Manpack VHF High-Power Antenna

20 – 500 MHz

Product Code: OMNI-A0124

VERSION: 5.3

SPECIFICATIONS:

Product code:	
OMNI-A0124	N-type (M) connector
OMNI-A0124-01	7/16 (M) connector
Electrical:	
Frequency range	20 – 500 MHz
Gain	See graph
VSWR	< 3:1, typical 2.5:1
Nominal impedance	50 Ω
Azimuth pattern	Omni-directional
Elevation pattern	Monopole pattern
Power handling	30 W CW (20 – 100 MHz) 35 W CW (100 – 500 MHz)
DC resistance	Short circuit
Groundplane requirements	Groundplane dependent; Minimum 400 mm x 200 mm x 500 mm manpack recommended
Mechanical:	
Dimensions of base (excluding connector) (l x d)	203 mm x 60 mm
Dimensions of whip (l x d)	1280 mm x 15.5 mm max
Folded length (excluding connector)	792 mm
Total mass	0.74 kg
Mounting	On connector at base
Colour	Black, others on request
Environmental: designed to meet the following specifications	
Temperature range	Storage: -30 °C to +70° C Operation -30 °C to +55° C
Weather proofing	IP66 rain resistant (when mounted on a connector)
Shock and vibration	MIL-STD-810E 516.4: vibration category 8, shock 40 g
Exposed materials	Painted aluminium and stainless steel. Black pigmented plastic

PRODUCT FEATURES:

- High efficiency VHF antenna
- Full-band coverage, takes the place of 2 regular high-power antennas
- Proven flexible base spring protects the antenna

APPLICATION AREAS:

- Manpack high-power systems
- Wideband monitoring
- Dismounted force protection
- Carry-forward high-power solutions

PRODUCT OVERVIEW:

This wideband manpack antenna covers the full VHF band with some extension to 20 MHz and 500 MHz. It is mounted on either an N-type or 7/16 connector base, with a matching unit at the base, a spring for shock absorption and flexibility, and has a thin steel whip. By covering the full VHF band in one antenna, it replaces 2 conventional high-power antennas, reducing clutter and visual signature on the manpack system.

The matching section at the base of the antenna contains transformers and loading for the whip. This is mounted directly onto the male connector. The whip extends from the top of the matching section, it is spring-loaded at its base, and flexible over its length. It is also possible to fold the whip in half for storage purposes.

The radiating whip is loaded along its length to control the antenna radiation patterns. It is thin and flexible over most of its length, with loads protruding slightly. The whip will not be damaged by contact with trees, doorways etc., in normal operation.

sales@alaris.co.za

www.alarisantennas.com

Manpack VHF High-Power Antenna

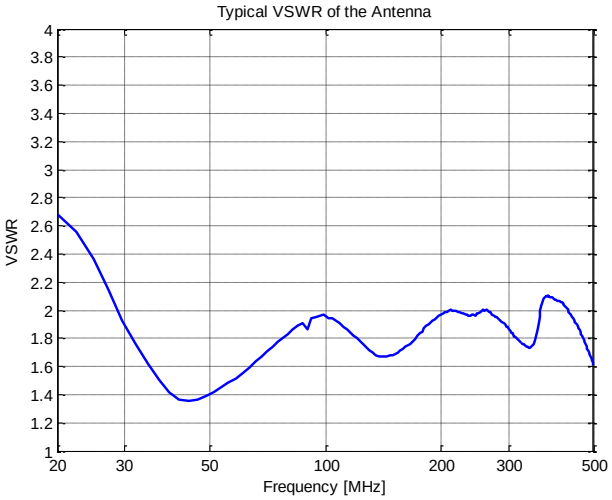
20 – 500 MHz

Product Code: OMNI-A0124

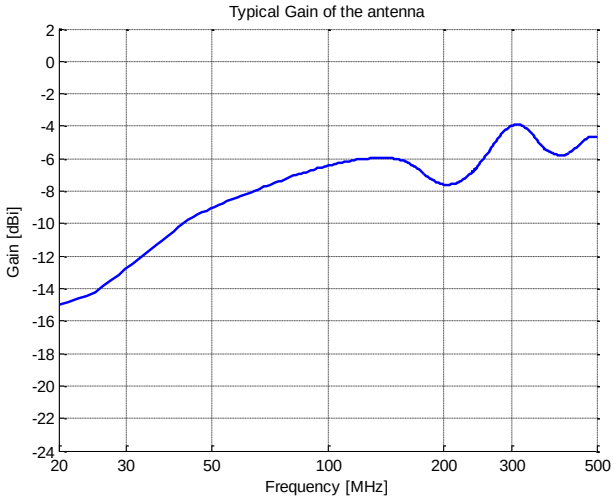
VERSION: 5.3

VSWR AND GAIN GRAPHS:

Typical VSWR:

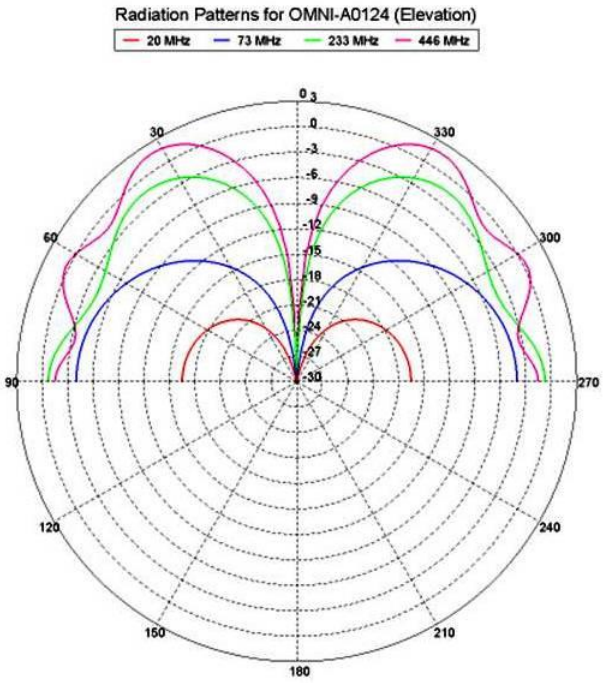


GAIN:

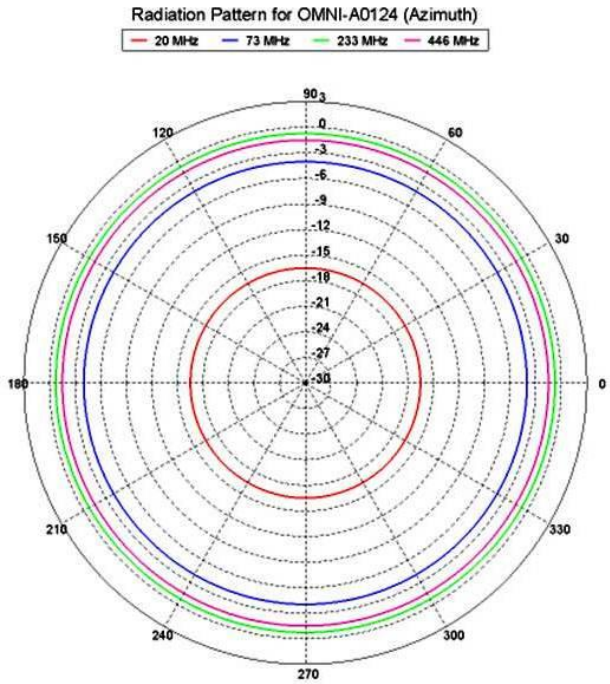


Radiation patterns:

E-plane:



H-plane:



sales@alaris.co.za

www.alarisantennas.com