

# VHF Monitoring Antenna

20 – 520 MHz

Product Code: OMNI-A0155

VERSION: 1.1

## SPECIFICATIONS:

<b>Electrical:</b>	
Frequency range	20 – 520 MHz
Gain	See graph
VSWR	< 3:1, typical 2.5:1
Nominal impedance	50 Ω
Azimuth pattern	Omni-directional
Power handling	20 W CW
DC resistance	Short circuit
Connector	N-type female
<b>Mechanical:</b>	
Dimensions of base (L x D)	200 mm x 60 mm
Dimensions of radiator (L x D)	1300 mm x 35 mm max
Dimensions of radials (L x D)	1600 mm x 5 mm
Total length	1600 mm
Total diameter	3000 mm
Total mass	3 kg
Mounting	Mast mount flange (40 – 100 mm)
Colour	Black, others on request
<b>Environmental:</b>	
Temperature range	Storage: -30 °C to +70 °C Operation -30 °C to +55 °C
Weatherproofing	IP66 rain resistant
Shock and vibration	MIL-STD-810E 516.4: vibration category 8, shock 40 g
Exposed materials	Painted aluminium and fibreglass



## PRODUCT FEATURES:

- High efficiency VHF antenna
- Full-band coverage, takes the place of 2 regular antennas
- Ground plane independent

## APPLICATION AREAS:

- Jamming systems
- Wideband monitoring

## PRODUCT OVERVIEW:

This wideband manpack antenna covers the full VHF band with some extension to 20 MHz and 520 MHz. By covering the full VHF band in 1 antenna, it replaces 2 conventional jamming antennas, reducing clutter and the visual signature.

The matching section at the base of the antenna contains transformers and loading for the whip. This is mounted directly onto an L-shaped mounting bracket and an N-type connector. The whip extends from the top of the matching section. The radiating whip is loaded along its length to control the antenna radiation patterns.

The antenna comes with 5 radials, 1.6 m in length that connect into the base of the antenna. These radials make the antenna ground plane independent without compromising on electrical performance.

# VHF Monitoring Antenna

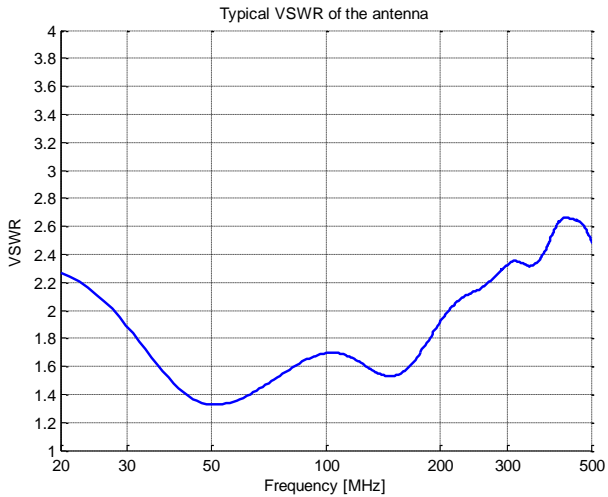
20 – 520 MHz

Product Code: OMNI-A0155

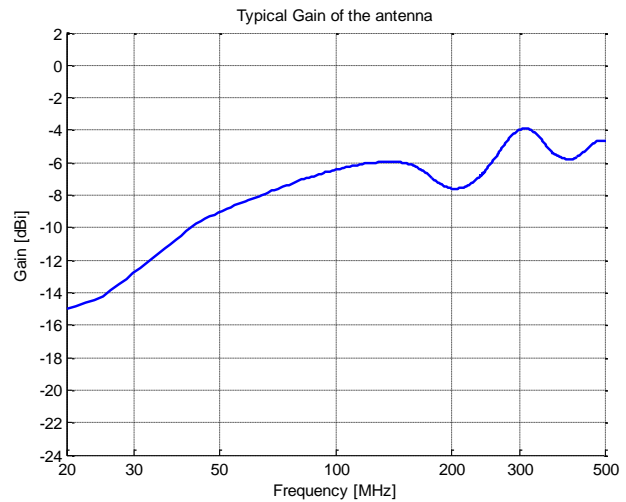
VERSION: 1.1

## VSWR AND GAIN GRAPHS:

### Typical VSWR



### GAIN

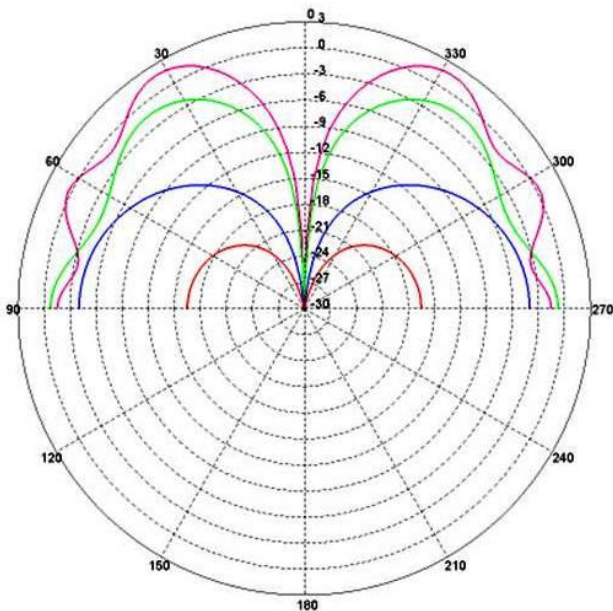


## Radiation patterns

### E-plane

Radiation Patterns of the OMNI-A0155 (Elevation)

— 20 MHz — 73 MHz — 233 MHz — 446 MHz



### H-plane

Radiation Patterns of the OMNI-A0155 (Azimuth)

— 20 MHz — 73 MHz — 233 MHz — 446 MHz

