

F-310

F-300 Series: Fuselage Mount Internet SATCOM System

High-Performance Connectivity System

- Optimized to take advantage of next generation High Throughput Satellite (HTS) spot beam technology.
- Enjoy seamless high-speed connectivity from the moment you step on board the aircraft to when you land at your destination.
- Browse the internet, send and receive emails, make calls using Voice-Over-IP (VoIP), access VPN services, conduct video conferences, enjoy your favorite work or entertainment applications.
- Provides global always-on broadband internet access.
- Highest performing Ku-band SATCOM antenna system critical for low angle satellite coverage while flying at higher latitudes.
- Use with laptops, tablets, and smart phones of your choice.

Robust Design

- ITU compliant Ku-band SATCOM antenna system.
- Satellite tracking design allows for full continuous motion in azimuth and -10° to +90° motion in elevation. Provides full reception performance during aircraft flight maneuvers, even at higher latitudes.
- Antenna is mounted externally to the aircraft under a protective radome enclosure.

Global Coverage

- With Ku-band satellite coverage, you can operate globally without settling for less.
- With Ku-band you can select from many different satellite operators. This provides flexibility and operational security.

 Compatible with both traditional wide-beam and next generation spot beam HTS satellite constellations.

KEY BENEFITS

- Keeps you connected, productive & entertained.
- Global operation even over water.
- Provides high-speed internet using wide beam and spot beam Ku-band satellites.
- Fits under the AeroShield® ARINC 791 radome and adapter plate system.
- Open-architecture: can operate over any Ku-band network when paired with compatible modem.





LRUs

F-310 system is composed of 3 aircraft LRU's:

- Antenna (Fuselage Mount Unit-FMU).
- 2. Antenna Control & Modem Unit (ACMU).
- 3. High Power Transceiver (HPT).

Radome

- The F-310 can be paired with the AeroShield ARINC 791 style Radome and Adapter Plate mounting system.
- AeroShield Radome provides optimized Kuband transmissivity and aerodynamics, reducing drag for fuel savings.
- AeroShield Radome is fully bird-strike compliant.

Integrated Modems

 Inquire for latest list of compatible modems.

Get Started Today

For additional details, please contact Astronics AeroSat.

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Inputs

Power: 115VAC, 400Hz

Control Interface: Ethernet

 Navigation Interface: ARINC 429

Certification

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

F-310 SPECIFICATIONS

Typical Performance

EIRP: 45.5 dBW (40W HPT)

G/T (25°K Sky Temperature): 11.7 dB/K @ 11.7 GHz

Receive Frequency: 10.7 GHz to 12.75 GHz

Transmit Frequency: 13.75 GHz to 14.5 GHz

Polarization:

Linear Orthogonal Tx/Rx

Cross Polarization Rejection: 20 dB

Polarization Control: $45^{\circ} \pm 110^{\circ}$

Field of View:

Azimuth (continuous): 360° Elevation: +90° to -10°

Roll, Pitch, Heading Rates of Change: 12.0° / Second

Pointing Accuracy: <0.2°

Roll, Pitch, Heading Acceleration: 12.0° / Second / Second

Weight:

FMU (Antenna): 64 Lbs (29 Kg). ACMU: 21 Lbs (9.5 Kg).

HPT: 19 Lbs (8.6 Kg).

Power:

ACMU: <150W Typical HPT (40W): 400W typical

Operating Temperature:

FMU: -55° to $+70^{\circ}$ C ACMU: -15° to $+55^{\circ}$ C HPT: -55° C to $+70^{\circ}$ C