

Manpack Wireless High-Power Antenna

850 – 2500 MHz

Product Code: OMNI-A0140

VERSION: 2.7

SPECIFICATIONS:



Electrical:	
Frequency range	850 – 960 MHz; 1700 – 2500 MHz
Operational	850 – 960 MHz; 1700 – 2500 MHz
Out-of-band estimate	See graphs
Gain	3 – 4 dBi typical (in band)
Azimuth pattern	Omni, 3 dB ripple
Elevation pattern	Narrow beam
Polarisation	Vertical
Nominal impedance	50 Ω
VSWR	< 2.5:1 or better
Power handling:	
850 – 2200 MHz	70 W CW
2200 – 2500 MHz	50 W CW
Connector	N-type male at base
Groundplane requirements	Groundplane independent
Mechanical:	
Dimensions (l x d)	650 mm x 35 mm
Total mass	0.4 kg
Mounting	On N-type connector at base
Colour	Black, others on request
Environmental: designed to meet the following specifications	
Temperature range	Storage: -41 °C to +71 °C Operation -31 °C to +55 °C
Weatherproofing	IP66 water resistant (when mounted on a connector)
Shock and vibration	MIL-STD-810E 516.4: Vibration category 8, shock 40 g
Exposed materials	Painted fibreglass Powder-coated aluminium

PRODUCT FEATURES:

- High gain communications high-power antenna
- Covers all handheld wireless bands
- Proven flexible base spring protects the antenna

PRODUCT OVERVIEW:

This banded antenna is for interception of wireless communications. It is mounted on an N-type connector base, with a spring for shock absorption and flexibility. A glass-fibre tube contains the antenna RF board.

The array covers the GSM 900, PCS, UMTS/3G and WLAN bands. Full-specification coverage starts at 850 MHz, but there will be reduced performance down to 500 MHz. A 2-stack array of multi-band dipoles is used to provide gain at these frequencies, with a small down tilt to improve close-in coverage.

The lowest feed point is elevated about 250 mm from the base of the antenna, allowing the signal to be radiated over the user's head. This reduces absorbed power and increases field strength at the target.

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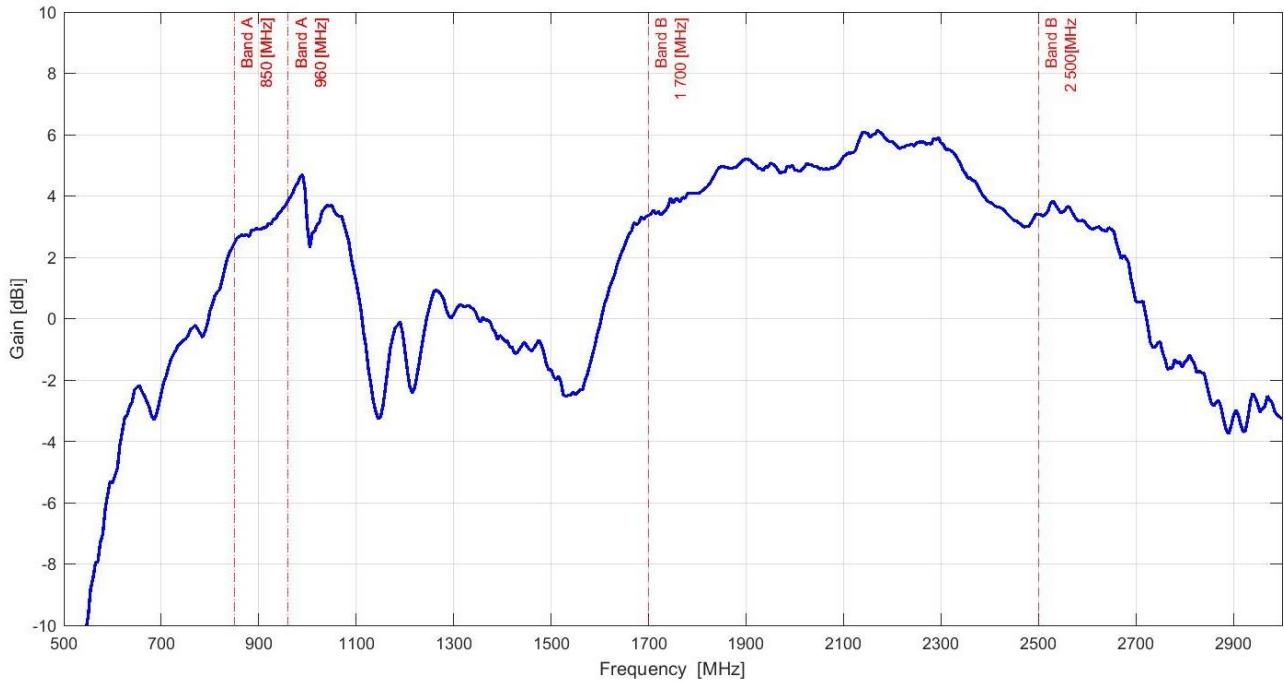
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Measured in-band and estimated out-of-band VSWR and gain graphs:

Typical in-band and estimated out-of-band gain:



Typical in-band and estimated out-of-band VSWR:

