

UHF SATCOM Antenna

The 19-409 UHF SATCOM Antenna is a dual-usage antenna, operating in the 243 MHz - 270MHz and 293 MHz - 318 MHz frequency bands.

Originally designed as an airborne antenna (for installation on aircraft such as the US Navy EA-6B), it can also be used as a man-portable land based antenna.

The antenna comprises a glass reinforced plastic (GRP) radome bonded to an aluminium alloy cavity



ELECTRICAL

Frequency Range	243 MHz to 270 MHz 293 MHz to 318 MHz
Gain	≥ 3 dBiC at zenith (typical)
Polarisation	Predominantly RHCP
Radiation Pattern	Maximum radiation essentially orthogonal to the plane of the antenna
Power Rating	150W CW (maximum)
Impedance	50 ohm (nominal)
VSWR	≤ 2.0:1
Connector	TNC Female

MECHANICAL

Dimensions (LxWxH)	0.32m x 0.30m x 0.10m
Weight	2.273 kg

ENVIRONMENTAL

Altitude	MIL-STD-810 45,000 feet, storage and operational
Acceleration	13.5g all axes
High Temperature	MIL-STD-810 Storage: 95°C Operational: 71°C
Low Temperature	MIL-STD-810 Storage: -62°C Operational: -54°C
Shock	MIL-STD-810 Functional: 20 g, 11 ms, sawtooth Crash Hazard: 40 g, 11 ms, sawtooth
Vibration	MIL-STD-810E, Method 514.4, Procedure I, Category 5 ($W_0 = 0.2g^2/Hz$)
Temperature Shock	10°C per minute between operational limits
Humidity	Normal operation with relative humidity up to 95% at 55°C
Salt Fog	The antenna is not degraded by salt exposure up to 48 hours at 5% salinity
Magnetic Effect	The compass safe distance is no more than 300m

