



KUSAT-2000 TAIL MOUNT BROADBAND INTERNET SATCOM SYSTEM

GLOBAL HIGH THROUGHPUT, SEAMLESS CONNECTIVITY

For ARINCDirectSM Ku-band HTS LuxStream service

The Collins KuSAT-2000 tail mount broadband internet SATCOM system readies an aircraft for ARINCDirectSM LuxStream, our Ku-band high-throughput satellite (HTS) service. LuxStream enhances the passenger experience for aircraft owners and operators by providing blazing fast and reliable in-flight satellite internet service around the world. And with flexible service subscription options and ARINCDirect data management tools, LuxStream is the right aircraft internet solution for almost any budget.

Designed for maximum performance using next-generation Ku-band HTS spot beams, the KuSAT-2000 integrates the next-generation modem required for HTS spot beam operation. This operation provides



minimum beam-to-beam switchover latency for a seamless user experience. The system is compatible with both Ku-band conventional wide-beam and next-generation spot beam satellites.

KEY FEATURES AND BENEFITS

- Minimized system weight and power usage
- Compatible with next-generation HTS spot beam and traditional wide-beam Ku-band satellites
- Keeps users connected, productive and entertained
- Global Ku-band satellite coverage
- Provides high-speed internet
- Satellite tracking design enables full continuous motion in azimuth and -0° to 90° motion in elevation
- Provides full reception performance during aircraft flight maneuvers, even at higher latitudes
- Fits under most tail Ku-band radomes
- Compatible with most existing aircraft routers

GENERAL SPECIFICATIONS

GAU aperture size	29 cm
EIRP	41.9 dBW (25 W PAU)
G/T (1500K Sky Temperature)	11.5 dB/K at 12.75 GHz
Receive frequency	10.7 GHz to 12.75 GHz
Transmit frequency	13.75 GHz to 14.5 GHz
Polarization	Linear Tx/dual pol Rx, dual pol circular Rx only
Cross polarization rejection	20 dB
Polarization control	45°± 105°
Field of view	Azimuth (continuous): 360° Elevation: +90° to -00°
Roll, pitch, heading rates of change	>12.0°/second
Roll, pitch, heading acceleration	>12.0°/second/second
Pointing accuracy	<0.2°

Weight

- GAU	23.5 lbs. (10.7 kg)
- ACMU	12.8 lbs. (5.8 kg)
- BUC	4 lbs. (1.81 kg)
- BDC	7 lbs. (3.175 kg)

Power

- GAU	Power supplied by ACMU
- ACMU	75 W typical
- BUC	Power supplied by BDC
- BDC	130 W typical

Operating temperature

- GAU	-55° C to 70° C
- ACMU	-40° C to 55° C
- BUC	-55° C to 70° C
- BDC	-40° C to 55° C

INPUTS

- Power: +28 VDC
- Control interface: Ethernet
- Navigation interface: ARINC 429
- Discrete interface: WOW, flap position

CERTIFICATION

- RTCA DO-160 and DO-178 compliant
- Design based on proven technology used on multiple aircraft types

INTEGRATED MODEMS

- iDirect Velocity CX780

LINE REPLACEABLE UNITS (LRUS)

- KuSAT 2000 system is composed of four aircraft LRUs:
 - Gimbal Antenna Unit (GAU)
 - Antenna Control & Modem Unit (ACMU)
 - Block Up Converter (BUC)
 - Block Down Converter (BDC)

**HARDWARE**

LuxStream KuSAT-2000 Tail Mounted SATCOM System Installation Manual

GAU Tail Mount Unit

ACMU

BDC

BUC

PART NUMBER

523-0829572

822-3658-001

822-3659-001

822-3662-001

822-3661-001

MOUNTING LOCATION

Vertical stabilizer

Pressurized cabin

Pressurized cabin

Vertical stabilizer

Specifications subject to change without notice.



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