



T-310

T-300 Series: Tail Mount Broadband Internet SATCOM System

High-Throughput Satellite (HTS) Ready

- The T-310 system was designed for maximum performance using next generation Ku-band HTS spot beams.
- The T-310 system contains the integrated next generation modem required for HTS spot beam operation providing minimum beam-to-beam switchover latency.
- Compatible with both Ku-band conventional wide-beam and next generation spot beam satellites.

High-Performance Connectivity System

- Enjoy seamless high-speed connectivity from takeoff to touchdown.
- 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.

- Stream your favorite internet TV channels (e.g. Hulu®, Netflix®).
- Use with laptops, tablets, and smart phones of your choice.

Robust Design

- Satellite tracking design allows for full continuous motion in azimuth and -0° to $+90^{\circ}$ 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 located on the aircraft tail.

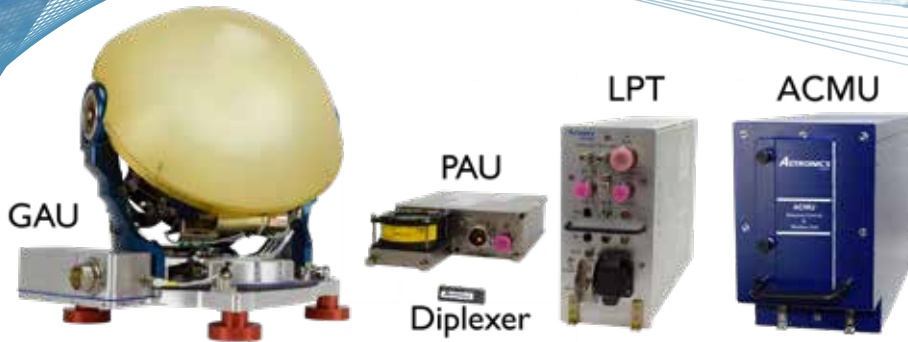
Global Coverage

- With Ku-band satellite coverage,

you can operate globally without settling for less.

KEY BENEFITS

- Compatible with next generation HTS spot beam and traditional wide beam Ku-band satellites.
- Keeps you connected, productive & entertained.
- Global operation even over water.
- Provides high-speed internet.
- Fits under most tail Ku-band radomes.
- Open-architecture: can operate over any Ku-band network when paired with compatible modem.



Inputs

- Power: +28 VDC
- Control Interface: [Ethernet](#)
- Navigation Interface: [ARINC 429](#)
- Discrete Interface: [WOW, Flap Position](#)

LRUs

T-310 system is composed of 5 aircraft LRU's:

1. Gimbal Antenna Unit (GAU).
2. Antenna Control & Modem Unit (ACMU).
3. Low Power Tranceiver (LPT).
4. Power Amplifier Unit (PAU).
5. Diplexer.

Get Started Today

For additional details, please contact Astronics AeroSat.

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Certification

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

Integrated Modems

- iDirect Velocity CX780.

T-310 SPECIFICATIONS

Typical Performance

GAU Aperture Size: 29cm
EIRP: 41.9 dBW (25W PAU)
G/T (150°K Sky Temperature): 11.5 dB/K @ 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 -0°

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

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

Pointing Accuracy: <0.2°

WEIGHT:

GAU (Antenna): 23.5 Lbs (10.7 Kg)
ACMU: 12.8 Lbs (5.8 Kg) (ARINC 600 - 4 MCU)
Diplexer: 0.2 Lbs (0.1 Kg)
LPT: 13 Lbs (5.9 Kg) (ARINC 600 - 3 MCU)
PAU: 8.6 Lbs (3.9 Kg)

POWER:

LPT: 400 Watts Typical
ACMU: 75W Typical

OPERATING TEMPERATURE:

GAU: -55° to +70° C
ACMU: -40° to +55° C
LPT: -40°C to +55°C
PAU: -40°C to +70°C
Diplexer: -55° to +70° C