

# TYPE 12-5006

# CHELTON

## V/UHF Tuneable Antenna

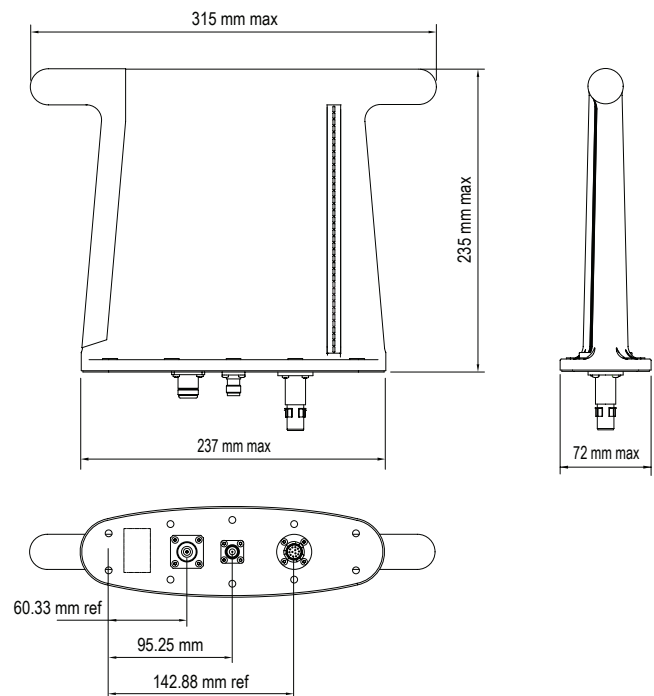
Chelton Antenna Systems' tuneable antennas provide radios with transmission and receiver capability in the V/UHF frequency bands. There is an ever increasing demand for continuous, resilient, secure communications over a wider bandwidth and greater range.

The 12-5006 operates at a power of 50 W to enable use with new high power radios. Low maintenance costs and a resilient antenna mean lower lifecycle costs.

The 12-5006 is a multiband tuneable antenna designed for use with radios operating in the VHF and UHF frequency bands.

The antenna is compatible with Chelton's range of logic units that are capable of providing an interface to current fast frequency-hopping radios and, as a system, is capable of meeting the tuning times with modes such as Havequick II and Saturn.

The 12-5006 comprises a pressure-moulded, composite radome of aerofoil section, which houses the electronic assembly, enclosed by an aluminium alloy baseplate that supports three connectors (two RF and one DC control).



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### ELECTRICAL

<b>Frequency</b>	30 MHz 960 MHz	- 600 MHz - 1220 MHz
<b>Gain</b>	> -14.5dBi > -5 dBi > -1 dBi > 0 dBi > 0 dBi	30 MHz - 88 MHz - 108 MHz - 174 MHz 225 MHz - 600 MHz 960 MHz - 1220 MHz
<b>VSWR</b>	> 2.5:1 > 3.0:1 > 2.5:1 > 2.5:1 > 2.0:1 > 1.8 dBi > 2.0:1	30 MHz - 30 MHz 88 MHz - 118 MHz 118 MHz - 174 MHz 225 MHz - 600 MHz 960 MHz - 1000 MHz 1000 MHz - 1100 MHz 1100 MHz - 1220 MHz
<b>Polarisation</b>	Predominantly vertical when mounted vertically	
<b>Power Handling</b>	50 cw max 50 cw max 50 cw max 1.5 kW peak 0.4% duty cycle	30 MHz - 88 MHz 118 MHz - 174 MHz 225 MHz - 600 MHz 960 MHz - 1220 MHz
<b>Connectors</b>	RF: N Female, TNC Female DC: D38999/49WB35PN	

### MECHANICAL

<b>Dimensions</b>	315 mm x 235 mm x 72 mm (maximum, not including connectors)
<b>Weight</b>	1.59 kg (maximum)
<b>Mounting</b>	10 holes fixed location

### ENVIRONMENTAL

<b>Temperature</b>	Operational: -54°C to +71°C Storage: -54°C to +85°C
<b>Altitude</b>	35,000 ft

### CERTIFICATION

MIL-STD-810G, MIL-STD-461, MIL-STD-464, RTCA DO-160G

