

Wideband HP Active Monitoring Antenna

20 – 3000 MHz

Product Code: OMNI-A0156

VERSION: 1.8

SPECIFICATIONS:



PRODUCT DESCRIPTION:

This is an extremely wideband, compact, active horizontally polarised receiving antenna for omnidirectional monitoring. It is designed for either static use on shelters or can be installed on vehicles.

Mounting is via the provided standard NATO and US 4/6 hole mounting flange, making it compatible with a variety of standard mounting arrangements.

The OMNI-A0156 and OMNI-A0156-02 variants of the antenna provide 2 output ports which exit the antenna under the mounting flange for watertight and convenient vehicular installation. One output port covers the band from 20 to 1000 MHz and the second from 1000 to 3000 MHz. The OMNI-A0156-01 combines the two bands internally and provides a single output connector.

The OMNI-A0156 and OMNI-A0156-01 versions are equipped with active matching and amplification, which provides excellent performance at very low frequencies. The OMNI-A0156-01 provides a passive bypass feature to allow the antenna to be used in passive mode in high field strength environments by removing power to the antenna.

The active versions of the antenna can be powered using a product such as the MISC-A0022.

The antenna is excellently twinned with the OMNI-A0098 active VP monitoring antenna to provide full spectrum coverage of both VP and HP signals.

Product code:		
OMNI-A0156	Active antenna	
OMNI-A0156-01	Active antenna with passive bypass	
OMNI-A0156-02	Passive antenna	
Electrical:		
	OMNI-A0156 & OMNI-0156-02	OMNI-A0156-01
Frequency range	Band A: 20 – 1000 MHz Band B: 1000 – 3000 MHz	20 – 3000 MHz
Antenna factor	See graph	
Passive antenna gain	See graph	
VSWR	< 2.5:1	
Nominal impedance	50 Ω	
Azimuth pattern	Omni-directional	
Azimuth ripple	< 6 dB	
RF power handling	Active, receive only	
Polarisation	Linear, horizontal	
Connector	Band A: N-type female Band B: N-type female	1 x N-type female
Power supply (active antenna)	15 V DC injected onto band A connector (see also MISC-A0022 supply)	10 – 15 V DC injected into RF connector
Mechanical (see interface drawing):		
Total length	< 400 mm	
Total diameter	< 360 mm	
Total mass	3 kg	
Mounting	4 and 6 hole NATO flange	
Colour	Per request	
Environmental: designed to meet the following specifications		
Temperature range	Storage: -30 °C to +70 °C Operation -30 °C to +65 °C	
Wind survival	160km/h	
Weatherproofing	IP 66 rain resistant	
Shock and vibration	MIL-STD-810E 516.4: vibration category 8, shock 40 g	

PRODUCT FEATURES:

- Compact HP monitoring
- Active matching and amplification
- Standard mounting interface
- Vehicular and shelter-mountable

APPLICATION AREAS:

- Wideband monitoring

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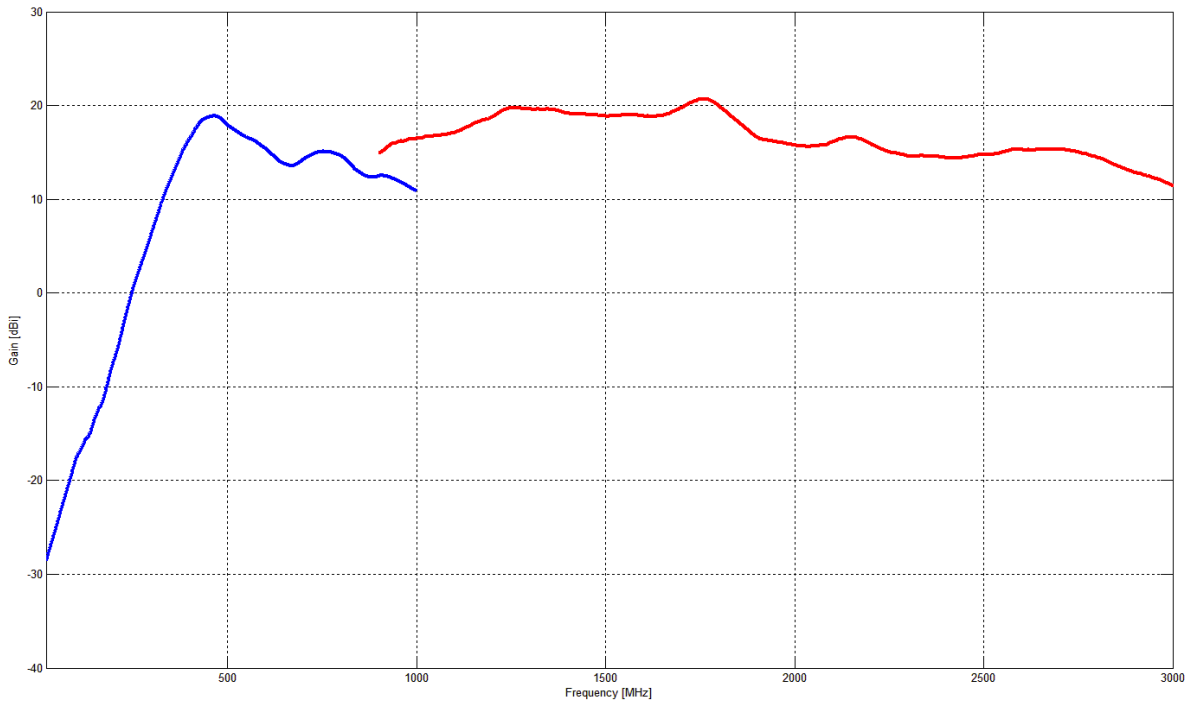
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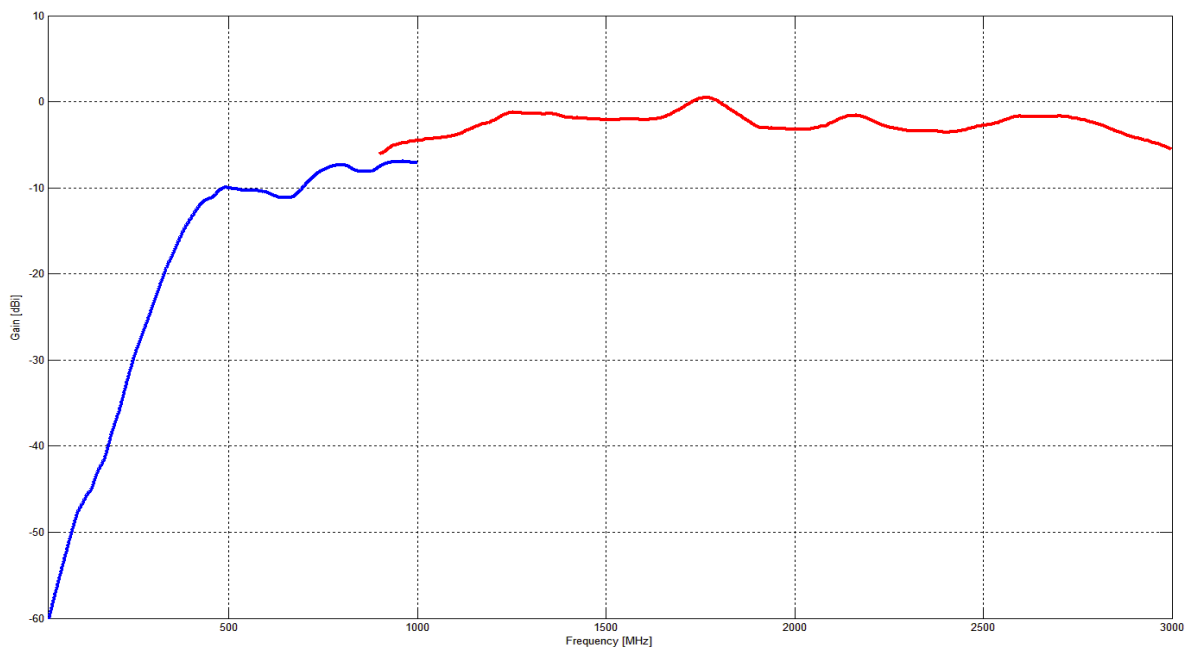
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PERFORMANCE GRAPHS:

Active gain (OMNI-A0156 & OMNI-A0156-01):



Passive gain (OMNI-A0156-02):



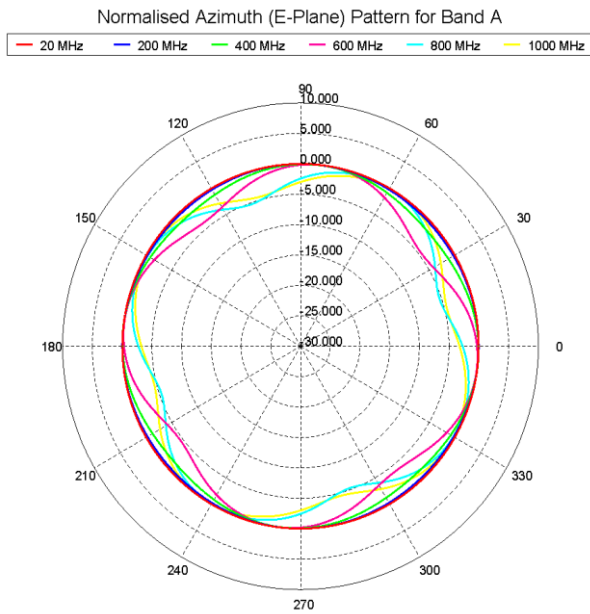
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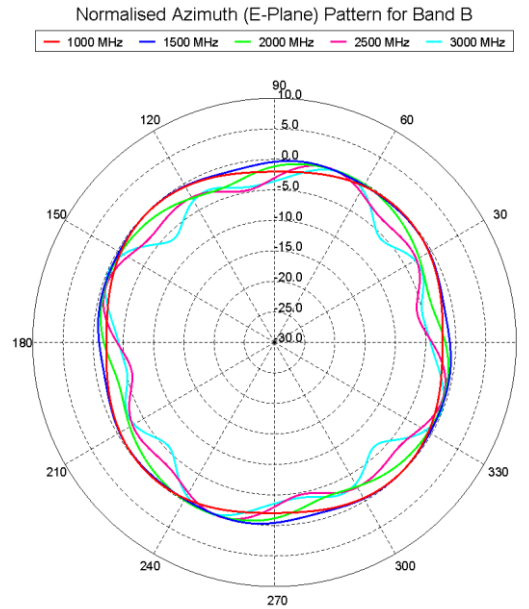
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E-plane pattern Band A:



E-plane pattern Band B:



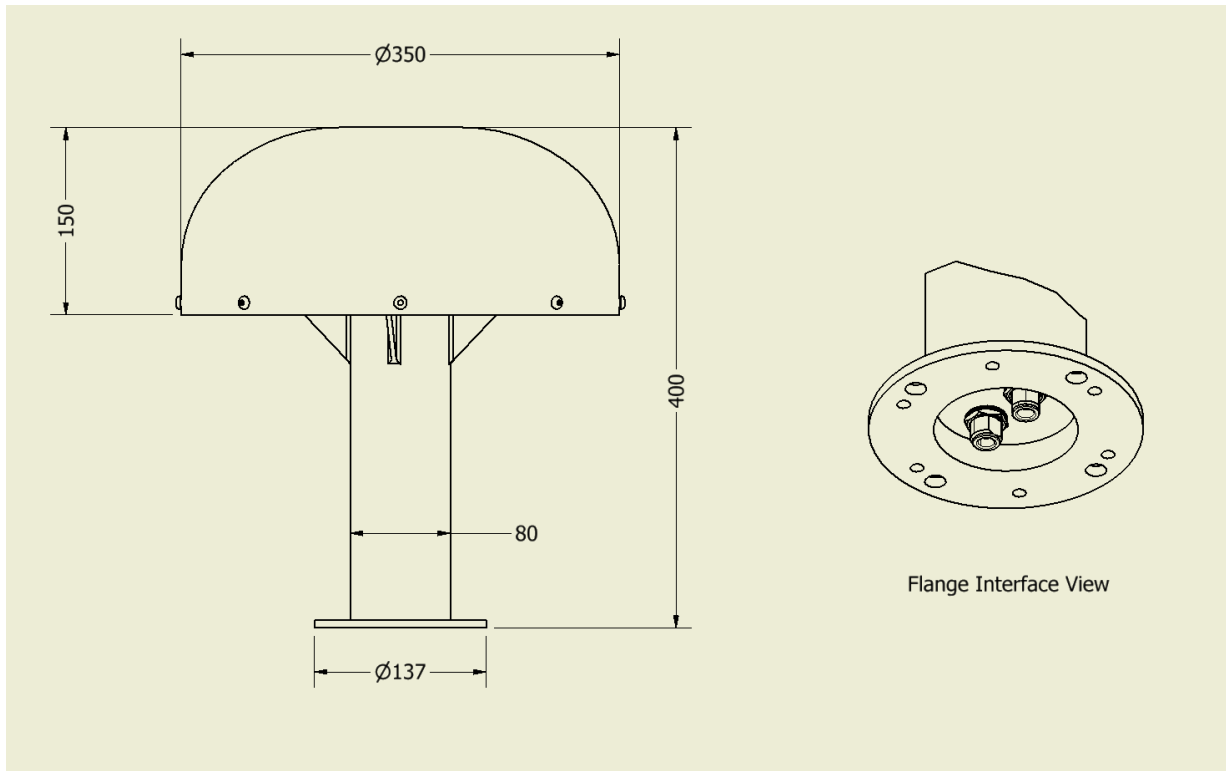
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INTERFACE DRAWING:



ACCESSORIES:



MISC-A0022 wideband 15 V power supply suitable for use in conjunction with the OMNI-A0156.

Please refer to latest product brochure for more details.