

# Cellular 2G/3G/GSM + LPWA NB-IoT/LoRA/SigFox - Board Antenna



**PRO-IS-589**

Request Samples



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**75.0 x 8.0 x 0.8mm**  
**RoHS/RoHS II Compliant**  
**MSL Level = 1**

## Features

- Compact
- Thickness of 0.8 mm
- Linear Polarization
- Gain of 4.1 dBi
- Efficiency > 66% (Lower Band), 26% (Upper Band)
- Easy integration using cable and connector
- Customizable cable and Connector options

## Applications

- Cellular 2G/3G/GSM and NB-IoT applications
- IoT/ M2M
- Automation/ Smart Home
- Healthcare Devices
- Hand-free/ PC Peripherals
- Remote monitoring/ Video and surveillance

## Product Image





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## Electrical Specification

Parameter	Specification		Unit
Operating Frequency	791 ~ 960	1710 ~ 1990	MHz
Return Loss	< -7.7	< -4.5	dB
Polarization	Linear		
Peak Gain	4.1	2.8	dBi
Efficiency	>66	>26	%
Impedance	50	50	$\Omega$

## Mechanical Specification

Parameter	Specification
Antenna Dimension	75 x 8 x 0.8 mm
Cable Type	Coaxial
Cable length	64 mm
Connector Type	MHF-4 (F)
Mounting Type	Adhesive

## Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
MSL Level	1
RoHS/RoHS II Compliant	Yes



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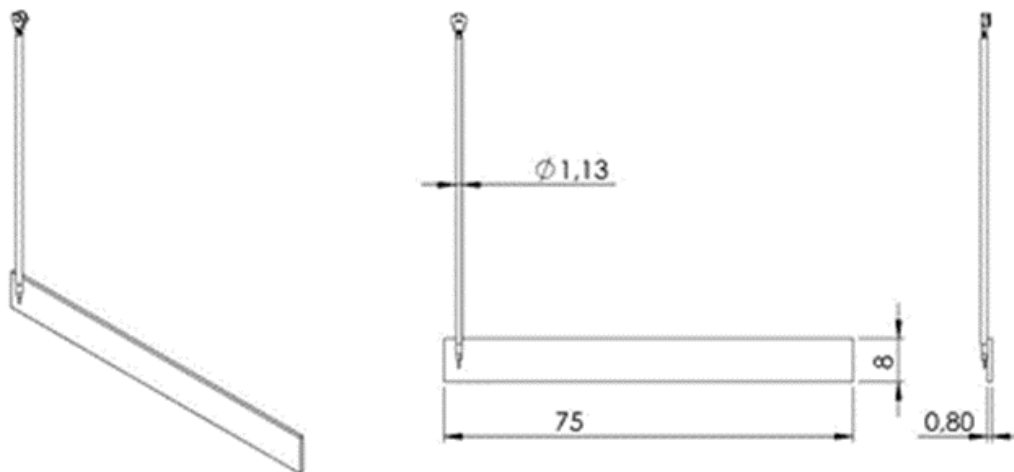


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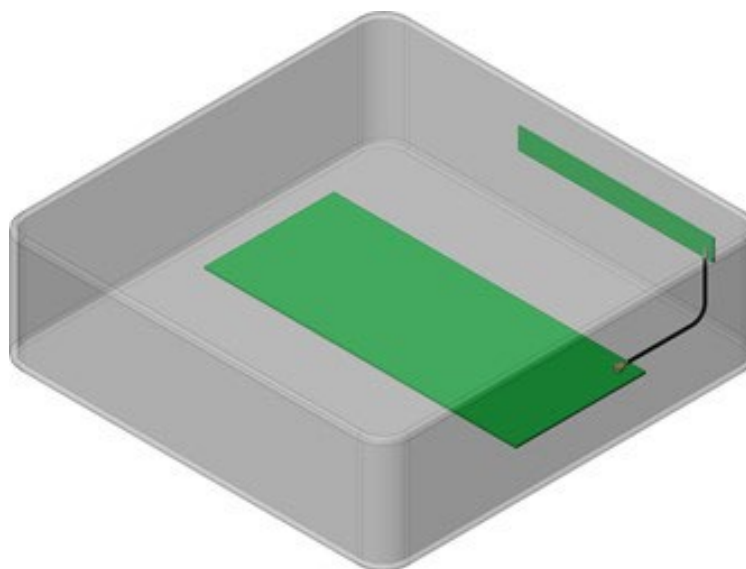
## Product Dimensions



Unit: mm

## Measurement Setup

The antenna measurements were done on a standard measurement fixture - the antenna mounted in an ABS plastic box, 150x150x45 mm, connected to a PCB, 120x50 mm, with the cable fully extended





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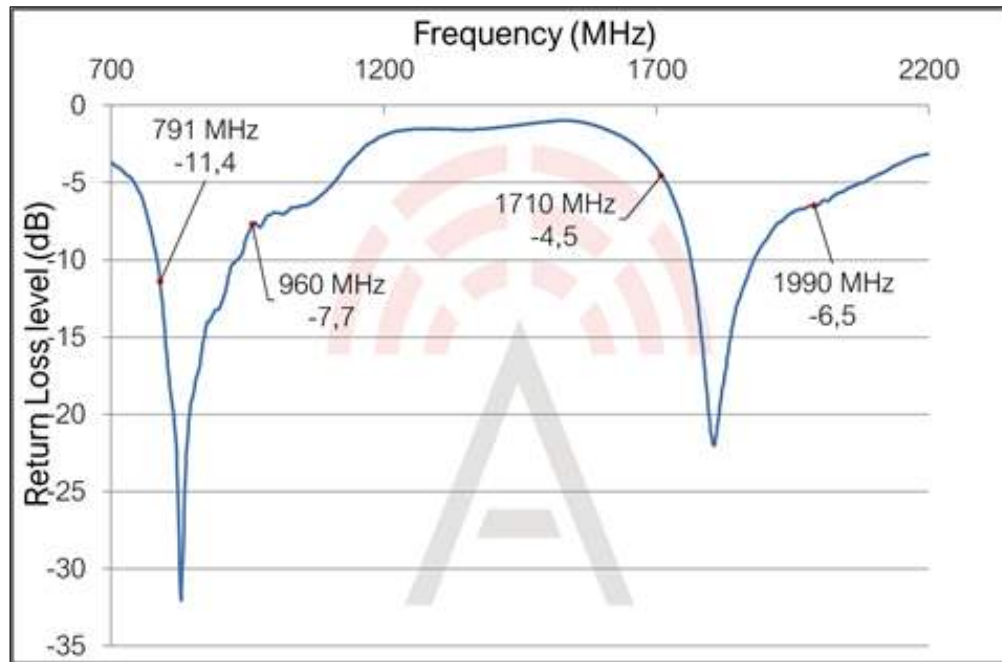


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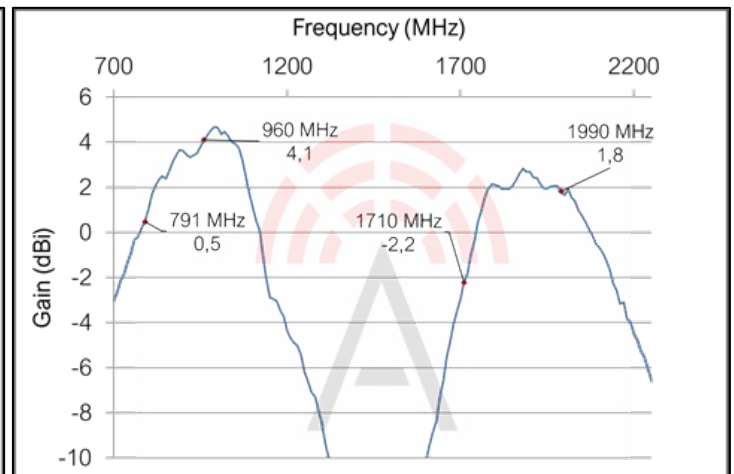
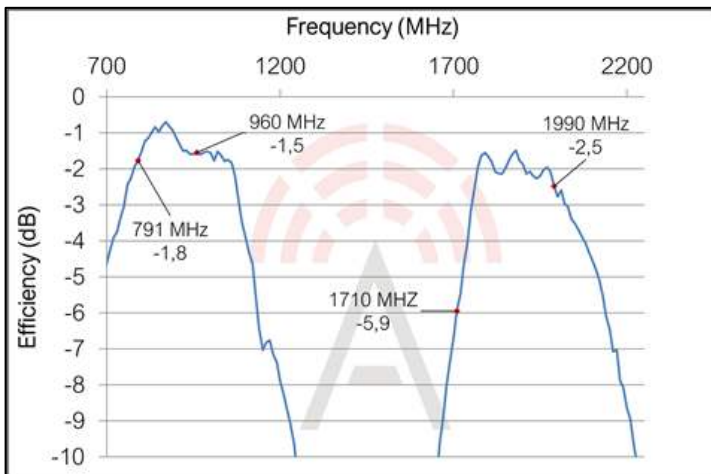
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## Return Loss



## Total Radiation Efficiency

## Maximum Radiation Gain





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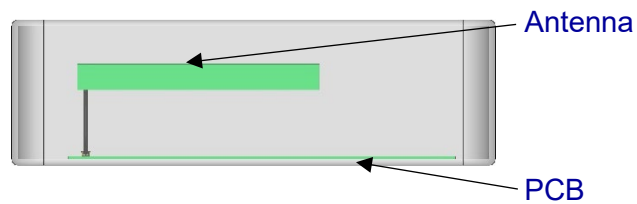
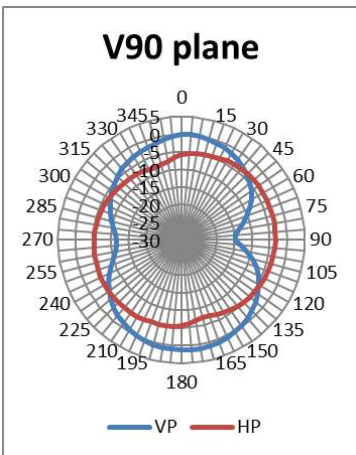
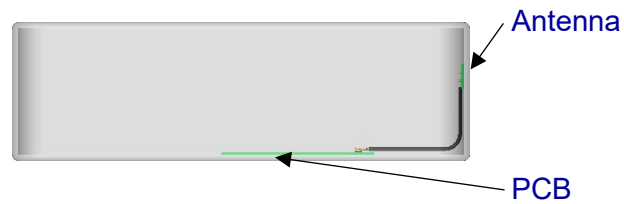
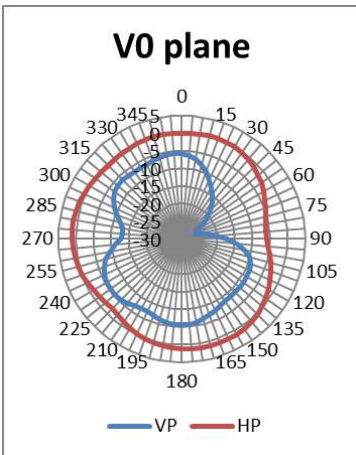
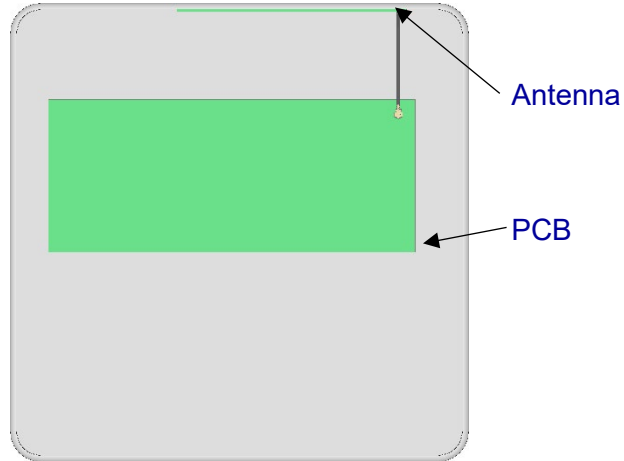
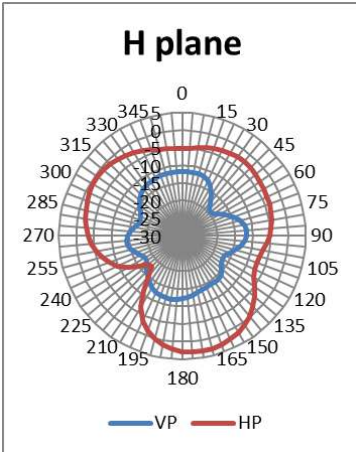


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## Radiation Characteristics - 2D Pattern (870 MHz)





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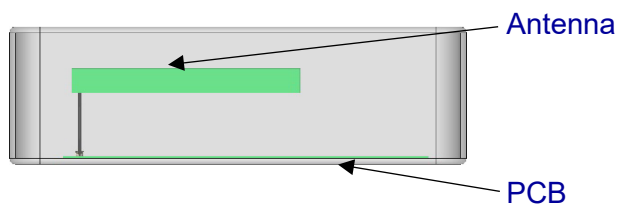
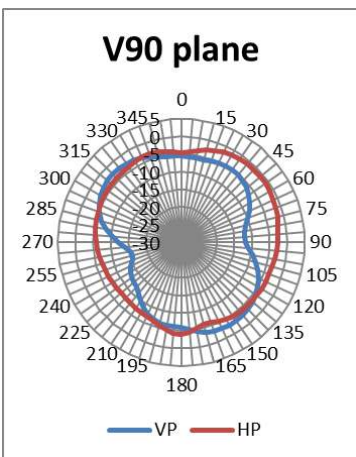
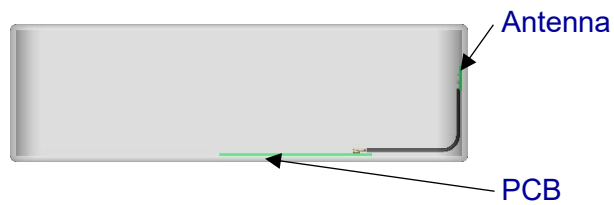
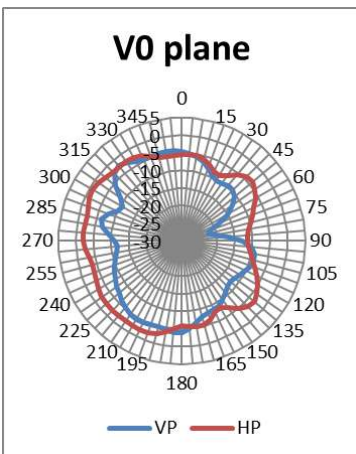
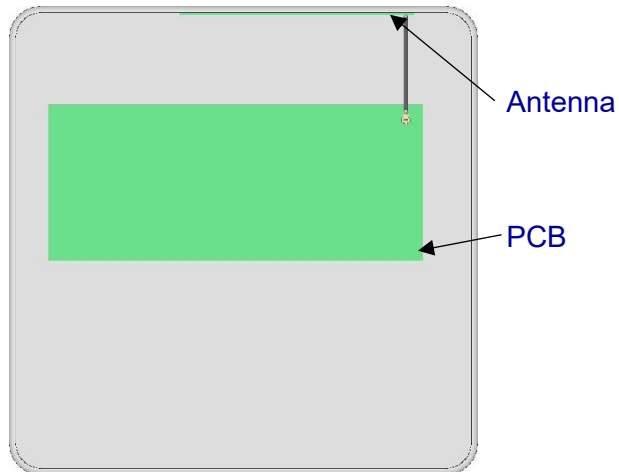
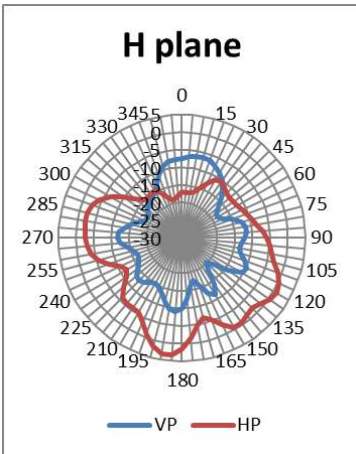


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## Radiation Characteristics - 2D Pattern (1850 MHz)



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## Packaging Information

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Pieces per bag: 100 pieces

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