

5000-9010

CHELTON

TacSAT Antenna (UFO and MUOS)

The 5000-9010 is a UHF, tactical satellite (TacSAT) antenna that operates over:

- Legacy UFO (UHF Follow-On) satellite frequencies 244 MHz to 318 MHz
- MUOS (Mobile User Objective System) satellite band 300 MHz to 380 MHz

This TacSAT antenna is designed for use on land vehicles, and can function effectively with or without a groundplane.

The 5000-9010 comprises an aluminium alloy baseplate fitted with blind mounting fasteners. A composite radome is fitted to the baseplate. The RF connector is mounted on the side of the radome and is partially protected.



ELECTRICAL

Frequency	244 MHz - 380 MHz
Gain	≥ +4 dBiC at zenith (typical +6 dBiC)
Polarisation	Predominantly right hand circular at zenith
Power Rating	200 W CW (maximum)
Impedance	50 ohm (nominal)
VSWR	< 2.0:1
Radiation Pattern	Maximum radiation essentially orthogonal to the plane of the antenna
Connector	N Type Female

MECHANICAL

Height	260 mm (maximum) (not including connector)
Diameter	345 mm (maximum))
Weight	3.0 kg (maximum)
Mounting	4 holes fixed location

ENVIRONMENTAL SPECIFICATION

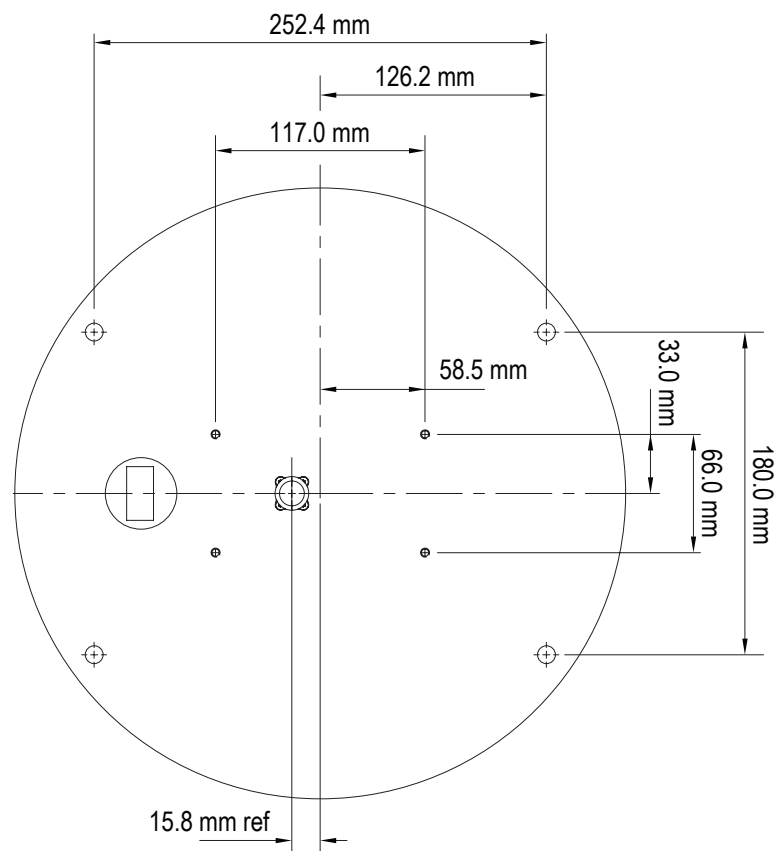
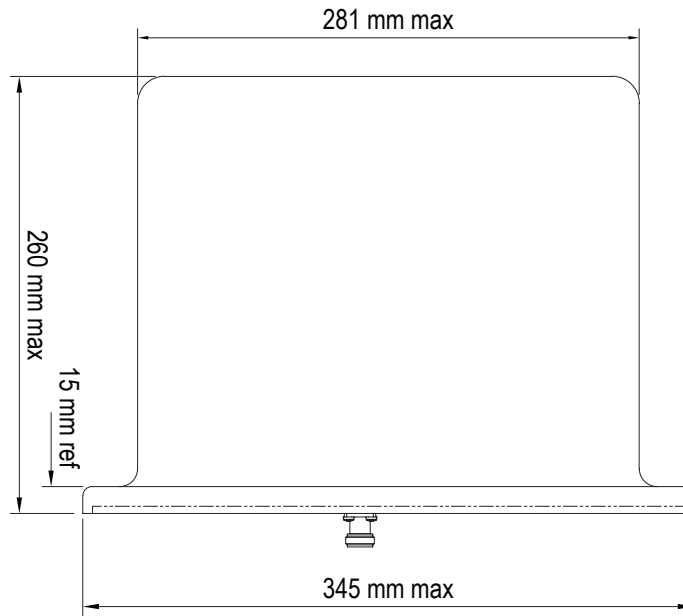
High Temperature	MIL-STD-810F, Method 501.4, Procedures I and II Operational: +71°C Storage: +71°C
Low Temperature	MIL-STD-810F, Method 502.4, Procedures I and II Operational: -40°C Storage: -40°C
Solar Radiation (Sunshine)	MIL-STD-810F, Method 505.4, Cycle A1 modified +55°C with 1120 Watt/metre ² solar radiation incident on the surface of the antenna
Salt Fog	MIL-STD-810F, Method 509.4
Sand and Dust	MIL-STD-810F, Method 510.4, Procedures I and II
Immersion	MIL-STD-810F, Method 512.4 Conditioning Temperature option a(1), immersion at a depth of 1 metre, for a period of 2 hours
Vibration	MIL-STD-810F, Method 514.5, Category 4, Procedure I modified Two wheeled trailer test, duration 64 minutes (64 miles) per axis
Shock	MIL-STD-810E, Method 516.4, Procedures I and V Functional: 20 g, 11 ms, sawtooth Crash Hazard: 40 g, 11 ms, sawtooth



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