

# 3505-100

# CHELTON

## Wideband Manpack Antenna

The 3505-100 Wideband Manpack Antenna is suitable for software defined (SDR) radios for use in a network centric environment over the 225 MHz - 1000 MHz frequency band.

The antenna is of dipole design which means that it will operate efficiently without the need for a groundplane. The 3505-100 has a rigid tubular radome that covers the radiating element. This is supported by a flexible gooseneck that is terminated by a male N type connector.

The gooseneck allows the antenna to deflect under impact without causing damage to the antenna or radio. It can also be angled to ensure that the antenna is vertical when the user is in the prone position. Manufactured from stainless steel and glass reinforced plastic, the antenna is fully ruggedised for military use.



### ELECTRICAL

<b>Frequency Range</b>	225 MHz -1000 MHz
<b>Gain</b>	≥ -12.5 dBi
<b>Polarisation</b>	Vertical when mounted vertically
<b>Radiation Pattern</b>	Essentially omnidirectional in azimuth
<b>Power Rating</b>	32W CW (maximum)
<b>Impedance</b>	50 Ohm (nominal)
<b>VSWR</b>	≤ 3.0:1
<b>Connector</b>	N Type Male

### MECHANICAL

<b>Height</b>	0.56m
<b>Weight</b>	0.5kg
<b>Mounting Configuration</b>	Directly to radio bulkhead connector/ interface

### ENVIRONMENTAL

<b>High Temperature</b>	MIL-STD-810F, Method 501.4, Procedures I and II Procedure II -Operational: +70°C Procedure I -Storage: +85°C
<b>Low Temperature</b>	MIL-STD-810F, Method 502.4, Procedures I and II Procedure II -Operational: -40°C Procedure I -Storage: -55°C
<b>Humidity</b>	MIL-STD-810E, Method 507.3, Procedure III 95%
<b>Vibration</b>	MIL-STD-810E, Method 514.4, Category 8 Ground mobile
<b>Shock (Operational)</b>	MIL-STD-810F, Method 516.5, Procedure I Functional ground equipment

