



# OFFICE-IN-THE-SKY SHIPSET FOR LARGE-CABIN AIRCRAFT

## High-Speed Internet Access From The Moment You Step Onboard



Equip your large-cabin business aircraft with the VMT-1500 airborne high-speed Internet system and get the in-flight experience you have been waiting for. Designed to operate with our Yonder® Mobile Broadband Service, the VMT-1500 system is the lightest,

smallest-footprint Ku-band mobile high-speed Internet shipset available. The system delivers typical connection speeds from 1 – 2 Mbps to the aircraft and 128 – 1024 Kbps from the aircraft, anywhere in our Yonder service area.

No other system has the capacity and proven technologies to offer the level of services we provide. ViaSat's patented Paired Carrier Multiple Access (PCMA) technology delivers efficient use of the satellite bandwidth. And the ViaSat-patented access technique called Code Reuse Multiple Access (CRMA) ensures that the small-aperture VMT-1500 terminal operates within FCC and ITU regulatory guidelines for adjacent satellite interference. The system operates daily on hundreds of business and military aircraft.

## Yonder High-Speed Internet Service for Business Aircraft

The VMT-1500 shipset equips your aircraft to utilize the ViaSat Yonder service for Internet performance on par

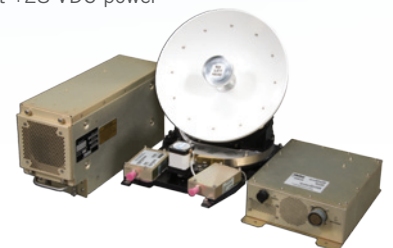
with cable modem and DSL services found in your office or home. From your laptop computer, wireless smart phone or PDA, you can:

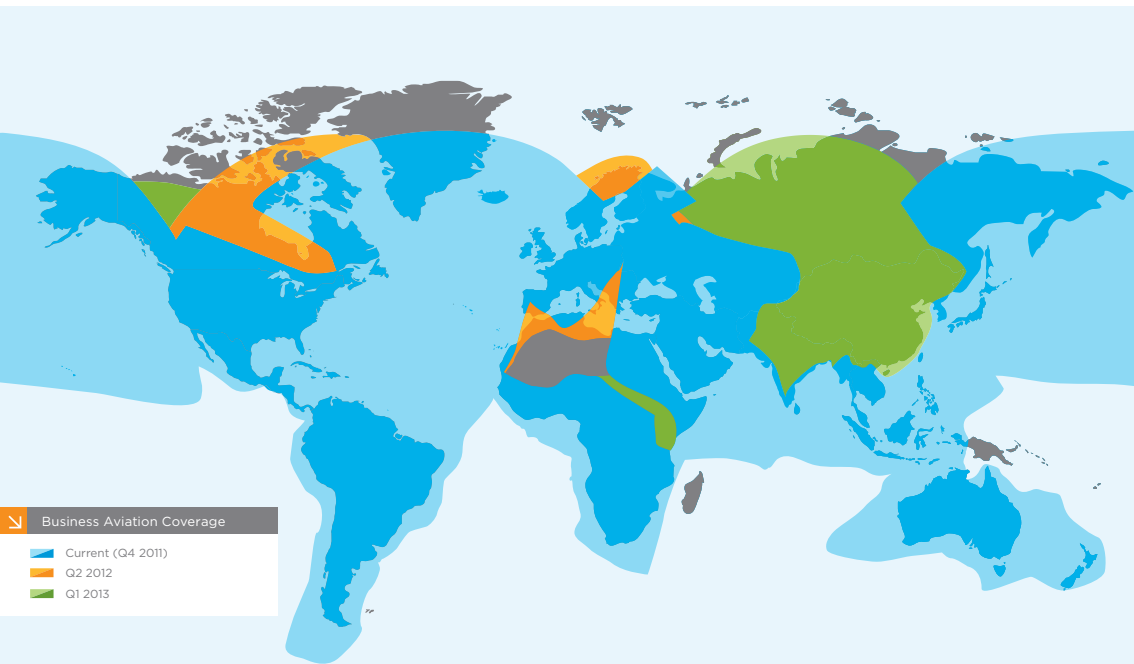
- » Browse the web, or send and receive email in real time
- » Access your company's network through a secure VPN
- » Place and receive phone calls just as you would on the ground
- » Conduct video conferences

When your aircraft is equipped with the VMT-1500 system and Yonder service, it's business as usual anywhere and anytime you are onboard.

## VMT-1500 AT-A-GLANCE

- » Affordable, always-on high-speed Internet access
- » Unsurpassed global service coverage
- » Supports Internet browsing, email transfers, VoIP telephony, VPN access, and more
- » Lightest, smallest-footprint Ku-band mobile terminal
- » Typical user speeds of 1 – 2 Mbps to the aircraft and 128 – 1024 Kbps from the aircraft
- » Antenna mounts permanently on tail of aircraft, with variable distance from antenna to modem to accommodate various aircraft
- » Operates from standard aircraft +28 VDC power
- » DO-160E certified
- » 24/7 hub network availability and monitoring





## Take a seat and stay connected **no matter what your flight plan**

No other mobile broadband service provider delivers more high-speed Internet coverage than ViaSat. Our partnership with KVH Industries ensures your coverage will extend to nearly every corner of the globe.

Yonder services are available anywhere you fly within the coverage of our network.

**YONDER**<sup>®</sup>

### SPECIFICATIONS\*

#### OPERATING FREQUENCIES

- › Transmit 14.0 to 14.5 GHz
- › Receive 11.55 to 12.75 GHz

#### TRANSMISSION RATES

- › Return Link Typical user speeds of 128 to 1024 kbps
- › Forward Link Typical user speeds of 1 to 2 Mbps

#### MODULATION, FEC and SPREADING

- › Forward Link Rx Spread BPSK/  
QPSK/8PSK/16APSK  
1/3 Turbo Code  
1/4, 1/3, 2/5, 1/2, 3/5, 2/3,  
3/4, 4/5, 5/6, 8/9, 9/10  
Low-density  
Parity-check (LDPC) Codes
- › Return Link Tx Spread GMSK  
1/3 Turbo Code
- › Spread Factors  $4 \leq k \leq 150$  (Ret Tx);  
 $1 \leq k \leq 23$  (Fw Rx)
- › Min. Required Eb/No 1.2 dB (Fw Rx);  
2.25 dB (Ret Tx)
- › Multiple Access TDM (Fw Rx);  
CRMA (Ret Tx)
- › Freq. Reuse Paired Carrier Multiple  
Access (PCMA)

#### RF/TRACKING PERFORMANCE

- › EIRP 39 dBW minimum
- › G/T 9 dB/K minimum
- › Polarization Selectable  
horizontal/vertical  
linear polarization
- › Coverage 360° azimuth;  
5° to 85° elevation
- › Tracking 30° per sec min;  
40° per sec<sup>2</sup> min

#### BASEBAND INTERFACES

- › Data 10/100BaseT Ethernet
- › Nav ARINC™ 429 input required
- › Voice RJ-11 (option)

#### OPTIONAL FEATURES

- › Acceleration TCP/HTTP Performance  
Enhancing Proxy
- › Telephony VoIP or POTS  
phone connections
- › Router Cisco Systems  
router/switch
- › Video Compression MPEG-4 Part 10  
(H.264) real-time  
streaming compression

#### ENVIRONMENTAL and PHYSICAL

- › Power Input +28 VDC,  
<275 W (w/o options)
- › Operation Temp -55° to +70° C  
(topside equipment);  
-20° to +60° C  
(in-aircraft equipment)
- › Aircraft Operations Stationary on the ramp,  
taxiing, and all flight modes  
from take-off to touchdown
- › Weight, Total System 32 lb

#### SUPPORTED AIRCRAFT

- › Gulfstream G IV, G V, G 450, G 550
- › Bombardier Challenger 604,  
Global Express, Global XRS,  
Global 5000
- › Boeing BBJ
- › Cessna Citation X

### CONTACT

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