

# ISM 900MHz Helical SMD-Antenna

Ground cleared under antenna, clearance area 8.00 x 40.00 mm. Pulse Part Number: W3113



## Features

- Low profile (2.5mm, embedded to board)
- Compact size W x L x H (12.4 x 8 x 2.5 mm)
- Low weight (400 mg)
- Lead Free materials
- Fully SMD compatible
  - Glue needed between antenna and PWB
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

## Applications

- 900MHz ISM Band Systems
- Engineering samples available*

## Electrical specifications @ +25 °C

*Note: Electrical characteristics depend on test board (GP) size and antenna positioning on GP and Ground Clearance area size.*

## ISM 900MHz

Typical performance (testboard size 100 x 40 mm, PWB ground clearance area 8.00 x 40.00 mm)

Frequency Range [MHz]	Max Gain [dBi]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance [ $\Omega$ ]	Operating Temperature [°C]
902 – 928	0.8 (peak) -0.3 (band edges)	66 / -1.8 (peak) 51 / -2.9 (band edges)	-10	50	-40 to +85

### Pulse Finland Oy

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[www.pulseeng.com/antennas](http://www.pulseeng.com/antennas)

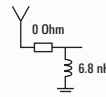


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## Typical Electrical Characteristics (T=25 °C)

Typical Return Loss S11/ impedance, measured on the 100 x 40 mm test board with matching circuit



### Dualband WLAN

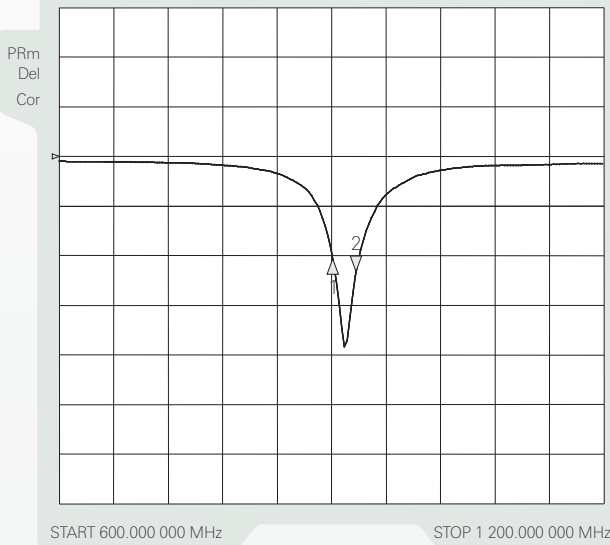
3 Aug 2006 12:20:14

CH1Markers

- 1. -10.315 dB 902.000 MHz
- 2. -11.610 dB 928.000 000 MHz

CH1 S11 LOG

5 dB/REF 0 dB

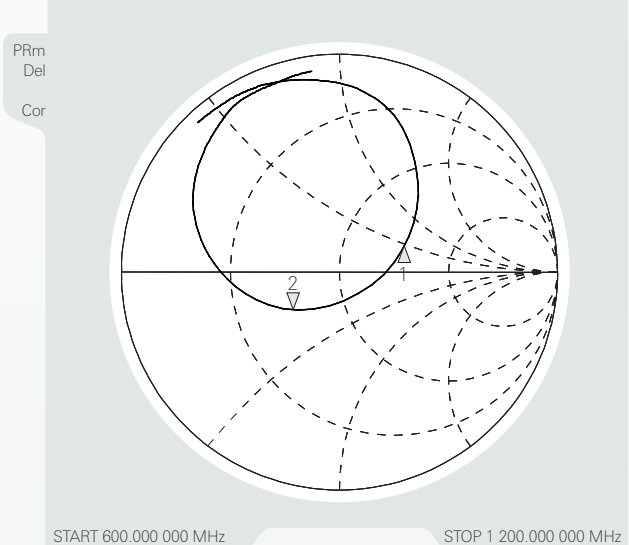


### Dualband WLAN

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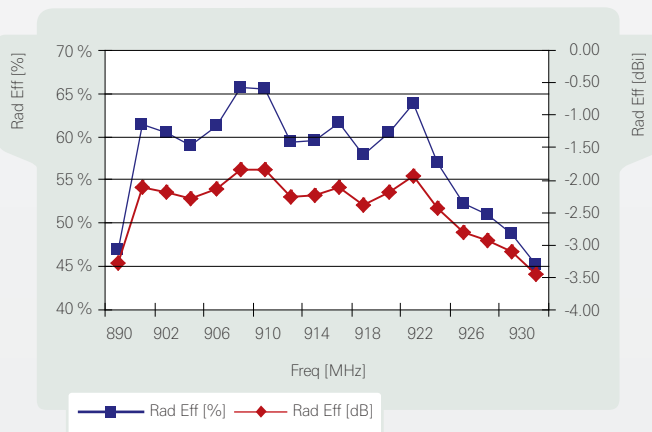
- 1. 88.223 Ω 24.625 Ω 902.000 MHz
- 2. 30.870 Ω -11.444 Ω 14.986 pF 928.000 000 MHz

CH1 S11 1 U FS



Free space efficiency and maximum gain, PWB ground clearance area 8.00 x 40.00 mm

### ISM 900 MHz Hor Helical Antenna



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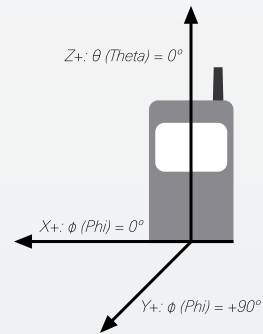
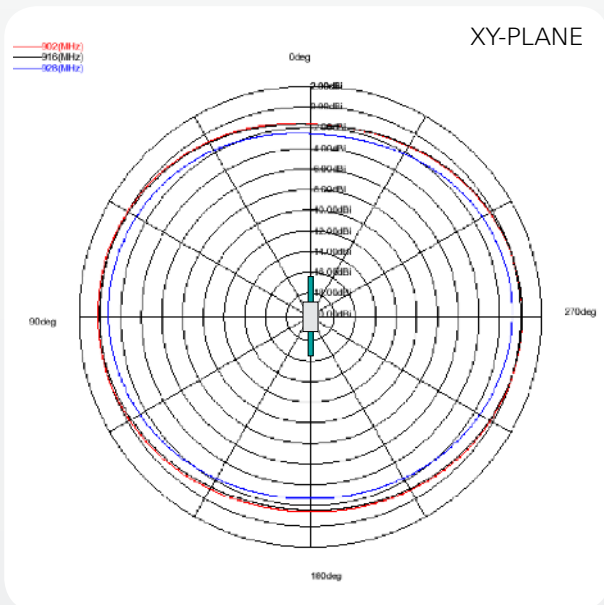
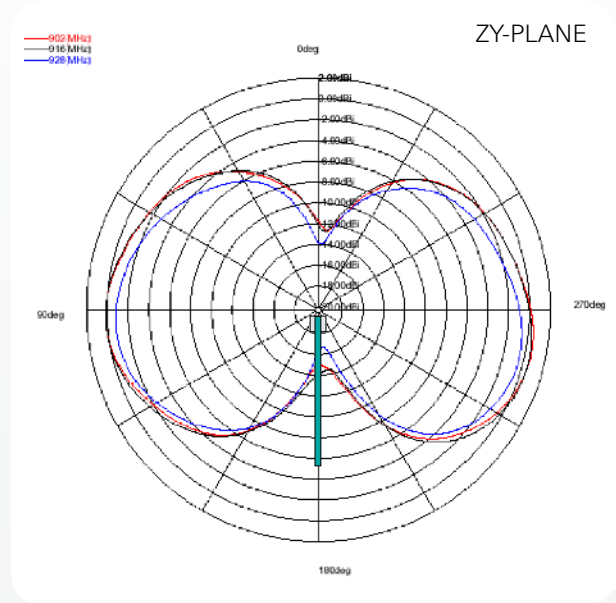
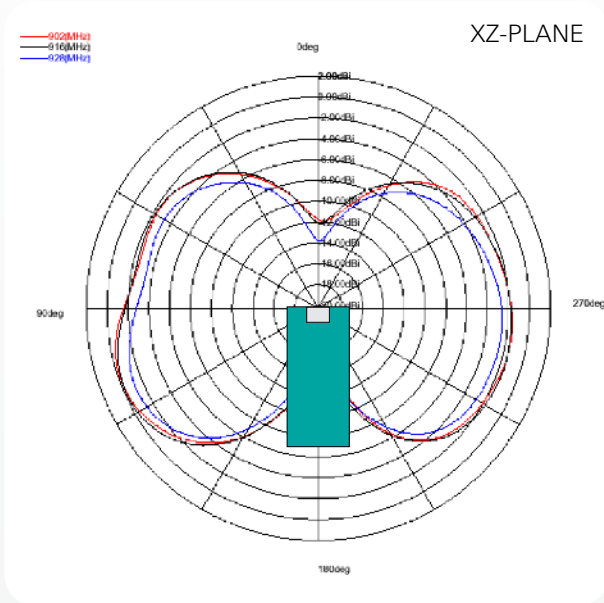
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## Typical Free space Radiation Patterns



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