



Series: Internal Antenna PART NUMBER: W3315BXXXX



#### Features:

- Dualband WiFi antenna
  - 2400-2500MHz
  - 4900-5925MHz
- Gain 2/5dBi
- Connector:
  - · As required
- Cable
  - · As required

#### **Applications:**

- WiFi, Bluetooth, BLE, ZigBee
- DSRC
- 2.4 and 5GHz proprietary radios
- IoT and M2M terminals
- · Security, Transportation

All dimensions are in mm / inches

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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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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





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# This document covers all product variants of the following product family

Antennas	Equivalent PN	Cable Type	Cable Length	Connector	Suggested Receptacle
W3315B0100	W3315B0100	Φ1.13mm Black	100mm	IPEX MHF –A13	I-PEX 20429-001E
				20428-001R	
			65mm	Equivalent of IPEX	I-PEX 20279-001E or
W3315B0065MHF1	W3315BA0065			MHF 20278-112R-13,	I-PEX 20441-001E-01
W3315B0100MHF1	W3315BA0100		100mm	Compatible with <b>U.FL</b>	
W3315B0200MHFIII	W3315BC0200	Ф0.81mm Black	200mm	Equivalent of IPEX	
				MHFIII 20367-001R,	I-PEX 20369-001E
				Compatible with <b>W.FL</b>	
W3315B0100MHF4	W3315BD0100		100mm	Equivalent of IPEX	
				MHF4 20448-001R-081	I-PEX 20449-001E or I-PEX 20579-001E
W3315B0250MHF4L	W3315BD0250		250mm	Equivalent of IPEX MHF4L 20499-001E	









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#### **ELECTRICAL SPECIFICATIONS**

Frequency 2.4-2.5/4.9-5.925GHz

Nominal Impedance  $50\Omega$ 

VSWR 2:1

Gain (2400-2500MHz) 2dBi +/- 1 dB

Gain (4900-5925MHz) 5dBi +/- 1 dB

Efficiency(Average) 70%

Radiation Pattern OMNI

Polarization: Vertical

Power withstanding 2W Max

Cable and Connector As Required

Cable length As Required



#### TECHNICAL DATA SHEET

**Description: INTERNAL FPC DUAL-BAND WIFI** 

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#### **MECHANICAL SPECIFICATIONS**

Weight 0.5 g

Fixing system Adhesive Tape 3M9077

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature -40 ~ +85° C

Humidity 95% RH @ +25°C for 12 h and 55°C for 12h, 6 cycles

Salt mist 48 hours

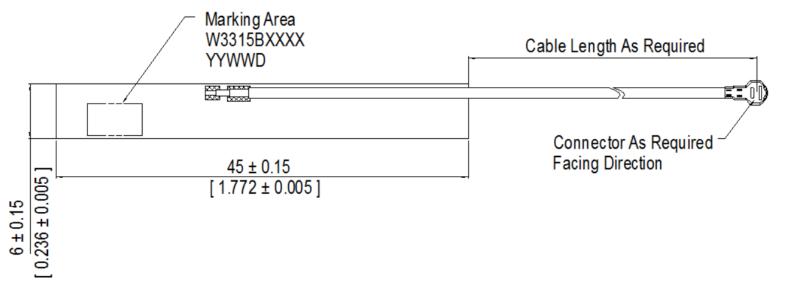






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#### **MECHANICAL DRAWING**

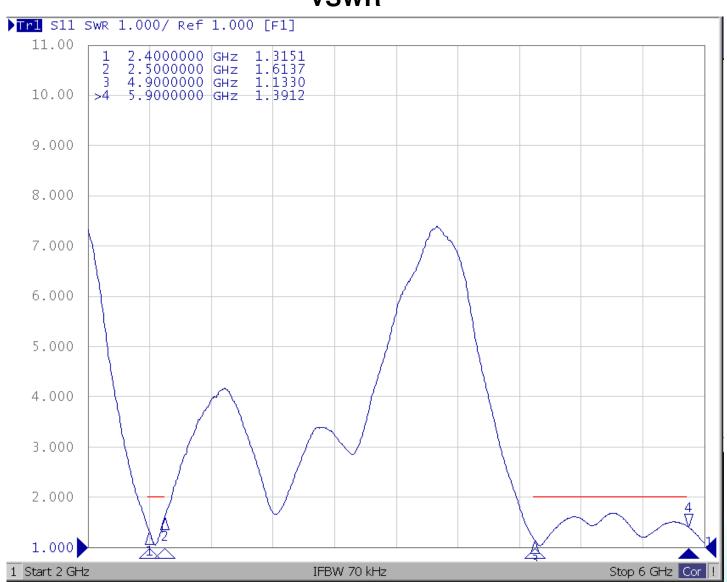




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#### **CHARTS**

# W3315B0100 Measured on a 2mm thick plastic (ABS) part. VSWR







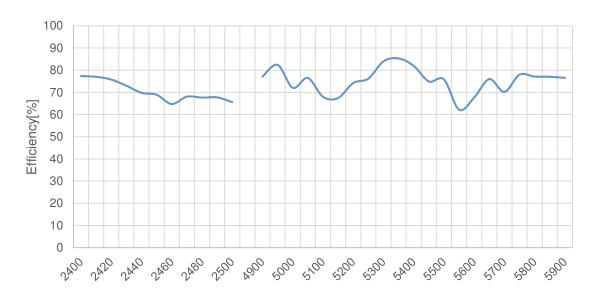


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#### **CHARTS**

# Efficiency(%)

W3315B0100



# Gain(dBi) W3315B0100 6 5 4 1 0 2 1

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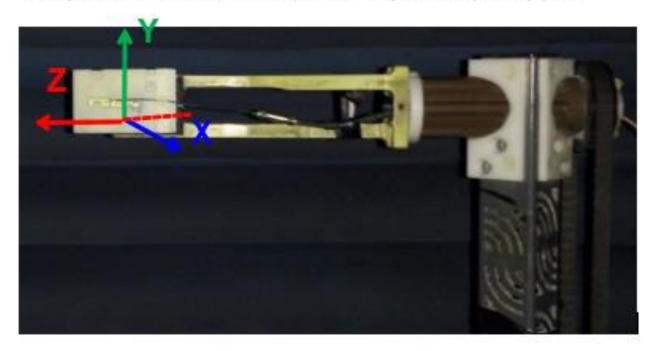
Series: Internal Antenna PART NUMBER: W3315BXXXX

#### **CHARTS**

W3315B0100 Measured on a 2mm thick plastic (ABS) part.

3D pattern

The pattern is measured on 2mm plastic (ABS) part.





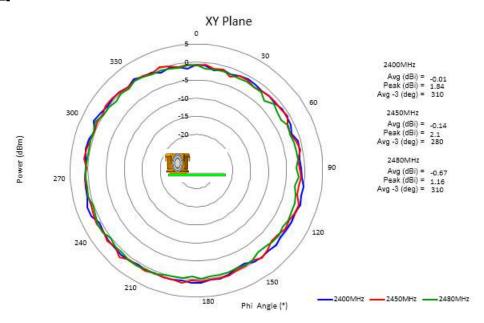


Series: Internal Antenna PART NUMBER: W3315BXXXX

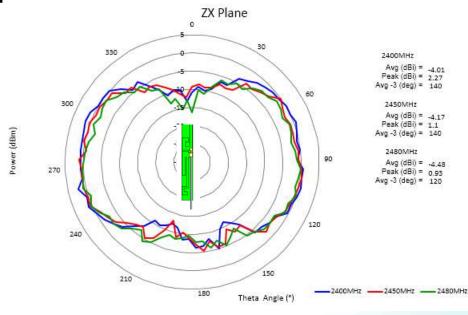
# 2400-2500MHz

#### **CHARTS**

# **H\_plane**



# E\_plane



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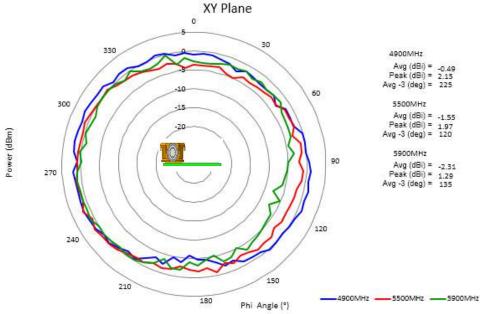


Series: Internal Antenna PART NUMBER: W3315BXXXX

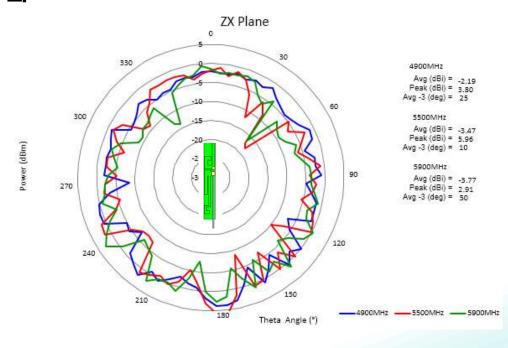
# 4900-5925MHz

#### **CHARTS**

# **H\_plane**



# E\_plane



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ROHS





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#### **PACKAGING**

- 10 antennas packed in one plastic bag
- 10 plastic bags of 10 antennas packed in a bubble bag
- 15 bubble bags of 100 antennas packed in a cardboard box
- 1 label on each box with qty, part number, date code.