

HF Passive Monopole

1 – 30 MHz

Product Code: MONO-A0079

SPECIFICATIONS:



* MONO-A0079-01 with guy ropes shown

PRODUCT DESCRIPTION:

The HF passive whip monopole antenna is designed for deployment on permanent installations and includes a deployable groundplane. The antennas' radiation pattern is suitable for medium to long range HF monitoring.

The base of the antenna isolates the monopole whip from the ground structure and has an RF connector protruding from the side.

The antenna has been designed to be permanently or semi-permanently mounted on fixed installations such as concrete plinths or other suitable structures. The mast is self-supporting and is able to withstand harsh wind environments without the requirement of stabilizing ropes. The glass fiber insulated radiator is segmented into 3 threaded interlocking sections to allow for more compact shipping.

The antenna is intended for use in constructing DF interferometer arrays consisting of a number of MONO-A0079 antennas.

Product Codes	
MONO-A0079	Low wind speed (without guy ropes)
MONO-A0079-01	High wind speed (with guy ropes)
MONO-A0079-02	Low wind speed (without guy ropes) with replaceable gas arrestor
MONO-A0079-03	High wind speed (with guy ropes) with replaceable gas arrestor
Electrical:	
Frequency range	1 – 30 MHz
Polarisation	Vertical
Gain	See graph
Nominal input impedance	50 Ω
Connector	N-type female
Mechanical:	
Length	10 m
Total mass	19 kg excluding packaging
Max whip dimensions (d x h)	Ø 180 mm x 3300 mm
Base dimensions (d x h)	Ø 450 mm x 250 mm
Base Plate Dimensions (d x h)	Ø 550 mm x 6 mm
Groundplane diameter	20 m ground radials (supplied)
Mounting method	Bolted to a concrete plinth Plinth with diameter of > 550 mm recommended
Environmental: designed to meet the following specifications	
Wind survival	
MONO-A0079 / -02	120 km/h
MONO-A0079-01 / -03	160 km/h (5 mm ice) with guy ropes installed
Water ingress rating	IP66
Temperature	-40 °C to +55 °C (operation)
Shock and vibration	Designed for: Vibration: MIL-STD 810G 514.7 Procedure I Category 4 Shock: MIL-STD 810G 516.7 Procedure II: 40 g 11ms
Lightning protection	Gas discharge arrestor
Salt Fog	Designed for MIL-STD 810G 509.6

PRODUCT FEATURES:

- 1 to 30 MHz frequency range
- Rugged
- Extremely durable mast design
- Self-contained groundplane
- Glass fiber insulated radiator
- Incorporated lightning protection

APPLICATIONS:

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

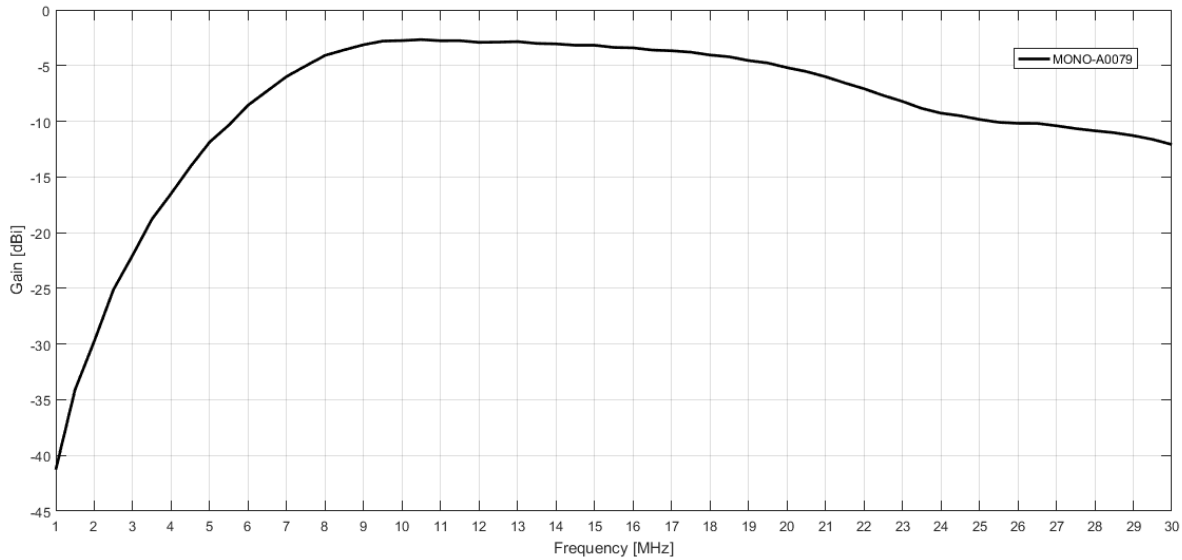
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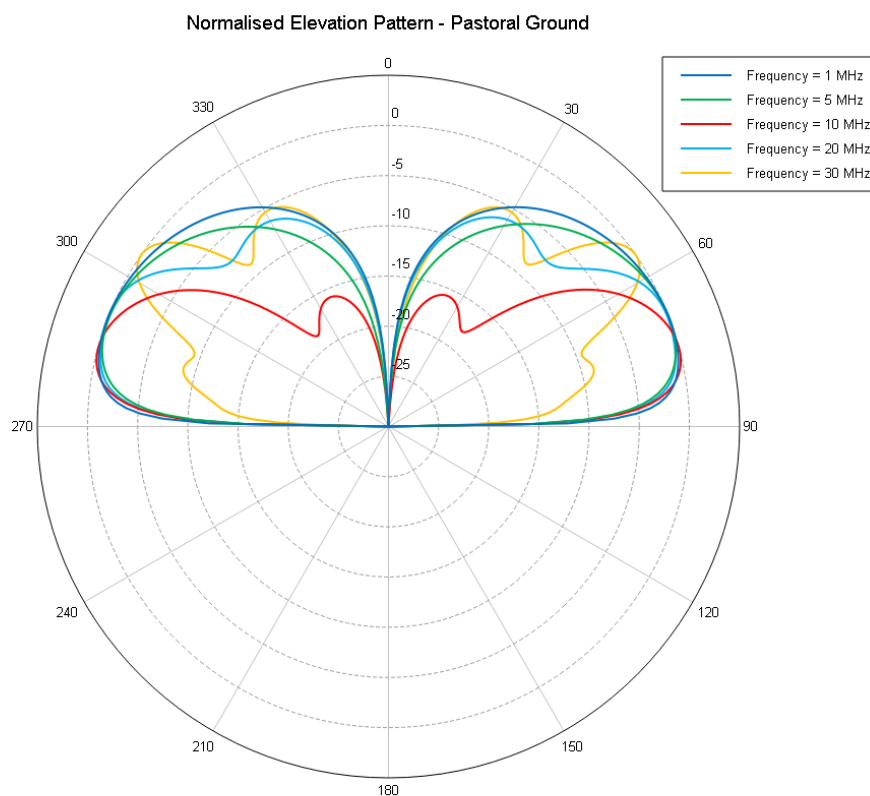
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VERSION: 1.6

GAIN (Including mismatch loss):



Radiation pattern:



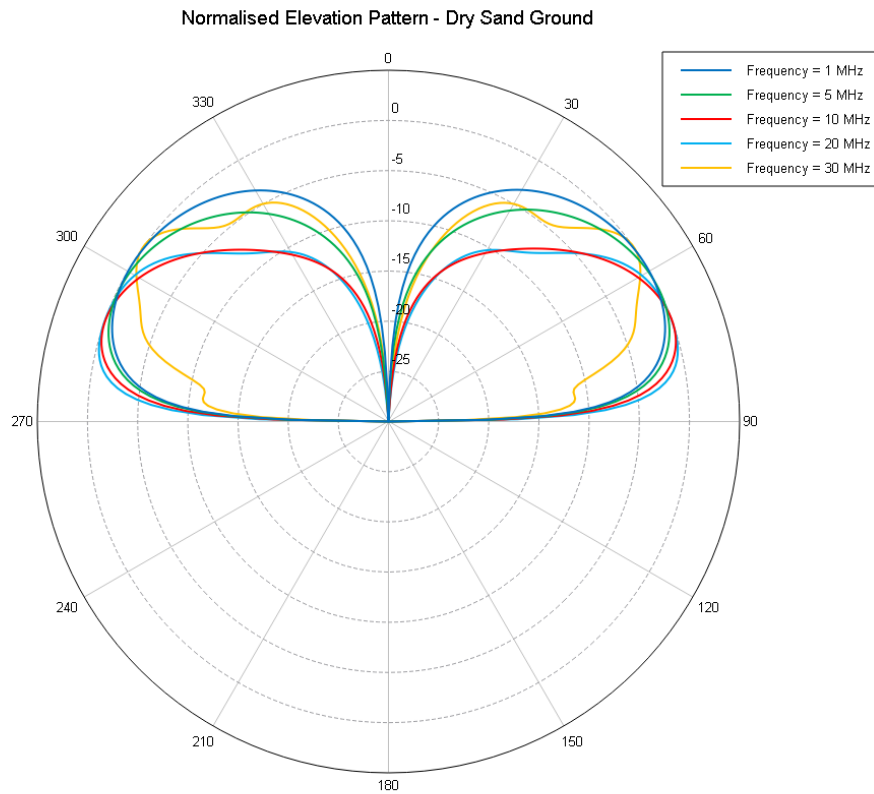
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Radiation pattern:



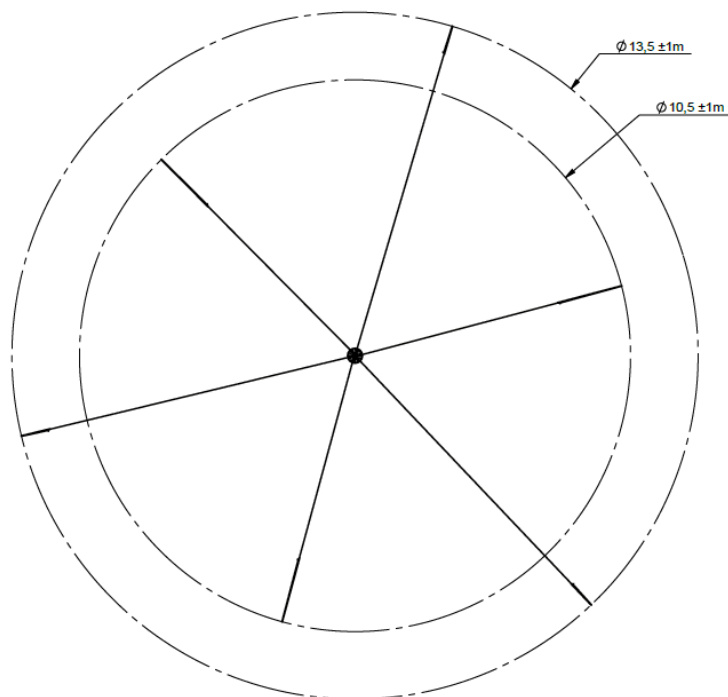
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Mechanical Outline (MONO-A0079-01 / -03)



TOP VIEW

