

#### **TECHNICAL DATA SHEET**

Description: 2400-2500/4900-5925MHz Swivel

WiFi Antenna with coax feed

**PART NUMBER: W1039B030** 



Antenna



Mounting grommet, supplied with Antenna

#### Features:

- Frequency:
  - 2400-2500/4900-5925MHz
- VSWR: 2:1
- Gain: 1 dBi / 2 dBi
- Efficiency: 60% / 50 %
- Length 88 mm (90 deg bent)
- 76 mm coax with U.FL
- RoHS Compliant

## **Applications:**

- · 2.4GHz and 5GHz radios
- Indoor use
- WiFi, Bluetooth, Zigbee
- Routers, Gateways, Data terminals
- IoT
- · Automation, security

All dimensions are in mm / inches

Issue: 1904

In the effort to improve our products, we reserve the right to make changes judged to be necessary. CONFIDENTIAL AND PROPRIETARY INFORMATION

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For more information:

Pulse Worldwide Headquarters 15255 Innovation Drive #100 San Diego, CA 92128 USA Tel:1-858-674-8100 Pulse/Larsen Antennas 18110 SE 34<sup>th</sup> St Bldg 2 Suite 250 Vancouver, WA 98683 USA Tel: 1-360-944-7551 Europe Headquarters Pulse GmbH & Do, KG Zeppelinstrasse 15 Herrenberg, Germany Tel: 49 7032 7806 0 Pulse (Suzhou) Wireless Products Co, Inc. 99 Huo Ju Road(#29 Bldg,4<sup>th</sup> Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998





TECHNICAL DATA SHEET

Series: STICK ANTENNA

Pulse*LARSEN* 

Antennas

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#### **ELECTRICAL SPECIFICATIONS**

Antenna Type Dipole Antenna

Frequency 2400-2500MHz/4900-5925MHz

Nominal Impedance  $50 \Omega$ 

**VSWR** 2:1(MAX)

Radiation Pattern **Omni** 

Gain >1dBi / >2dBi >60% / > 50% Efficiency

Polarization Vertical 2 W Power Withstanding

#### **MECHANICAL SPECIFICATIONS**

Overall Length 181.3 mm

Weight 7.46 q

Antenna Color / Material TPEE63D / Black

Similar with U.FL Connector type

Φ1.13mm coaxial cable Cable type

Cable length 76 mm

#### **ENVIRONMENTAL SPECIFICATIONS**

-20 ~ +70 ° C **Operating Temperature** 

-30 ~ +80 ° C Storage Temperature

Ingress protection Rating IP 20 Indoor use

**RoHS Compliant** Yes



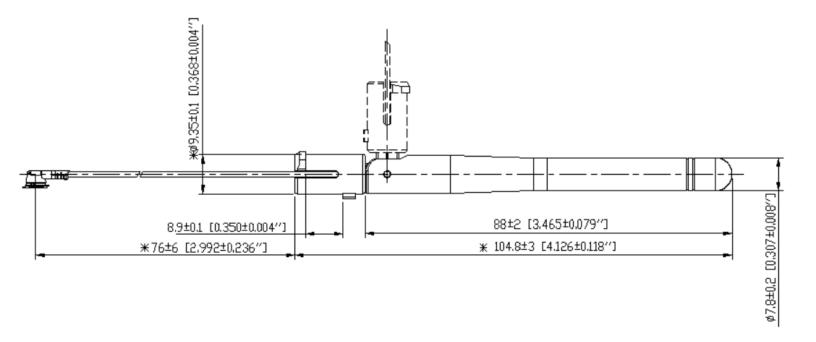


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### **MECHANICAL DRAWING**









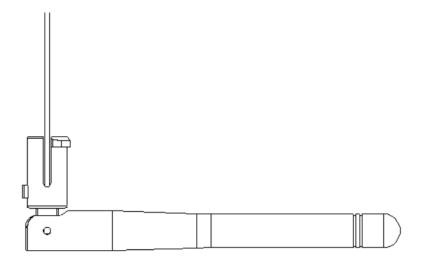
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#### **TEST SETUP**

### SETUP1:



### STEUP2:



Note: Free space radiation pattern is tested only in SETUP1.





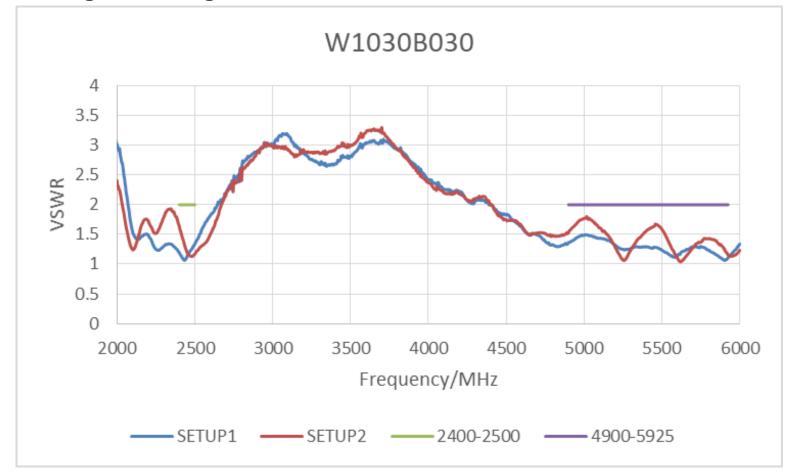
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#### **CHARTS**

## Voltage standing-wave ratio







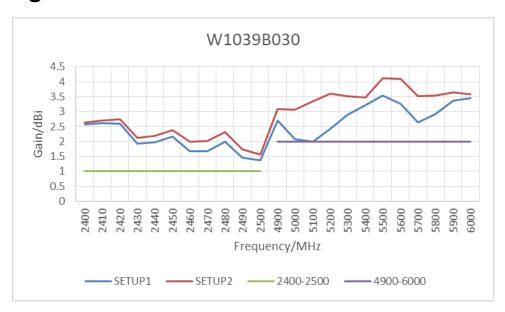
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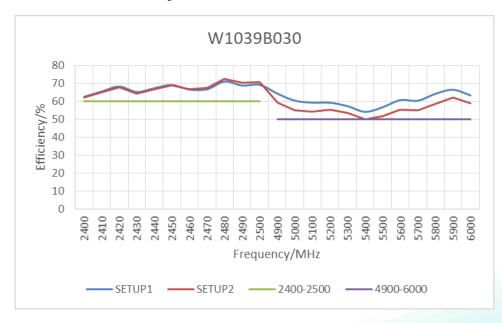
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#### **CHARTS**

# **Peaking Gain**



# **Radiation Efficiency**



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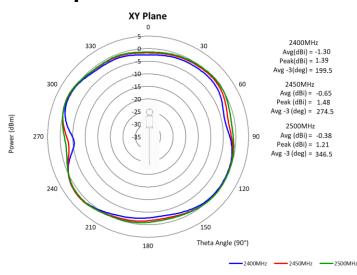
Description: 2400-2500/4900-5925MHz Swivel

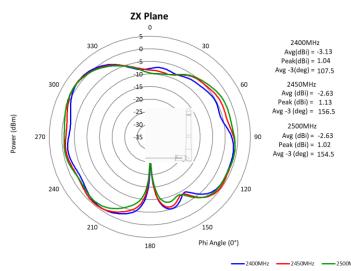
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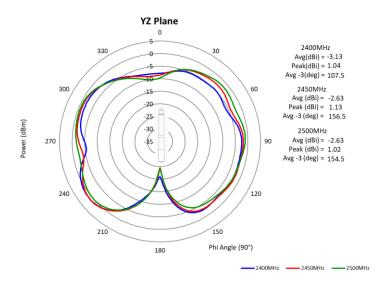
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#### **CHARTS**

# Free space Radiation Patterns/2400-2500MHz











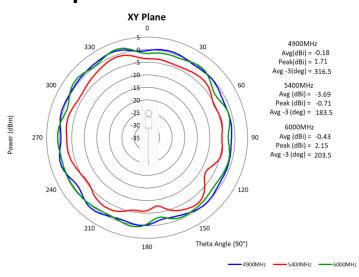
Description: 2400-2500/4900-5925MHz Swivel

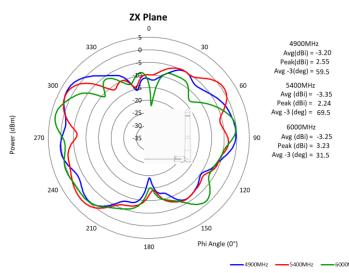
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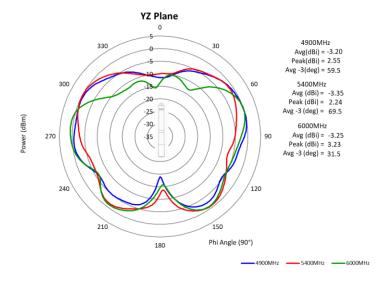
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#### **CHARTS**

# Free space Radiation Patterns/4900-6000MHz











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#### **PACKAGING**

**Quantity: 1200 PCS per Box** 

### **Packaging Steps:**

1. Place 20pcs products into PE bag

2. Apply HF & RoHS label onto PE bag and seal bag.





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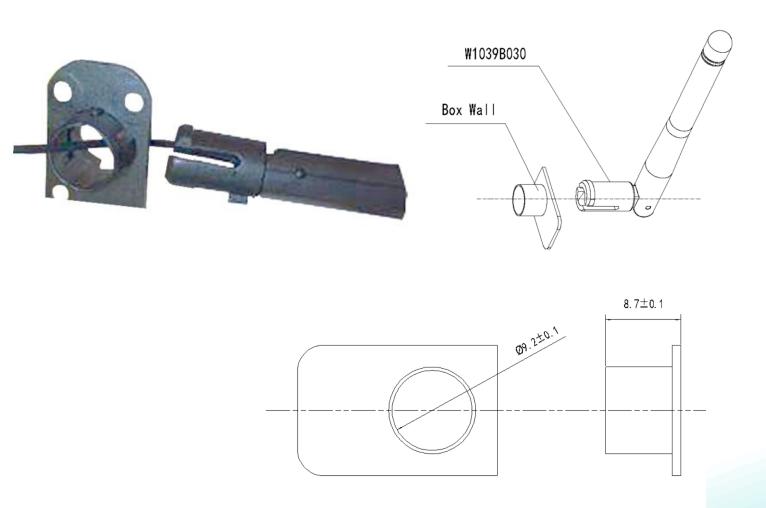
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#### **ASSEMBLY**

### The antenna has two kinds of mounting method

**Option 1**. If the box wall has the support structure as below, the antenna just directly insert into the hole of the box wall. The suggestion hole size is shown in the drawing.







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**Option 2**. If the box wall is flat wall. We should install the plastic mounting grommet we provide into the hole of the box wall firstly, then install the antenna. The suggestion hole size and wall thickness are below.

