

# External Outdoor Antenna for 2.4GHz Application

Pulse Part Number: W5001, W5010 and W5011



## Features

- Antenna size W5001: 18.2x128.05 mm  
W5010:  $\varnothing$ 10x130.09 mm  
W5011:  $\varnothing$ 10x130.09 mm
- Ingress Protection IP65
- UV protection
- RoHS Compliant Product
- Connector Type W5001: Fixed right angle RP-SMA (Male Body, Female Pin)  
W5010: Straight RP-SMA (Male Body, Female Pin)  
W5011: Straight RP-SMA (Male Body, Male Pin)

## Applications

- Zigbee 802.15, ISM 2.4GHz
- Metering, Security, M2M Applications

## Part Numbers:

| P/N            | Connector                                    |
|----------------|--|
| W5001          | Fixed Right Angle RP- SMA(Male)              |
| W5010<br>W5011 | Straight RP-SMA(Male)<br>Straight SMA (Male) |

## Electrical specifications @ +25 °C

W5001, W5010 and W5011 Typical free space performance

| Frequency Range [MHz] | Max Gain [dBi] | Efficiency [%] / [dB] | Return loss min. [dB] | Impedance [ $\Omega$ ] | Operating Temperature [°C] |
|-----------------------|----------------|-----------------------|-----------------------|------------------------|----------------------------|
| 2400 - 2500           | 1.5            | 70/-1.5               | -10                   | 50                     | -40 to +85                 |

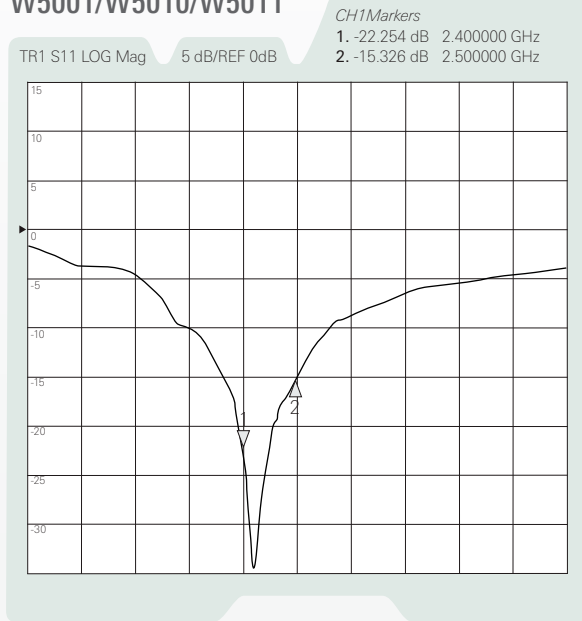
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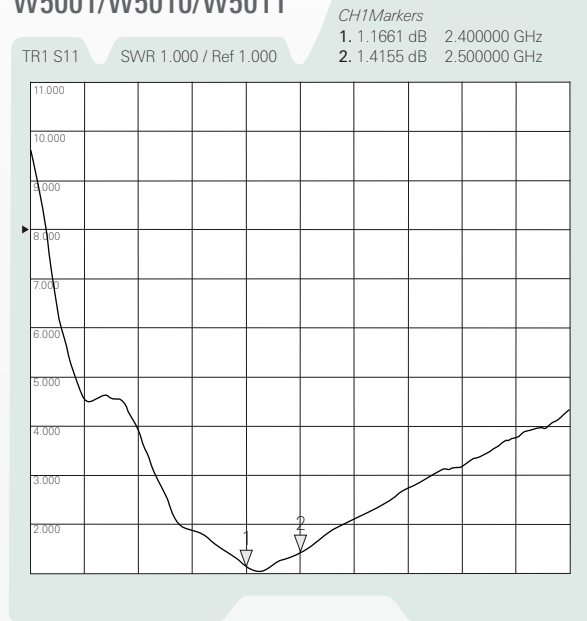
## Typical Electrical Characteristics (free space, T=25 °C)

Typical Return Loss S11/ VSWR

W5001/W5010/W5011



W5001/W5010/W5011



Free Space Total Field Maximum Gain

### Total Filed Peak Gain

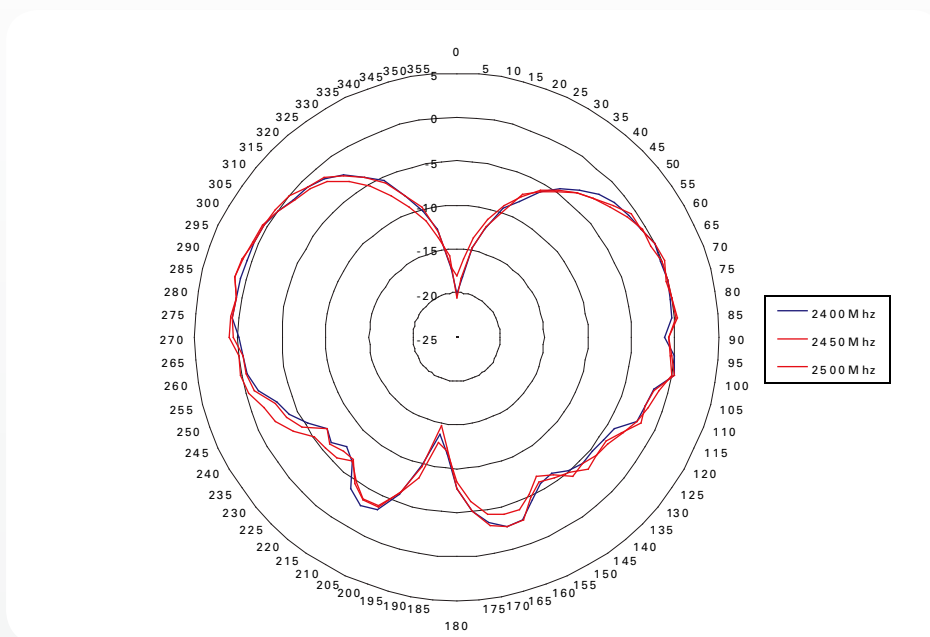


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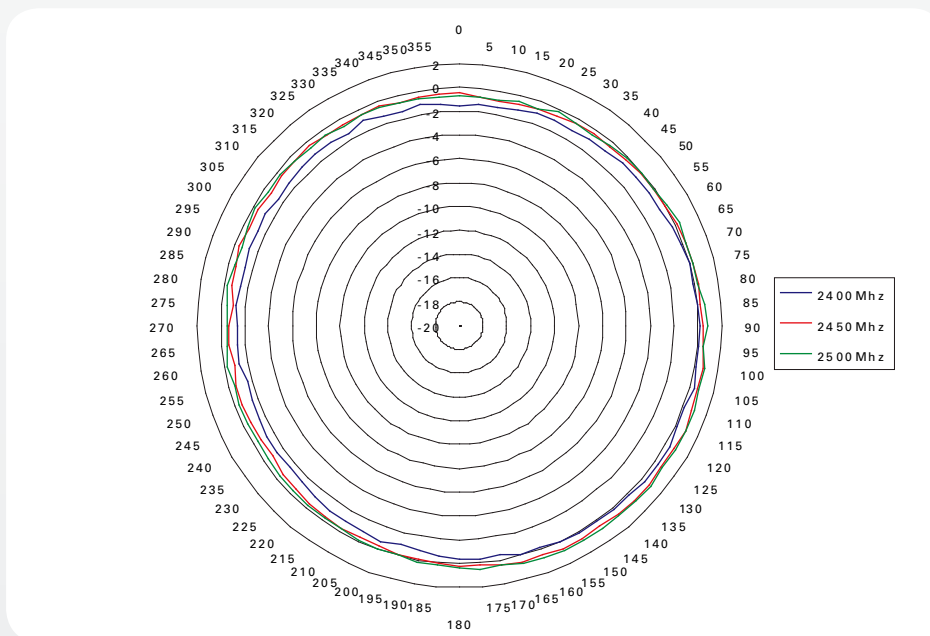
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## Typical Free space Radiation Patterns

E Plane Radiation Pattern



H Plane Radiation Pattern

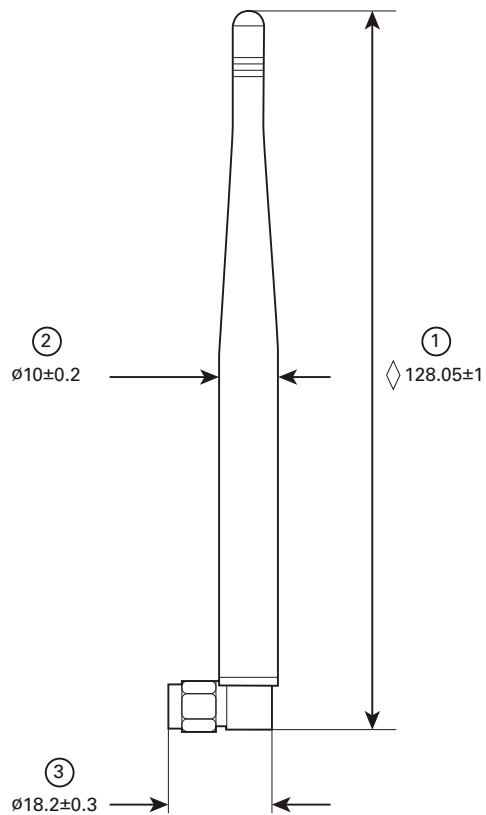


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## Connector Configuration

W5001



W5010 & W5011

