# 1607-900

# CHELTON

### Band 1 Radio Relay Antenna

The 1607-900 Band 1 Radio Relay Antenna is suitable for tactical deployment operating over 225 MHz to 400 MHz frequency band (Band 1). In addition to its outstanding electrical performance, its main features are its lightweight rugged design, ease of use and low wind drag.

The design is based on a corner reflector, with a fully welded lightweight aluminium reflector and a dipole feed assembly. The antenna is linearly polarised, with two mounting spigots at the rear provided for either horizontal or vertical polarisation.

For ease of transportation and stowage, each reflector can be folded into a flat position, which also protects the feed.



#### MECHANICAL

Dimensione	Davidaviadi	000 1 450 577
Dimensions	Deployed:	823 x 1452 x 577mm
	Stowed:	814 x 973 x 249mm
Weight	8 kg	
Mounting Configuration	2 x 40 mm sockets at 90°	

#### **ELECTRICAL**

Frequency	225 MHz - 400 MHz
Gain	9.2 dBi (nominal)
Polarisation	Vertical or horizontal
Impedance	50 ohm (nominal)
VSWR	< 2.0:1
Azimuth Beamwidth	
Vertically Polarized	48° ± 8°
Horizontally Polarized	62° ± 5°(typical) (60°±5° at 400 MHz)
Co-polar Front to Back Ratio	> 20 dB (typical)
Power Rating	50 W (maximum)
Input Connector	Spinner 4-11 Socket

Chelton Limited has a policy of continuous development and stress that the information provided is a guide only and does not constitute an offer or contract or part thereof. Whilst every effort is made to ensure the accuracy of the information contained in this Data Sheet, no responsibility can be accepted for any errors or omissions.

The copyright of antenna designs and images is copyright protected and owned by Chelton Limited. ©Chelton Limited. The Chelton Centre, Fourth Avenue, Marlow, Buckinghamshire, SL7 1TF, UK T: +44 (0)1628 472072 E: info@chelton.com W:chelton.com

# 1607-900

## CHELTON

## Band 1 Radio Relay Antenna

#### **ENVIRONMENTAL**

High Temperature	MIL-STD-810F, Method 501.2, Procedures I and II	
	Operational: +85°C	
	Storage: +85°C	
Low Temperature	MIL-STD-810F, Method 502.4, Procedures I and II	
•	Operational: -40°C	
	Storage: -40°C	
Driving Rain	BS EN 60068-2-18 BS 2011 Part 2.1 Test R	
Shock	MIL-STD-810F, Method 516.5, Procedure IV Drop height: 1.22 m To remain fully operational over 90% of frequency band	
Vibration (Restrained Cargo)	MIL-STD-810F, Method 514.5, Procedure I, Fig. 514.5C-2 as 3 axis duration 6 hours/axis	
Wind Loading (kgf/m <sup>2</sup> )	457.5 N at wind speed of 45 m/s	
Drop Test	Special Spigot Assembly and 'D' Shackle	





DEPLOYED





Chelton Limited has a policy of continuous development and stress that the information provided is a guide only and does not constitute an offer or contract or part thereof. Whilst every effort is made to ensure the accuracy of the information contained in this Data Sheet, no responsibility can be accepted for any errors or omissions. The copyright of antenna designs and images is copyright protected and owned by Chelton Limited. ©Chelton Limited.

The Chelton Centre, Fourth Avenue, Marlow Buckinghamshire, SL7 1TF, UK T: +44 (0)1628 472072 E: info@chelton.com W:chelton.com