

1623-900

CHELTON

Band 4 Radio Relay Antenna

The 1623-900 Band 4 Radio Relay Antenna is designed for point-to-point radio relay communications in the 4.4 GHz to 5.0 GHz band (Band 4) and 5.725 GHz to 5.850 GHz ISM (Industrial, Scientific and Medical) band.

It maintains excellent performance over the full frequency range, with a front to back ratio of better than 31 dB, and excellent sidelobe control.

Polarisation is achieved by mounting the antenna using one of two 40 mm sockets on the rear of the antenna. When mounted on a telescopic mast it provides a low profile both physically and electrically.

The 0.8 m diameter, aluminium reflector has an integral mounting plate and a quick-release fitting to connect the feed. Its robust, lightweight design is ideally suited to harsh military environments



Part Number	Colour	Connector
1623-900-01	NATO IRR Green	N-Type Female
1623-900-02	NATO IRR Green	Spinner 4-11 Socket
1623-900-03	Sand	N-Type Female
1623-900-04	Sand	Spinner 4-11 Socket
1623-900-05	CARC	N-Type Female
1623-900-06	CARC	Spinner 4-11 Socket



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ELECTRICAL

Valid over range -20°C to +55°C

Frequency	4.400 GHz - 5.000 GHz 5.725 GHz - 5.850 GHz
Impedance	50 ohm (nominal)
VSWR	< 1.5:1 over frequency range
Polarisation	Vertical or horizontal
Gain	≥ 26 dBi over frequency range
Azimuth Beamwidth	5°± 1° (vertically or horizontally polarized) (typical)
Co-polar Front to Back Ratio	> 35 dB vertical polarization > 31 dB horizontal polarization
Power Rating	20 W (maximum)
Connector	N-Type Female or Spinner 4-11 Socket

MECHANICAL

Dimensions (mm)	786 x 786 x 436.5 (maximum)
Weight (kg)	7 (maximum)
Mounting	2 x 40 mm sockets at 90

ENVIRONMENTAL

High Temperature	DEF-STAN 00-35, Part 3, Test CL2, Procedure B Operational: +55°C Storage: +85°C
Low Temperature	DEF-STAN 00-35, Part 3, Test CL4, Procedures A and B Operational: -20°C Storage: -40°C
Driving Rain	DEF-STAN 00-35, Part 3, Test CL27
Immersion	DEF-STAN 00-35, Part 3, Test CL29, Procedure A, depth B
Sand and Dust	DEF-STAN 00-35, Part 3, Test CL25
Shock	DEF-STAN 00-35, Part 3, Test M3
Vibration	DEF-STAN 00-35, Part 3, Test M1, para 5.2
Bump	DEF-STAN 00-35, Part 3, Test M12
Wind Loading (kgf/m²)	863 N at wind speed of 45 m/s

