

HYBRID SATCOM APPROACH (HSA)

Open standard multi-band, multi-network, and multi-orbit fully Automated - Primary, Alternate, Contingency, and Emergency (Auto-PACE) satellite communications solution

As the U.S. DoD adopts a hybrid architecture to its communications, delivering high-capacity global coverage with roaming across multiple frequencies and networks, satellites have become a critical requirement.

Viasat's Hybrid SATCOM Approach (HSA) is flight proven and meets the need to rapidly install BLOS capabilities on aircraft for near-term mission requirements.

Multi-Frequency, Multi-Network, Multi-Orbit Connectivity

- › Delivers flexible and resilient SATCOM solution that operates over commercial and military satellite constellations in GEO, MEO, HEO, and LEO orbits.
- › Designed around the GAT-5530 Ku- and Ka-band satellite terminal and leverages the ARINC-791 or ARINC-792 open standard in a modular installation configuration.
- › Can connect to L-, Ku-, and Ka-bands.

Features

MODULAR SATCOM

BLOS connectivity at Ku- and Ka-bands, with options to add Ku LEO, L-band, UHF, and MUOS

FLEXIBLE DESIGN FOR AIRCRAFT REQUIREMENTS

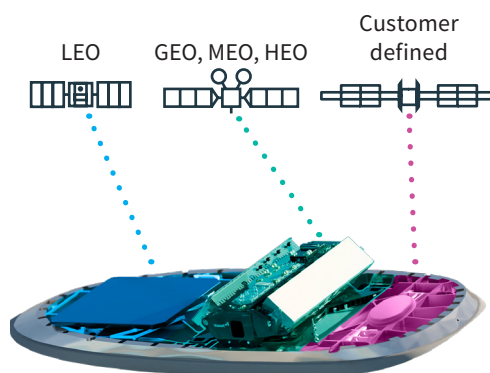
Rapidly move capability from platform to platform (B Kit) or line-fit install (A Kit)

Universal Roll-On/Roll-Off baseband kit can be used across aircrafts

GLOBAL COVERAGE AND SCALABLE SERVICES

Global high-capacity coverage with roaming across satellite frequency bands, networks and constellations, and satellite orbits

Fleet service plans allow BLOS subscriptions utilized across multiple aircraft and fleets



Zone 1: Flexible space for L-Band, MUOS, LOS, BLOS, and ancillary systems

Zone 2: Viasat's mechanically steered antenna, KuKarray

Zone 3: Flexible space for LEO Electronically Steered Array and other systems



Solution Overview

ARINC-791/792 Compliant Adapter Plate

- › Reduces cost for future technology through an open standard installation package

Radome

- › Transmits in Ku-, Ka-, L-Band, and UHF
- › DO-160G and MIL-STD-810G certified
- › Commercial and government SATCOM
- › Flexible space for LOS, BLOS, and ancillary systems
- › Mechanically steered KuKarray
- › Allowable zone for user selected LEO Electronically Steered Array

Universal Roll-On/Roll-Off (RO/RO) Kit

- › Available as a single Roll-On Roll-Off (RO/RO) kit, or as individual LRUs in rack mount, or ½ ATR form factors
- › Accommodates one external modem to enable roaming onto third party commercial or government satellite networks

Network Orchestration

- › Viasat's NetAgility™ is a flexible, virtual software-defined networking (vSDN) platform bridging disparate networks and distributed cloud resources
- › NetAgility™ enables Auto-PACE

Hybrid SATCOM Approach (HSA)

Specifications

GENERAL		TERMINAL	
RF Electronics	Integrated into antenna assembly	Class	Fuselage mount, 2nd generation medium profile dual Ku-/Ka-band Tx/Rx airborne antenna
Antenna Control	Integrated into antenna assembly	Aperture	Waveguide horn array; circular polarization, electronically switchable, cross- and co-pol
Elevation Coverage	0° to 90°	Ka-band	Frequency Full ITU Ka, Commercial and Military Tx: 27.5 GHz – 31.0 GHz Rx: 17.7 GHz – 21.2 GHz
Azimuth coverage	0° to 360° continuous		
Swept Volume (DxH)	39.3 x 11.3 in. / 99.7 x 28.7 cm.		
Weight	163.0 lb. / 73.9 kg.	EIRP	52.5 dBW (with radome)
Operating Temperature	-142 to +158°F / -61 °C to +70 °C	G/T	12.5 dB/K (with radome)
Polarization		Ku-band	Linear, cross- and co-pol electronic polarization tracking

UNIVERSAL RO/RO

Size (WxDxH)

24 x 40 x 18 in. / 61 x 102 x 46 cm.

Weight

195 lb. / 88.5 kg.

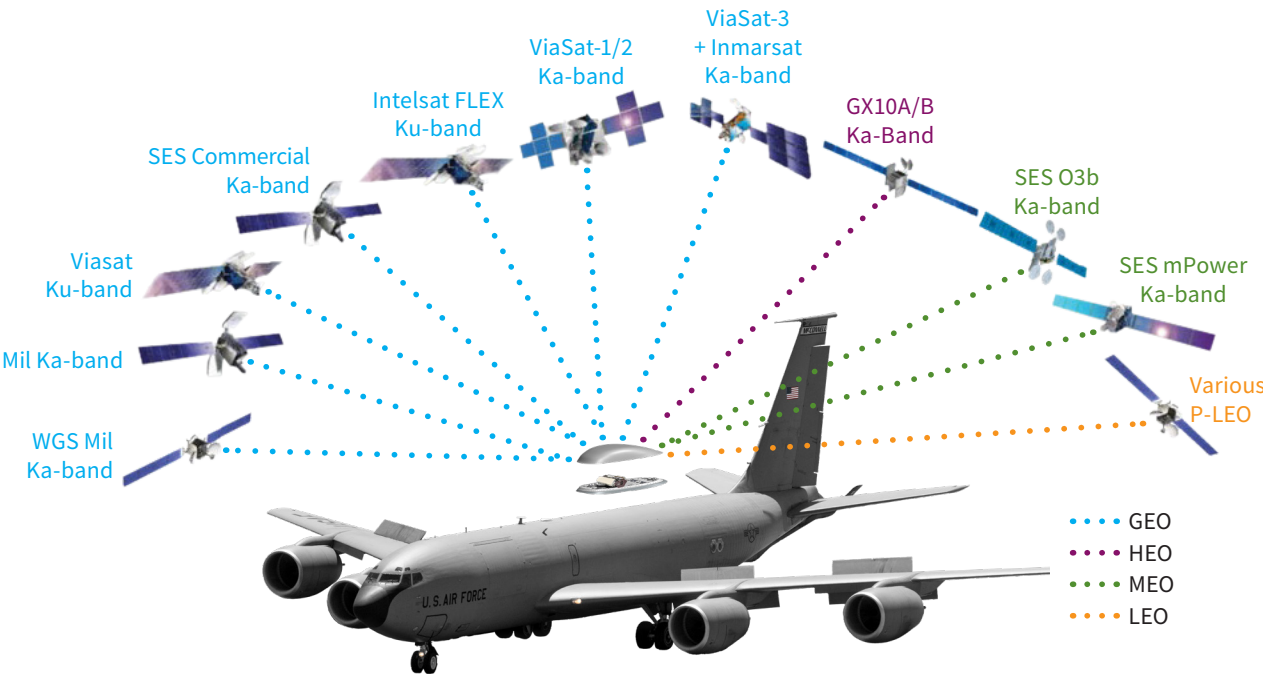
Power

1239W AC, 126W DC

Operating Temperature

-58 to +158°F / -55 to +70°C





Global headquarters
6155 El Camino Real, Carlsbad, CA 92009-1699, USA

U.S. Sales
TEL 888 842 7281 EMAIL insidesales@viasat.com WEB viasat.com/government

Copyright © 2025 Viasat, Inc. All rights reserved. Viasat, the Viasat logo and the Viasat Signal are registered trademarks in the U.S. and in other countries to Viasat, Inc. All other product or company names mentioned are used for identification purposes only and may be trademarks of their respective owners. Specifications and product availability are subject to change without notice.

