

# Penta Band Stubby Antenna

Pulse Part Numbers: W1910 / W1911



## Features

- Small form factor
- Antenna size W x H (10.4 x 49.0mm)
- Lead free materials
- RoHS Compliant Product
- Connector Type: SMA

## Applications

- Penta band EU/US GSM/WCDMA
- Frequency range: 850 / 900 / 1800 / 1900/ 2100 MHz
- M2M Applications

## Part Numbers:

| P/N   | Connector    |
|-------|--------------|
| W1910 | SMA(Male)    |
| W1911 | RP-SMA(Male) |

## Electrical specifications @ +25 °C

*Note: Electrical characteristics depend on device mechanics.*

*W1910&W1911 Typical free space performance, measured in test unit mechanics (position 1.)*

| Frequency [MHz] | Max Gain [dBi]           | Efficiency [%] / [dB]               | Return loss min. [dB] | Impedance [Ω] | Operating Temperature [°C] |
|-----------------|--------------------------|-------------------------------------|-----------------------|---------------|----------------------------|
| 824 - 960       | 1.0 (peak)<br>-0.5 (min) | 65 / -1.8 (peak)<br>50 / -3.0 (min) | -4                    | 50            | -40 to +85                 |
| 1710 - 1990     | 2.0 (peak)<br>0.5 (min)  | 65 / -1.8 (peak)<br>50 / -3.0 (min) | -6                    |               |                            |
| 1920 - 2170     | 2.5 (peak)<br>2.0 (min)  | 65 / -1.8 (peak)<br>50 / -3.0 (min) | -6                    |               |                            |

## Pulse Finland Oy

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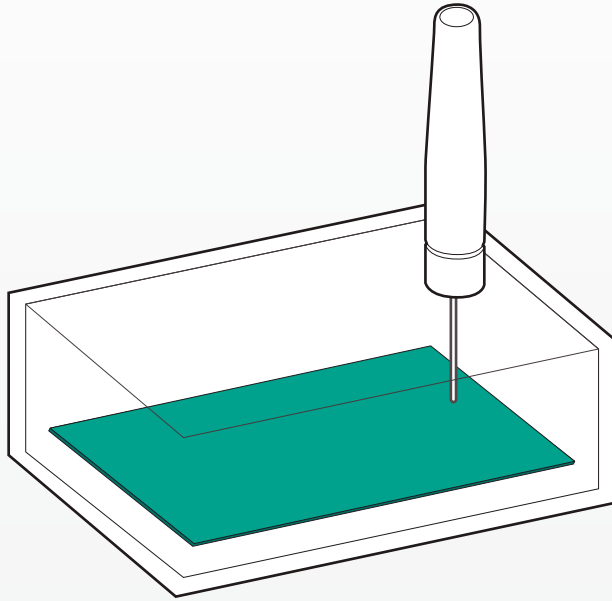
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## Test Unit and Antenna Mounting Position 1



*Ground Plane Size: 70mm(L) x 50mm(W) x 1mm(T)*

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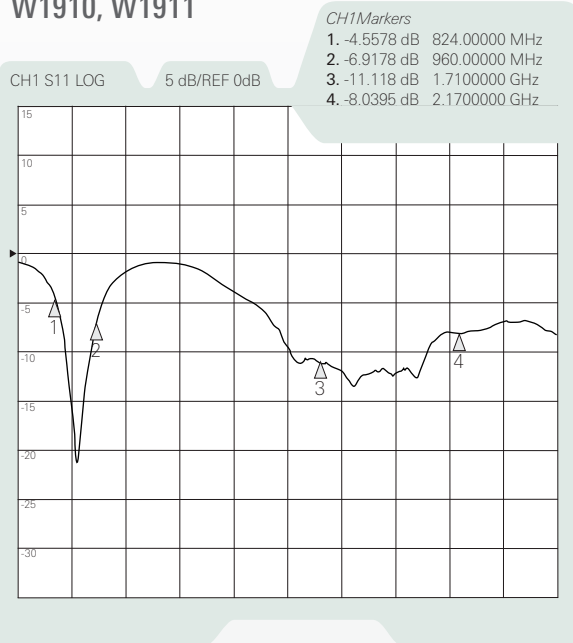
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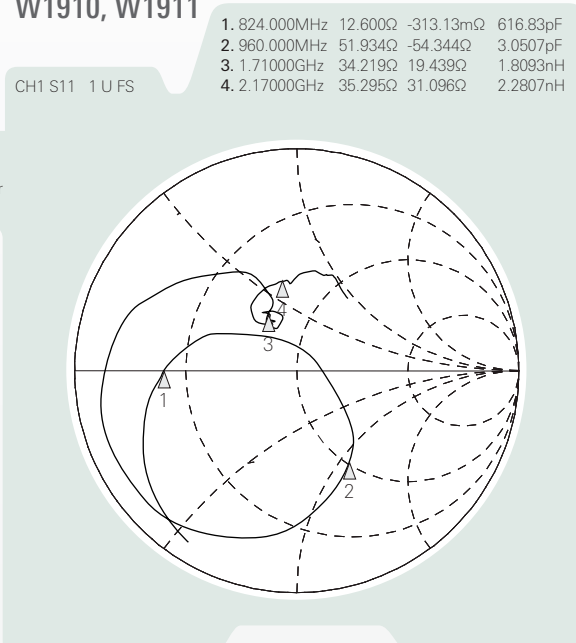
## Typical Electrical Characteristics (T=25 °C)

Typical free space performance, measured in test unit mechanics with 150mm feed cable (position 1.)

### W1910, W1911



### W1910, W1911

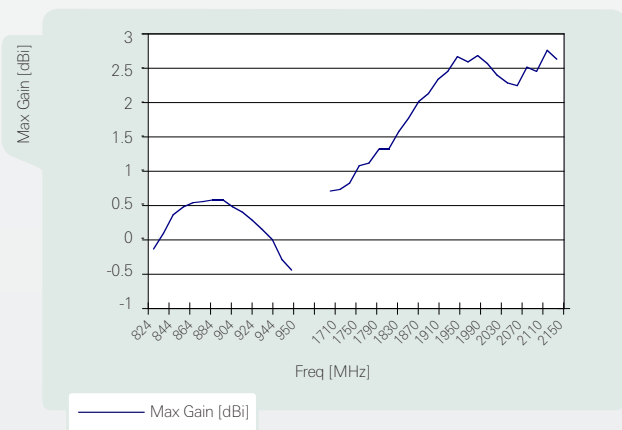


## Free Space Efficiency and Maximum Gain

### W1910 Efficiency



### W1910 Max Gain



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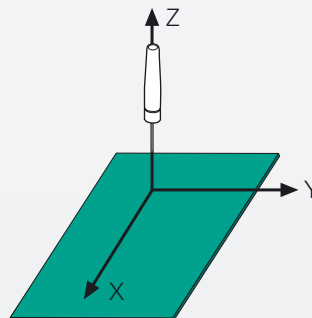
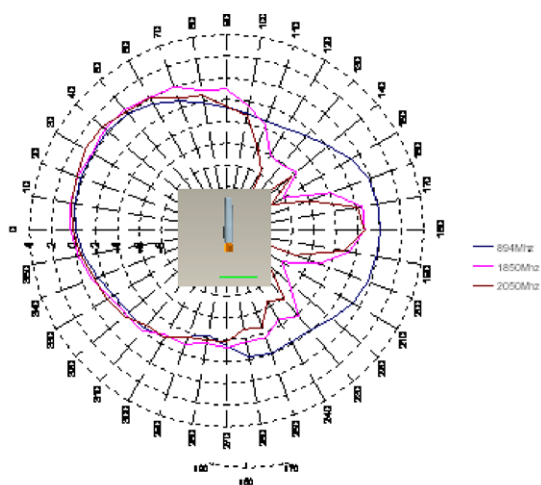
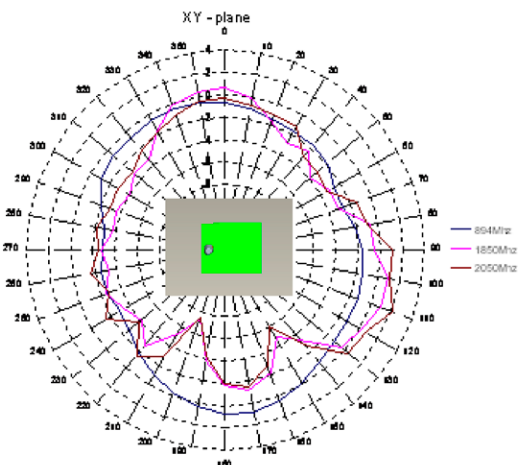
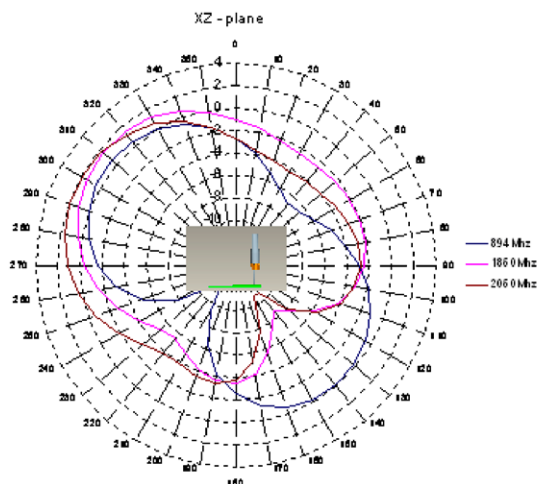
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# Penta Band Stubby Antenna

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## Typical Free space Radiation Patterns

Patterns measured in test unit mechanics (position1.)



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