

Manpack Tape Antenna

The 3515-100-100 Manpack Tape Antenna has been designed for handheld radio applications, and operates in the 30 MHz to 88 MHz frequency band.

This type of antenna is more suited for combat conditions where physical restriction on operator and radio is undesirable. The antenna is constructed from a number of stainless steel tape elements, sheathed in a protective durable sleeve.

The tape antenna is supplied with an Antenna Matching Unit (AMU) optimised over the full operating band. The radio interface end of the AMU can be tailored to the radio manufacturer's bulkhead interface.



ELECTRICAL

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| Note: | The electrical performance is valid from -20°C to +50°C. Figures apply for the antenna when held by a man and mounted on a handheld radio |
| Frequency Range | 30 MHz - 88 MHz |
| Gain | -22 dBi minimum at 30 MHz, rising to -16 dBi minimum at 88 MHz Over 360° azimuth rotation at 0° elevation with antenna approximately vertical |
| Polarisation | Vertical when mounted vertically |
| Radiation Pattern | Essentially omnidirectional in azimuth |
| Power Rating | 5 W CW (maximum) at 50°C |
| Impedance | 50 Ohm (nominal) |
| Connector | TNC Male |

MECHANICAL

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| Height | 600 mm |
| Diameter of Base | 22 mm |
| Mounting Configuration | Directly to radio bulkhead connector/ interface |

ENVIRONMENTAL

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| High Temperature | MIL-STD-810F, Method 501.4, Procedures I and II modified Procedure II-Operational: +50°C Procedure I-Storage (continuous): +70°C |
| Low Temperature | MIL-STD-810F, Method 502.4, Procedures I and II modified Procedure II-Operational: -20°C Procedure I-Storage: -40°C |
| Solar Radiation (Sunshine) | MIL-STD-810F, Method 505.4, Cycle A1 modified +50°C with 1120 W/m ² solar radiation incident on the surface of the antenna |
| Immersion | MIL-STD-810F, Method 512.4, Temperature option a(1) Depth of 1 m for 2 hours |
| Shock | MIL-STD-810F, Method 516.5, Procedure I |

