proven in-theater to deliver streaming data rates up to 10 Mbps with a 12 in. antenna. True broadband communications-on-the-move is a reality, and made affordable with Viasat's VMT-1220LA terminal and worldwide satellite network.

## BROADBAND COMMS-ON-THE-MOVE FOR LIGHT AIRCRAFT MISSIONS

- Intelligence, Surveillance, Reconnaissance
- Command, Control, Communications (C3)
- VIP Transport
- Search and Rescue
- Electronic Warfare


## LIGHT AIRCRAFT MOBILE SATCOM AT-A-GLANCE

### Secure High-Speed Communications

- Field-proven 10 Mbps streaming return link
- 10 to 30 Mbps shared forward link
- Protected IP traffic with optional HAIPE® Type 1 encryption

### 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

- Antenna mounts on tail or fuselage of aircraft
- Flexible modem installation locations (near or far from antenna)
- Multiple radome options
- 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 at fixed monthly costs
- Technical support with tiered service levels

# Viasat Light Aircraft Terminal VMT-1220LA

## VMT-1220LA SPECIFICATIONS

| | Ku-band | Ka-band |
|---|---|---|
| **ANTENNA** | | |
| Class | Tail or fuselage mount, parabolic reflector Tx/Rx airborne antenna | |
| Aperture | Parabolic reflector; selectable linear horizontal or vertical polarization | Parabolic reflector; circular polarization, electronically switchable, cross-pol. |
| Transmit Frequency | 14.0 – 14.5 GHz | 29.5 – 31.0 GHz |
| Receive Frequency | 10.95 – 12.75 GHz | 19.7 – 21.2 GHz |
| EIRP | 42.5 dBW min. | 46.5 dBW min. |
| G/T | 9 dB/K min. for > 11.55 GHz<br>8 dB/K min. for < 11.55 GHz | 10.2 dB/K min. |
| RF Electronics | Integrated into antenna assembly | |
| Coverage | Elevation: 5° to 85°<br>Azimuth: 0° to 360° continuous | |
| Swept Volume | Ø12.4 x 13.1 in.; Ø31.5 x 33.3 cm | |
| Weight | 22 lb.; 10 kg | |
| Operating Temperature | -55 °C to +70 °C | |
| **ANTENNA CONTROL UNIT (ACU)** | | |
| Power Source | 28 VDC | |
| Power Consumption | 350 W max. | 235 W max. |
| Dimensions (LxWxH) | 11.0 x 8.0 x 3.4 in.; 28.0 x 20.3 x 8.6 cm | |
| Weight | 5.5 lb.; 2.5 kg | |
| Operating Temperature | -55 °C to +70 °C | |

### BASEBAND INTERFACES

| | |
|---|---|
| **Data** | 10/100BASE-T Ethernet |
| **Console** | RS-232 and Ethernet |

### MODEM

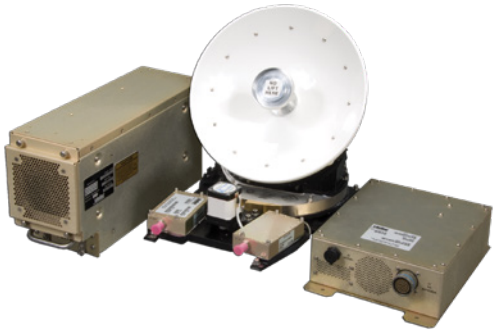
| | |
|---|---|
| **Form Factor** | ARINC 600 4 MCU |
| **Power Source** | 28 VDC |
| **Power Consumption** | 130 W maximum |
| **Dimensions (LxWxH)** | 14.6 x 4.9 x 7.7 in.;<br>37.1 x 12.4 x 19.6 cm |
| **Weight** | 10 lb.; 4.5 kg |
| **Operating Temperature** | -20 °C to +60 °C |

### INERTIAL REFERENCE UNIT

| | |
|---|---|
| **Power Source** | 28 VDC |
| **Power Consumption** | 21 W maximum |
| **Dimensions (LxWxH)** | 7.5 x 7.5 x 6.0 in.;<br>19.0 x 19.0 x 15.2 cm |
| **Weight** | 8.5 lb.; 3.9 kg |
| **Operating Temperature** | -32 °C to +60 °C |
| **Navigation Data Interface** | RS-422 |

### OPTIONAL FEATURES

| | |
|---|---|
| **Encryption** | Type 1 HAIPE® (KG-250X),<br>AES-256 FIPS 140-2 |
| **Acceleration** | TCP/IP Performance Enhancing Proxy |
| **Integrated Router/ Video Compression** | Multiple Options |



**SMALL FOOTPRINT 12 IN. ANTENNA, ACU, MODEM**

## CONTACT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