

Real-Time Video on
Hundreds of ISR Missions



Arming hundreds of mobile missions worldwide, the VMT-1220HM is a complete, self-contained airborne satellite terminal delivering high-speed IP communications-on-the-move. With the VMT-1220HM and ViaSat's Yonder® mobile broadband service, C-130 operators can send live, full-motion high-definition video over the horizon, make phone calls, conduct video conferences, access classified networks, and perform mission-critical communications while in flight.

For simple installation and rapid integration, the VMT-1220HM features a roll-on/roll-off design. The terminal can be quickly installed into a C-130 escape hatch while retaining use as an emergency exit. The terminal is JITC certified for installation and secure network operation.

Equipped with integrated technologies and robust waveforms, the VMT-1220HM has proven in-theater to deliver streaming data rates up to 4 Mbps with a 12" antenna, upgradable to 10 Mbps in early 2012. True broadband communications-on-the-move are a reality, and affordable with the VMT-1220HM and the Yonder worldwide network of satellites.

BROADBAND COMMS-ON-THE-MOVE FOR ANY C-130 MISSION

- » Intelligence, Surveillance, Reconnaissance
- » Command, Control, Communications (C3)
- » VIP Transport
- » Search & Rescue
- » Anti-Piracy
- » Electronic Warfare
- » Telemedicine
- » Aerial Refueling

C-130 MOBILE SATCOM AT-A-GLANCE

Secure High-Speed Communications

- » Field-proven 4 Mbps streaming return link (with 12" antenna), upgradable to 10 Mbps in early 2012
- » 10 to 30 Mbps shared forward link
- » Protected IP traffic with 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

Flexible Design for Aircraft Requirements

- » Roll-on/roll-off capability for use on different C-130 aircraft
- » Installed and ready-to-fly in 20 minutes or less
- » Accurate satellite tracking in all mission phases with Inertial Reference Unit (IRU)
- » Operates from aircraft or ground power
- » Integrated UPS allows seamless transition from aircraft or ground power
- » Airworthiness certified by USAF

Affordable and Scalable Services

- » Ku and Ka satcom operations, including Military and Commercial-Ka
- » Standard fixed-price monthly plans
- » Worldwide Yonder network with regional and global roaming options
- » Private in-theater networks available for specific mission charters
- » High-capacity coverage available over key regions including the Middle East, Southwest Asia, Europe, and the U.S.

C-130 Hatch-Mount Terminal VMT-1220HM

SPECIFICATIONS

	Ku-Band	Ka-Band (Preliminary)
Operating Frequency		
Transmit	14.0 – 14.5 GHz	29.5 – 31.0 GHz
Receive	11.55 – 12.75 GHz (optional 11.45 – 12.65 GHz)	19.7 – 21.2 GHz
Modulation and FEC		
Forward/Return Link	Network Optimized - Variable Coding, Spreading, and Modulation (VCSM)	
Spread Forward/Return Link	Variable to 150	
FEC	R = 1/3 Turbo	
Frequency Reuse	Paired Carrier Multiple Access (PCMA)	
Transmission Rates		
Forward/Return Link	128 Kbps to 4 Mbps	128 Kbps to 10 Mbps
RF/Tracking Performance		
EIRP	39.5 dBW minimum	46.5 dBW minimum
G/T	9 dB/K minimum	10.2 dB/K minimum
Polarization	Selectable horizontal/vertical linear polarization	Circular LH & RH
Coverage	Azimuth 360° Elevation 5° to 85°	
Tracking Rates	Azimuth 30°/s Elevation 20°/s Polarization 20°/s	Azimuth 30°/s Elevation 20°/s Circular Polarization
Tracking Acceleration	Azimuth 30°/s ² Elevation 30°/s ² Polarization 30°/s ²	Azimuth 30°/s ² Elevation 30°/s ² Circular Polarization

BASEBAND INTERFACES

Data 10/100BaseT Ethernet
Console RS-232 and Ethernet (via telnet)

OTHER FEATURES

Encryption Type 1 HAIPE (KG-250); AES-256 FIPS 140-2 optional
Acceleration TCP/IP Performance Enhancing Proxy
Router Cisco Systems 2811 router (red and black)

POWER

Input 120 Volts Single Phase AC 47-450Hz, max 950 W

ENVIRONMENTAL AND PHYSICAL

Operating Temp -55° to 65° C (hatch with antenna); 0° to 40° C (IRU and in-aircraft equipment)
Weight 44 lb (hatch with antenna); 12 lb (IRU with quick-release mount); 199 lb (in-aircraft equipment)
Size 24"H x 30" base diameter (hatch with antenna); 23"W x 20"H x 36"D (in-aircraft equipment)

MULTI-MISSION CAPABLE DESIGN



CONTACT

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