

# 5100-9005

# CHELTON

## 70W ECM Antenna

The 5100-9005 70W Electronic Counter Measures (ECM) Antenna is designed to combat the ever increasing threat from improvised explosive devices (IED).

The antenna consists of an Antenna Matching Unit (AMU) and a folding tubular whip radiating section. The AMU contains the antenna matching components and the mechanical adaptor interface between the jammer RF connector and the antenna.

The tubular whip section, which is made up of three articulated parts, is constructed from lightweight metallic material. The whip section is attached to the AMU via an M10 threaded stud. The wing nut style outer ensures speedy assembly of the unit.

The whip section also houses an electrical choke, to improve the full bandwidth gain on the horizon. A retaining strap is provided to secure the antenna in its collapsed state.



### ELECTRICAL

<b>Frequency Range</b>	20 MHz - 520 MHz
<b>Gain</b>	-23 dBi at 20 MHz -10 dBi average
<b>Power Rating</b>	70W CW (maximum)
<b>Input Impedance</b>	50 Ohm (nominal)
<b>VSWR</b>	< 3.5:1
<b>Polarisation</b>	Vertical when mounted vertically

### MECHANICAL

<b>Length</b>	1.2m overall (includes parts) 0.5m when collapsed
<b>Width</b>	70mm diameter (maximum)
<b>Weight</b>	370g

### ENVIRONMENTAL

<b>High Temperature</b>	MIL-STD-810F, Method 501.4 Procedure II - Operational: +55°C Procedure I - Storage: +70°C
<b>Low Temperature</b>	MIL-STD-810F, Method 502.4 Procedure II - Operational: -40°C Procedure I - Storage:- 40°C
<b>Solar Radiation</b>	MIL-STD-810F, Method 505.4 Cycle A1 modified, +55°C with 1120Watt/metre <sup>2</sup> solar radiation incident on the surface of the antenna
<b>Shock</b>	MIL-STD-810F, Method 516.5 Procedure I
<b>Immersion</b>	MIL-STD-810F, Method 512.4, Conditioning Temperature option a(1), immersion at a depth of 1 metre, for a period of 2 hours

