

Technical Characteristics

Satellite Antenna Assembly (SAA)

- Precision horn array aperture with integrated feeding network
- Dual linear polarizations (co-pol or cross-pol), integrated diplexer architecture
- Two-axis pedestal

Transmit frequency	13.75-14.5 GHz
Receive frequency	10.7-12.75 GHz
Receive G/T	11.8 dB/K @ 11.7 GHz
Transmit EIRP	Up to 42.5 dBW (depending on service providing scheme and coverage)
Azimuth gain pattern	Complies with 47 CFR 25.209 up to geographic skew angles of at least ±35°
Azimuth EIRP spectral density pattern	Complies with 47 CFR 25.222
Pedestal positioning range	Elevation: 0° to +90°; Azimuth: 0-360° continuous
Tracking accuracy	<0.2°
Dimensions	8.0 x 32.0 inches (H x D, swept volume)
Weight	96 lbs

High Power Transceiver (HPT)

- Block up converter
- Block down converter
- High power amplifier
- Single chassis configuration

Transmit power	up to 25 Watts
Power	115 VAC, 380-800 Hz, <300W
Dimensions	2.5 x 17.5 x 13.6 inches (H x W x L)
Mounting	Inside fuselage



Antenna Control Unit (ACU)

- Interfaces with aircraft for navigation information
- Provides antenna positioning command and control
- Controls HPT

Power	115 VAC, 47-800 Hz, <150W
Dimensions	2.5 x 14.0 x 14.7 inches (H x W x L)
Mounting	Inside fuselage



System Specifications

Total system current requirements	6 Amps
Total system power requirements	700W
Mean Time Between Failure (MTBF)	30,000 hrs (SAA + ACU) 15,000 hrs (HPT)
Environmental Qualification	RTCA/DO-160 E