

16-101

CHELTON

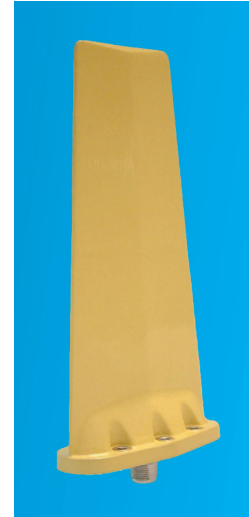
UHF Antenna

The 16-101 is a lightweight, broadband antenna, designed for the transmission and reception of communications and navigational signals in the frequency range 225 MHz to 400 MHz.

This UHF blade antenna is a solid, one-piece moulding of exceptional strength, capable of operating in the most severe military environments on aircraft operating up to Mach 2.5.

The antenna is of a symmetrical diamond shape section of upright form, tapered in both thickness and width throughout the stem section. A flanged base provides for a six bolt fixing to the airframe.

The surface deposited silver radiating element is protected by epoxy paint overcoated with a resilient polyurethane to ensure exceptional resistance to rain erosion.



ELECTRICAL

Frequency Range	225 MHz - 400 MHz
Gain	≥ -1 dBi
VSWR	≤ 2.0:1
Polarisation	Predominantly vertical (when mounted vertically)
Power Rating	Omnidirectional in azimuth (nominal)
Radiation Pattern	60 W CW (maximum)
Impedance	50 ohm (nominal)
Connector	N Type Female

MECHANICAL

Dimensions (LxWxH)	232 x 121 x 52 mm (maximum)
Weight	0.6 kg (maximum)
Mounting	6 holes fixed location



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ENVIRONMENTAL

Temperature	Storage:	-60°C to + 90°C
	Occasional Operational:	-60°C to +90°C
	Survival Range:	-60°C to + 135°C
Altitude	MIL-STD-810B, Method 504, Para 3.2, Proc I	
Temperature Shock	MIL-STD-810B, Method 503, Para 3.1, Proc I	
Vibration	MIL-STD-810B, Method 514, Para 4.6, Proc I	
Gunfire Vibration	MIL-STD-810B, Method 519.1, Proc I	
Acceleration	MIL-STD-810B, Method 513, Proc I	
	Fore:	3.0 g
	Aft:	11.8 g
Humidity	MIL-STD-810B, Method 507, Para 3.2, Proc II	
	MIL-STD-810B, Method 516, Para 3.4, Proc II	
Shock	MIL-STD-810B, Method 516, Para 3.4, Proc II	
Mould Growth	BS 2011, Pt 2.1 J	
Salt Mist	MIL-STD-810B, Method 509, Para 3.1	
External Contamination	DEF-STAN 133 Clause 14.3	
Dust and Sand	DEF-STAN 133, Para 10	
Magnetic Influence	BS 3G 100, Pt 2 Sect 2	
Static Load	2405 lb in	
Side Load Strength	1200 lb in (base bending moment unfactored)	
Solar Radiation	MIL-STD-810B, Method 505, Para 3.2, Proc II	

