

# LoRa/Sigfox/ISM Band 863-928MHz Magnetic Mount

PANORAMA ANTENNAS

MAR868-[X]



## MAR868-[X]

- 1/4 wave magnetic antenna covering 863-928MHz
- Magnetic mount - no hole required
- Omni-directional pattern
- RG174 coax cable
- IoT Applications

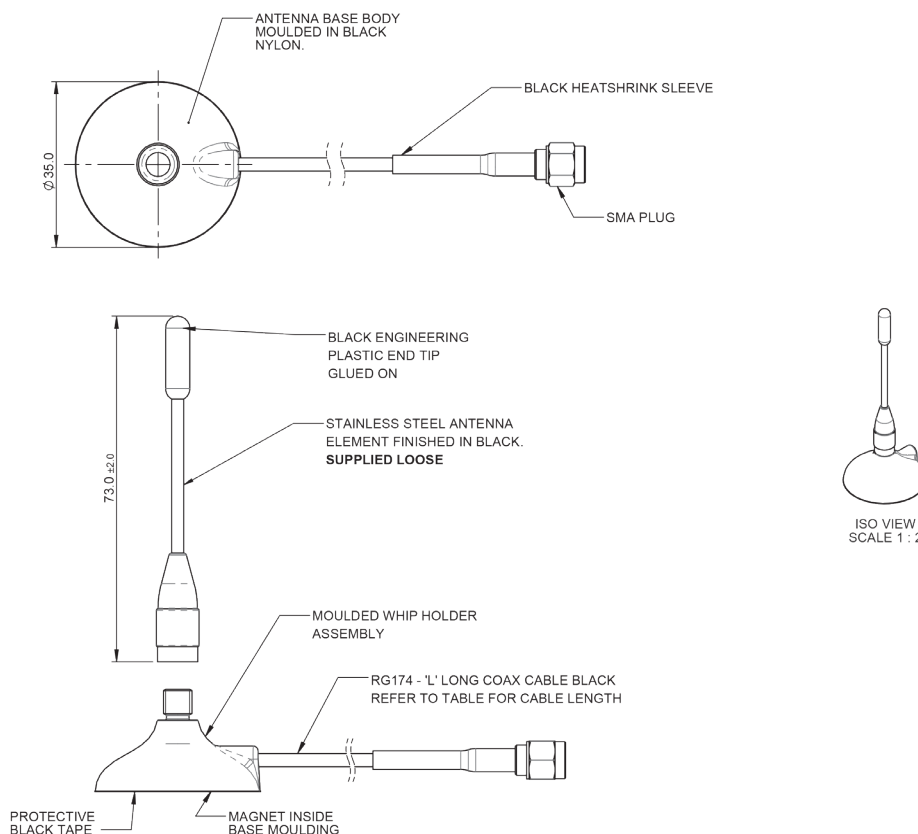
The MAR868-[X] is a high performance, rugged, compact magnetic mount antenna suitable for installations where a temporary solution is required or drilling a hole for a panel mount antenna is not possible.

Suitable for internal and external use, it is ideal for IoT and M2M applications using the 868 / 915 (863-928MHz) bands. The base is fitted with integrated flexible low loss RG174 cable and an SMA plug (m) as standard. Other connectors are available.

The antenna requires a ferrous metal mounting panel for magnetic adhesion.

## Technical Drawing

MAR868-[X]SP Shown



# LoRa/Sigfox/ISM Band 863-928MHz Magnetic Mount

PANORAMA  ANTENNAS

MAR868-[X]

## Product Data

### Part No

MAR868-2SP

### Electrical Data

Frequency Range (MHz) 863-928

Operational Band 868 / 915

Peak Gain: Isotropic\* 4dBi

Typical Efficiency\* >80%

Typical VSWR\* <2:1

Polarisation Vertical

Pattern Omni-directional

Impedance 50Ω

Max Input Power (W) 20

### Mechanical Data

Dimensions Total Height 88 (3.5")

(mm) Base Height 15 (0.5")

Base Diameter 35 (1.4")

Operating Temp (°C) -40°/+80°C (-40°/176°F)

Material PA6/66, brass and stainless steel

Colour Black

### Mounting Data

Fixing Magnetic mount

### Cable Data

Type RG174

Diameter (mm) 2.8 (0.1")

Length (m) 2.3 (7'6")

Termination SMA plug (m)

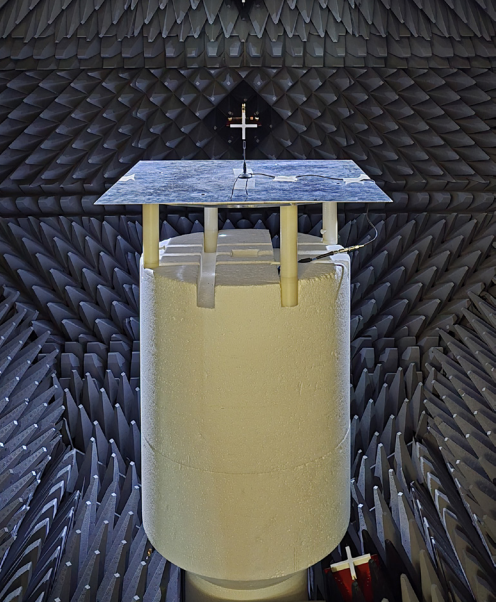
\*VSWR, efficiency and peak gain measured on 600x600mm (2'x2') ground plane with 0.5m (1.64') of RG174 cable.

LoRa/Sigfox/ISM Band  
863-928MHz Magnetic Mount

PANORAMA ANTENNAS

MAR868-[X]

Electrical Data on  
Ground Plane - Whip

Measurement Conditions	LoRa/Sigfox/ISM Antenna				
MAR868-[X] measured on 600x600mm (2'x2') ground plane with 0.5m (1.64') of RG174 Cable	Frequency Range (MHz)	Whip Bands	Antenna Element	Peak Gain (dBi)	Efficiency (%)
	868	868	Whip	3.9	80
	915	915	Whip	4.0	81

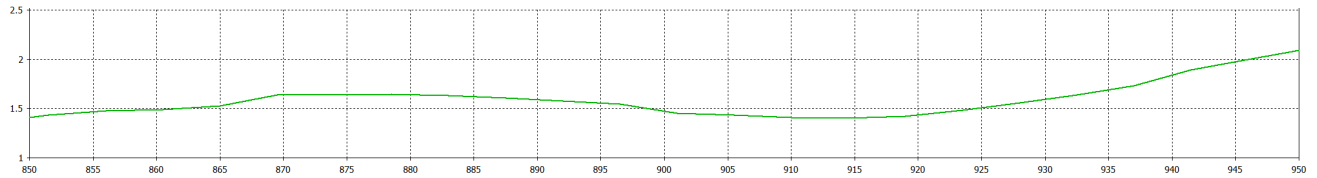
# LoRa/Sigfox/ISM Band 863-928MHz Magnetic Mount

MAR868-[X]

PANORAMA ANTENNAS

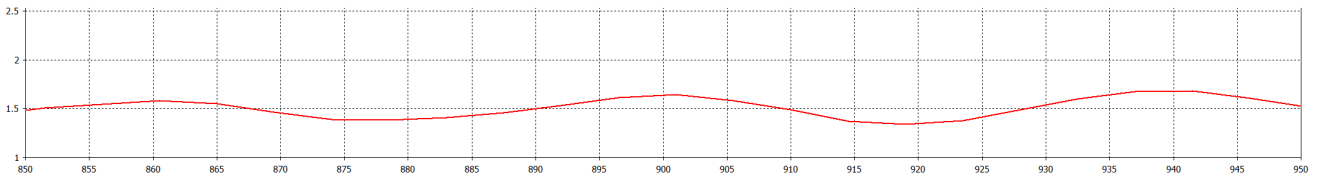
Electrical Data on  
Ground Plane - Whip

Typical VSWR\*



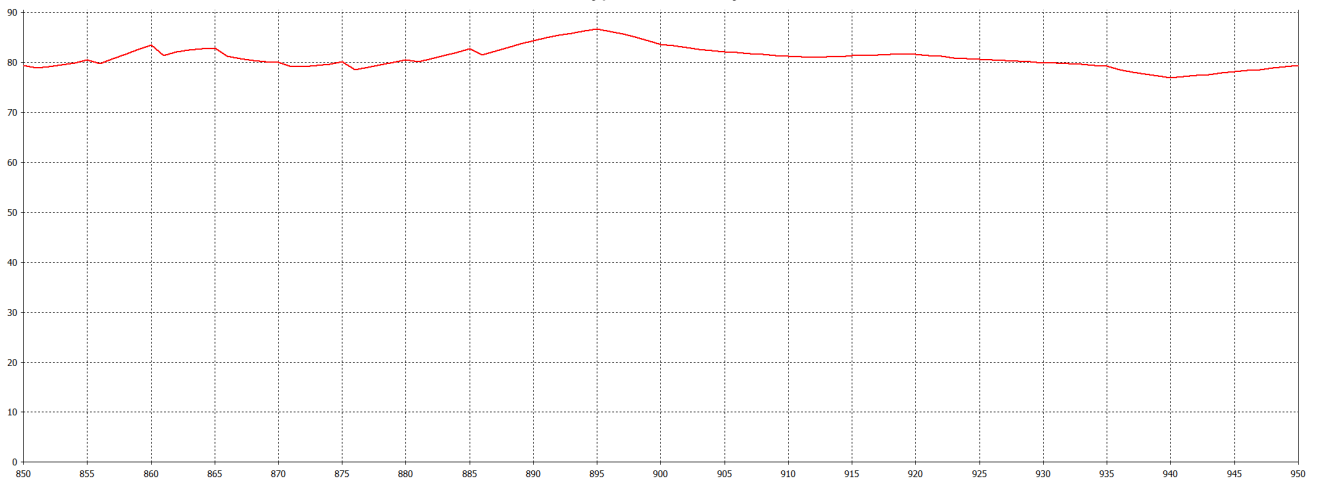
\*VSWR measured on 600x600mm (2'x2') ground plane with 0.5m (1.64') of RG174 cable

Typical VSWR\*



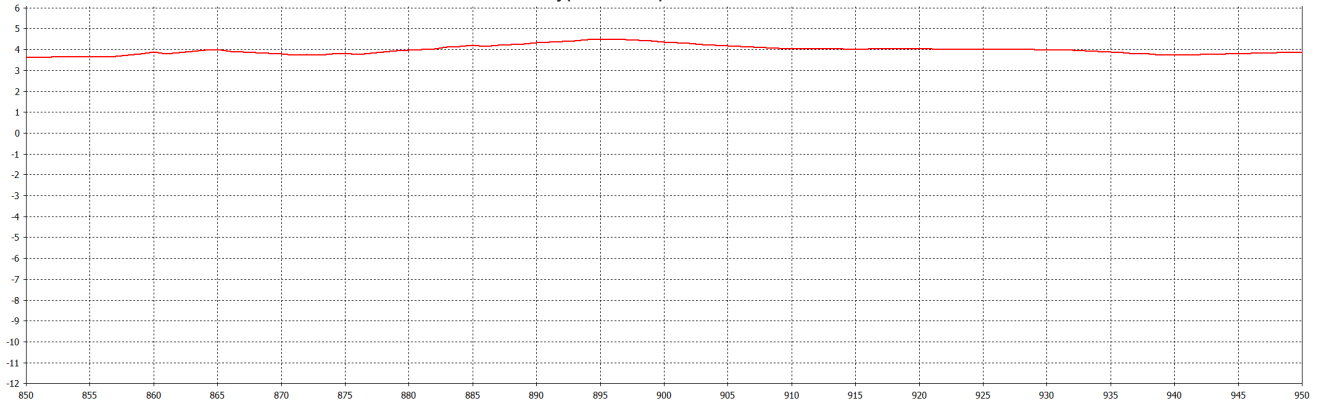
\*VSWR measured on 600x600mm (2'x2') ground plane with 2m (6.6') of RG174 cable

Typical Efficiency\*



\*Efficiency measured on 600x600mm (2'x2') ground plane with 0.5m (1.64') of RG174 cable

Typical Swept Peak Gain\*



\*Peak Gain measured on 600x600mm (2'x2') ground plane with 0.5m (1.64') of RG174 cable

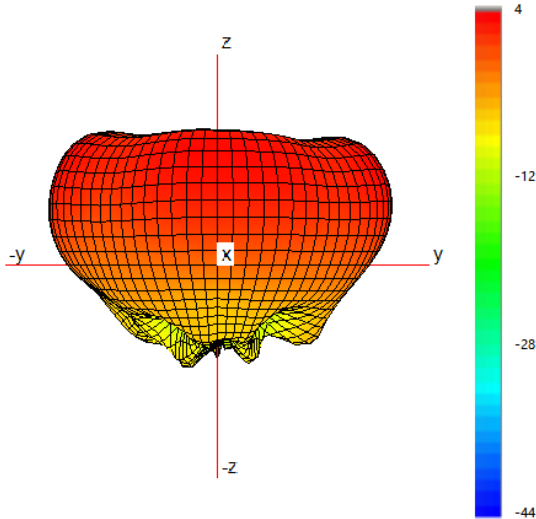
# LoRa/Sigfox/ISM Band 863-928MHz Magnetic Mount

PANORAMA ANTENNAS

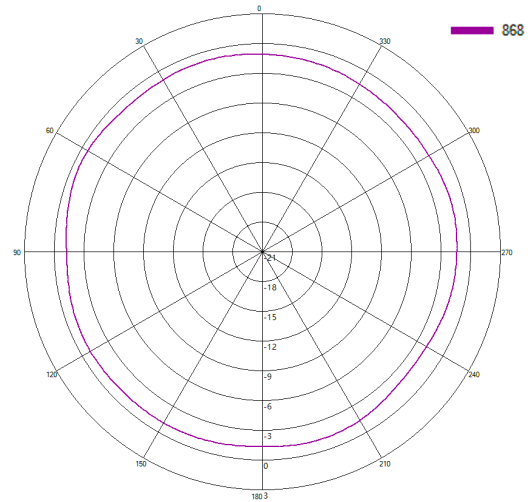
MAR868-[X]

3D Pattern Data on  
Ground Plane Whip

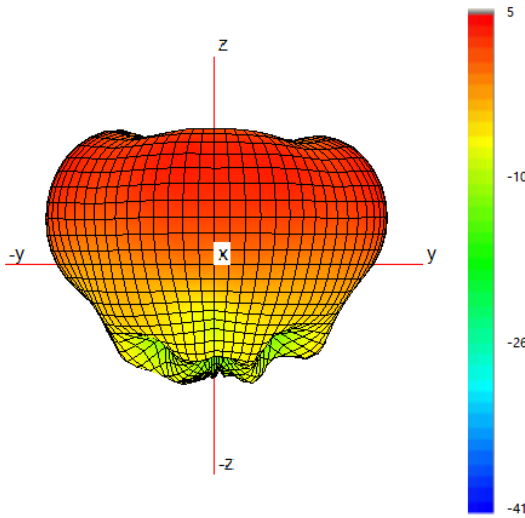
Typical 3D Pattern- Whip - 868 MHz



Typical H Plane- Whip - Pattern- 868MHz



Typical 3D Pattern- Whip - 915 MHz



Typical H Plane- Whip - Pattern- 915MHz

