Type 1607-900

Band 1 Radio Relay Antenna
225 MHz - 400 MHz

1607-900-DS Issue 1

The most important thing we build is trust

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.

Electrical Specification

Frequency	225 MHz - 400 MHz
Impedance	50 ohm (nominal)
VSWR	< 2.0:1
Polarisation	Vertical or horizontal
Gain	9.2 dBi (nominal)
Azimuth Beamwidth Vertically Polarized Horizontally Polarized	 48° ± 8° 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

Mechanical Specification

Dimensions (mm)	Deployed: 823 x 1452 x 577 Stowed: 814 x 973 x 249
Weight (kg)	8
Mounting	2 x 40 mm sockets at 90°

Environmental Specification

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^2)	457.5 N at wind speed of 45 m/s
Drop Test	Special Spigot Assembly and 'D' Shackle

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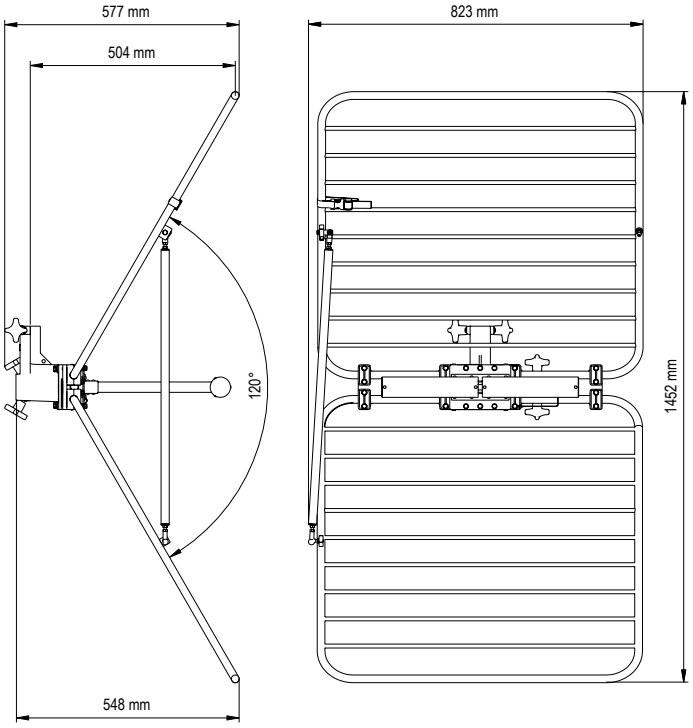
DEPLOYED



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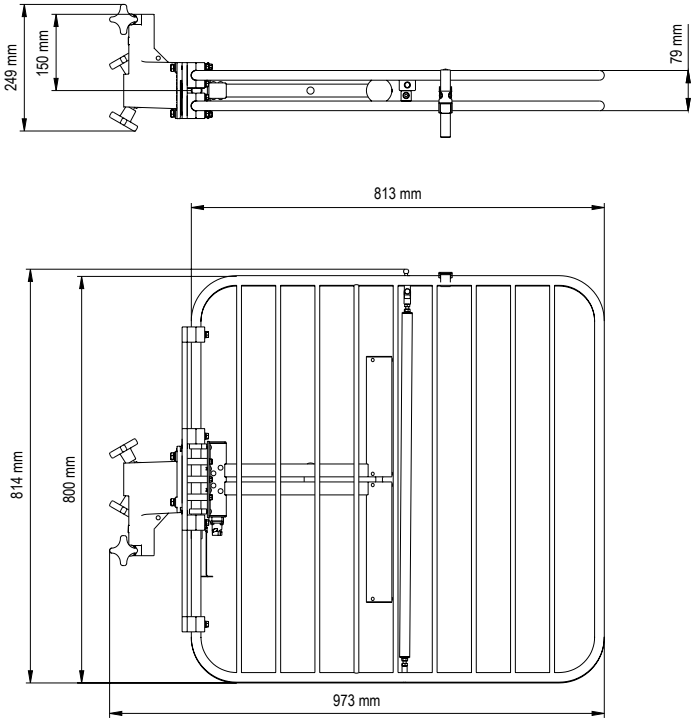

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