

VERSION: 1.0

## **HF Active Monopole**

### 1 – 30 MHz

## Product Code: MONO-A0097

#### SPECIFICATIONS:

Electrical:	
Frequency range	1 – 30 MHz
Polarisation	Vertical
Gain	See graph
Nominal input impedance	50 Ω
Connector	N-type female
H-plane 3 dB beamwidth	360°
Polarisation	Vertical
Sensitivity in 1 Hz bandwidth	1µV/m
OP1	18 dBm
OIP2	43 dBm
OIP3	37 dBm
Input Voltage	12.5 – 15.5 VDC
DC input current (max)	400 mA
Mechanical:	
Length	7.5 m
Total mass	< 30 kg excluding packaging
Base dimensions	300 mm x 300 mm
Groundplane diameter	15 000 mm
Mounting method	Free-standing on the ground. Can be bolted to a concrete plinth
Environmental: designed to meet the following specifications	
	120 km/h (5 mm ice)
Wind survival	(when fitted with supplied guy
	ropes)
Water ingress rating	IP66
Temperature	-40 °C to +55 °C (operation)
	Designed for MIL-STD 810E
Shock and vibration	516.4: vibration category 8, shock
<u> </u>	40 g during transport

#### **PRODUCT DESCRIPTION:**

The HF passive whip monopole antenna is designed for deployment on open ground or permanent installation and includes a deployable groundplane. The antenna's radiation pattern is suitable for medium to long range HF monitoring.

It can be deployed as part of either a linear or circular array and is quickly and easily deployed and stowed. The product can be rapidly deployed by two people within 30 minutes but can also be bolted to a plinth for semi-permanent installations.

The antenna is intended for use in constructing DF interferometer arrays consisting of multiple MONO-A0097 antennas.



#### **PRODUCT FEATURES:**

- 1 to 30 MHz frequency range
- Rugged
- Quick deployment time
- Self-contained groundplane
- Glass fiber insulated radiator

#### **APPLICATIONS:**

- HF DF array element
- Linear or circular arrays
- SSL arrays



Updated 2020-12-03

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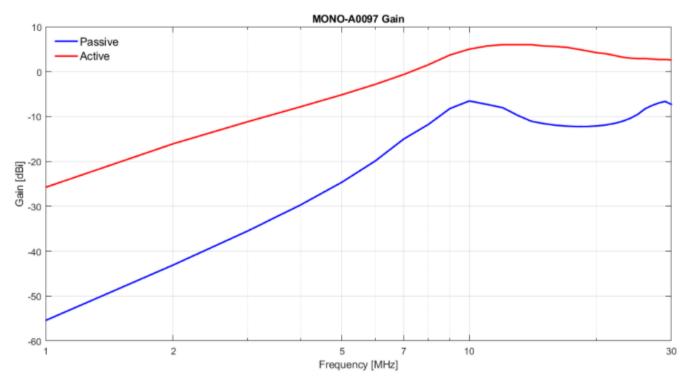
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#### GAIN:



**SENSITIVITY:** 

## E-field Sensitivity to achieve Signal-to-Noise of 0dB and 1Hz BW This is based on a receiver having a 10dB noise figure and assumes no external noise -30 Passive Active -35 -40 EField [dB µV/m] -45 -50 -55 -60 10<sup>0</sup> 10<sup>1</sup>

Frequency (MHz)

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