# 5000-9007

### **CHELTON**

### Low Profile UHF SATCOM Antenna

The 5000-9007 Low Profile UHF SATCOM Antenna operates in the frequency bands 240 MHz to 270 MHz and 290 MHz to 320 MHz.

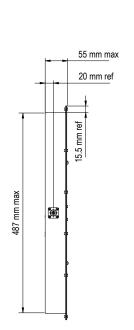
The antenna has been designed for use inside the roof or the boot of a standard commercial car or 4x4 vehicle.

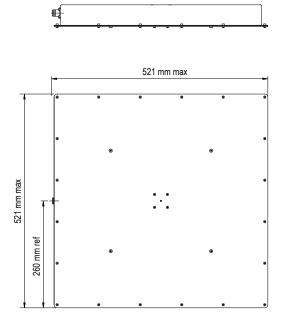
The 5000-9007 is configured as a pair of grounded, folded dipoles, fed in phase quadrature. This produces right hand circular polarisation (RHCP), with maximum gain at zenith.

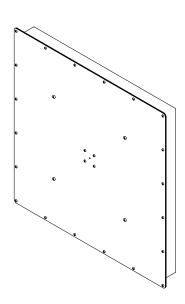
The antenna is designed to work both with, and without, a ground plane. The elevation



patterns are altered when a ground plane is introduced, and will increase the gain at the 240 MHz to 270 MHz band by up to 5 dB, with very little change in gain at the 290 MHz to 320 MHz band.







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#### **ELECTRICAL**

Frequency	240 MHz - 270 MHz
	290 MHz - 320 MHz
Gain	> 0 dBiC with maximum at zenith
Polarisation	RHCP
Radiation Pattern	Essentially omnidirectional in azimuth
Power Rating	25 W CW (maximum)
Impedance	50 ohm nominal
VSWR	< 2.0:1
Connectors	N Type Female

#### **MECHANICAL**

Dimensions	521 x 521 x 55 max
Weight	< 3.5 kg
Mounting Configuration	Magnetic mount or NATO 3/6 hole mount

#### **ENVIRONMENTAL**

High Temperature	MIL-STD-810G, Method 501.5, Procedures I and II Constant temperature exposure Operational: +55°C Storage: +71°C
Low Temperature	MIL-STD-810G, Method 502.5, Procedures I and II Operational: -40°C Storage: -54°C
	MIL-STD-810C, Method 516.2, Procedure I 15 g, 11 ms, sine
Vibration	MIL-STD-810G, Method 514.6 Proc I - General Vibration Annex C - Composite Wheeled Vehicle
Shock	MIL-STD-810G, Method 516.6 Proc I - Functional: 40 g / 11 ms Proc IV - Transit Drop