

**Description: 824-960/1710-2170MHz Right** 

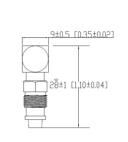
**Angle Stick Antenna** 

PART NUMBER: W1903

**Series: External Antenna** 



\$50±1 [1.97±0.04]



## Features:

- Penta band Cell Band Antenna
- Gain 0dBi
- Power Rating 2W
- Length 50mm
- Connector Right Angle FME Female
- RoHS Compliant

# **Applications:**

- Indoor applications
- 2G, 3G, 4G Cellular
- IoT, M2M
- Metering
- Industry automation & controls
- Energy monitoring

All dimensions are in mm / inches

Issue: 1641

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

This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything it may describe. Reproduction, disclosure or use without specific written authorization of Pulse is strictly forbidden. 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



**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

**PART NUMBER: W1903** 

**Series: External Antenna** 

ELECTRICAL SPECIFICATIONS		
Frequency	824-960/1710-2170	MHz
Nominal Impedance	50	$\Omega$
Return loss	-4.5	dB(max)
Average efficiency(824-960MHz)	27	%
Average efficiency(1710-2170MHz)	43	%
Peak Gain (824-960MHz)	0	dBi +/- 1 dB
Peak Gain (1710-2170MHz)	0	dBi +/- 1 dB
Polarization:	Vertical	
Power withstanding	2	W



**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

**PART NUMBER: W1903** 

**Series: External Antenna** 

## **MECHANICAL SPECIFICATIONS**

Plastic radome PC+PBT

Color Black

Weight 12.05 g

Overall Length 50[1.97] MM[INCHES]

# **ENVIRONMENTAL SPECIFICATIONS**

Operating temperature -30/+75 ° C

Temperature cycling test -35/+80 ° C

Salt mist 24 hours



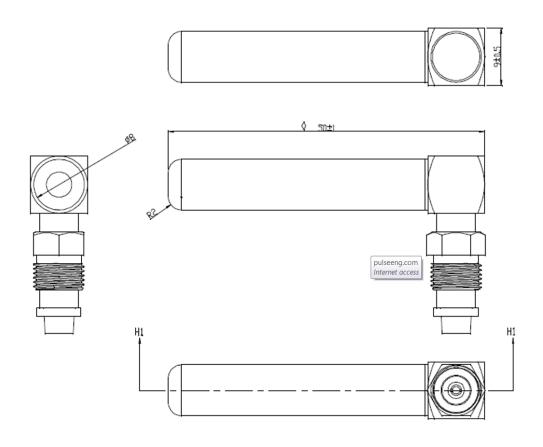
**Description: 824-960/1710-2170MHz Right** 

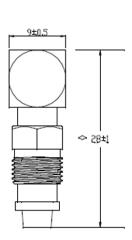
**Angle Stick Antenna** 

**PART NUMBER: W1903** 

# **Series: External Antenna**

# **MECHANICAL DRAWING**







**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

**PART NUMBER: W1903** 

**Series: External Antenna** 

# **CHARTS**

# Return loss

# Return loss vs Frequency measured in free space W1903 measured in PSU







**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

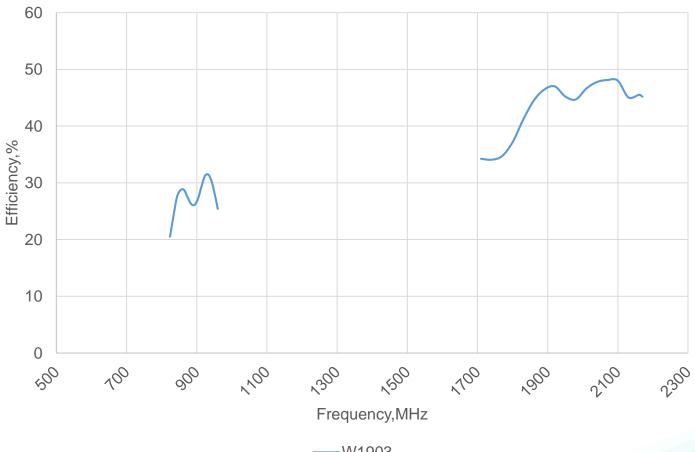
PART NUMBER: W1903

**Series: External Antenna** 

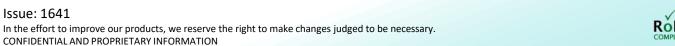
# **CHARTS**

# Efficiency

# Efficiency vs Frequency measured in free space W1903 measured in PSU



W1903





**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

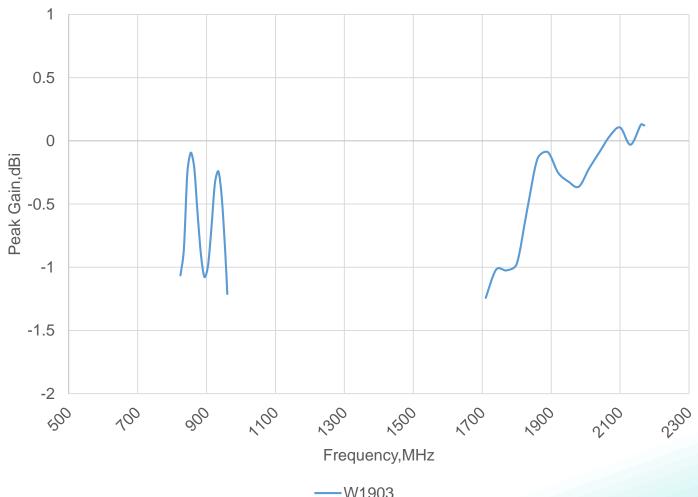
PART NUMBER: W1903

**Series: External Antenna** 

# **CHARTS**

# Peak Gain

# Peak Gain vs Frequency measured in free space W1903 measured in PSU



-W1903





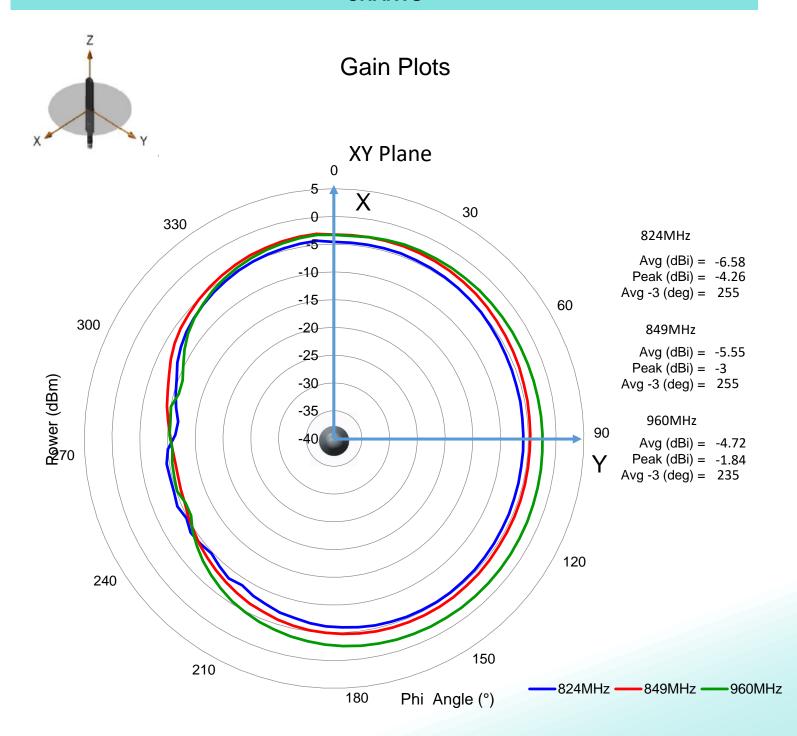
**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

**PART NUMBER: W1903** 

**Series: External Antenna** 

## **CHARTS**



Issue: 1641



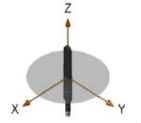
**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

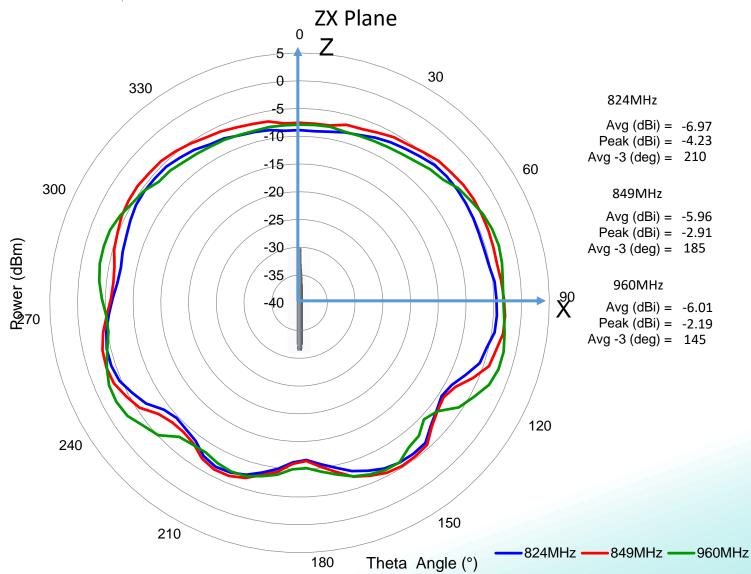
**PART NUMBER: W1903** 

**Series: External Antenna** 

## **CHARTS**



# **Gain Plots**



Issue: 1641

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





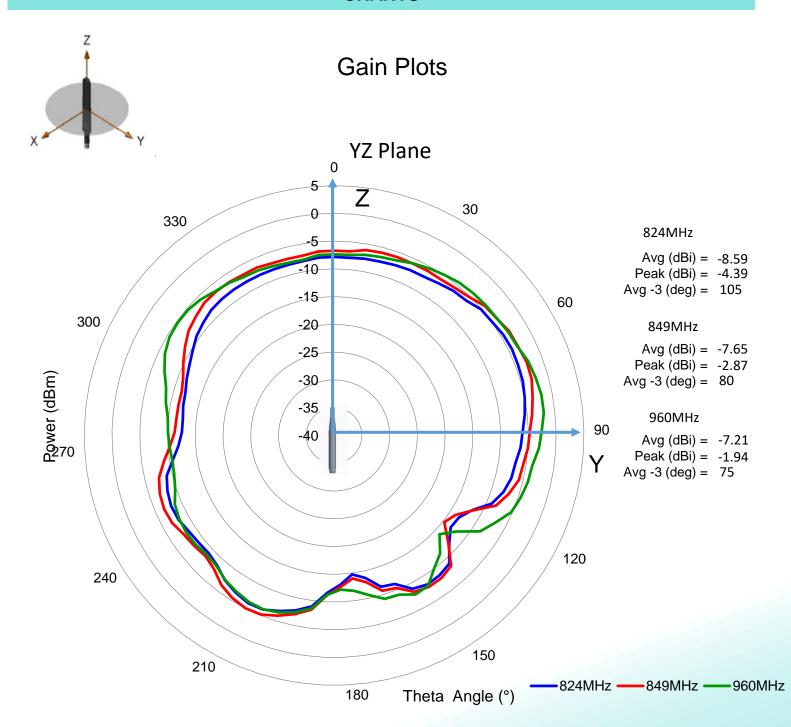
**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

PART NUMBER: W1903

# **Series: External Antenna**

# **CHARTS**



Issue: 1641



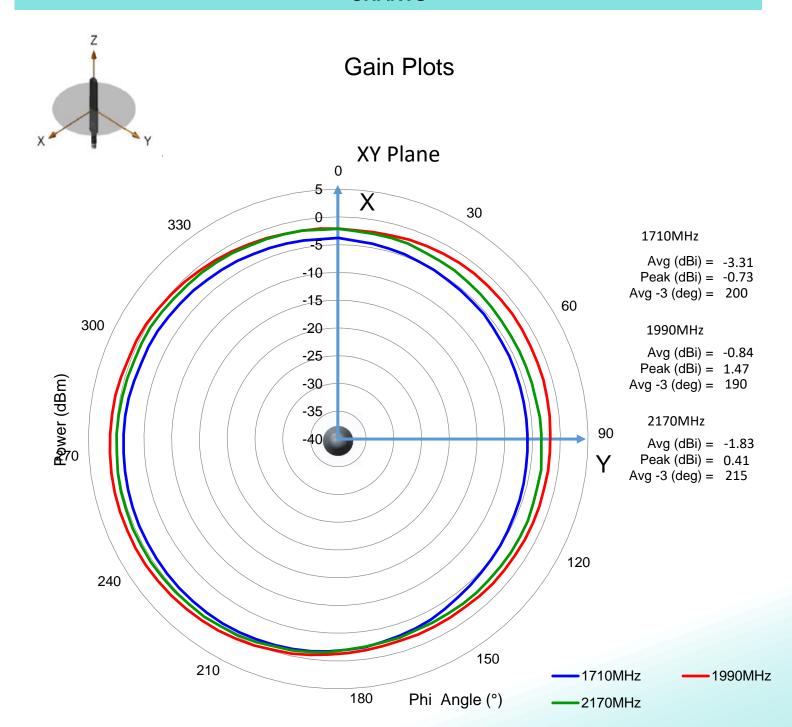
**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

**PART NUMBER: W1903** 

# **Series: External Antenna**

# **CHARTS**



Issue: 1641



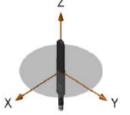
**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

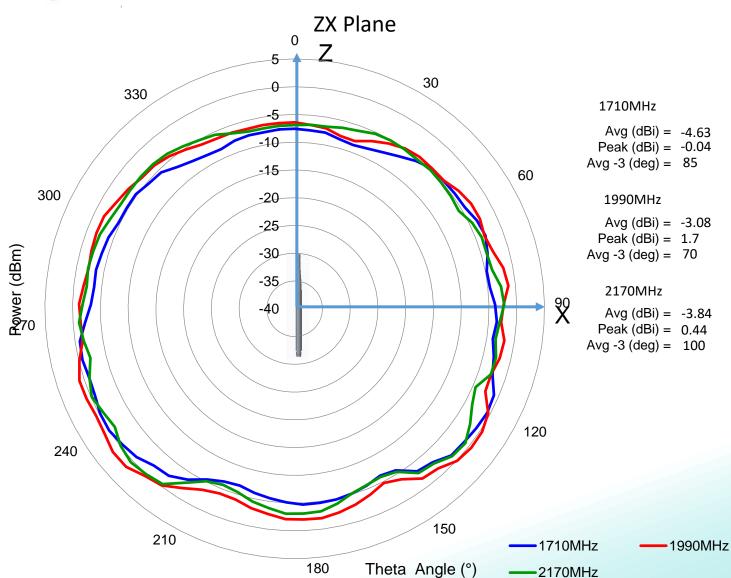
**PART NUMBER: W1903** 

# **Series: External Antenna**

## **CHARTS**



# Gain Plots



Issue: 1641

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





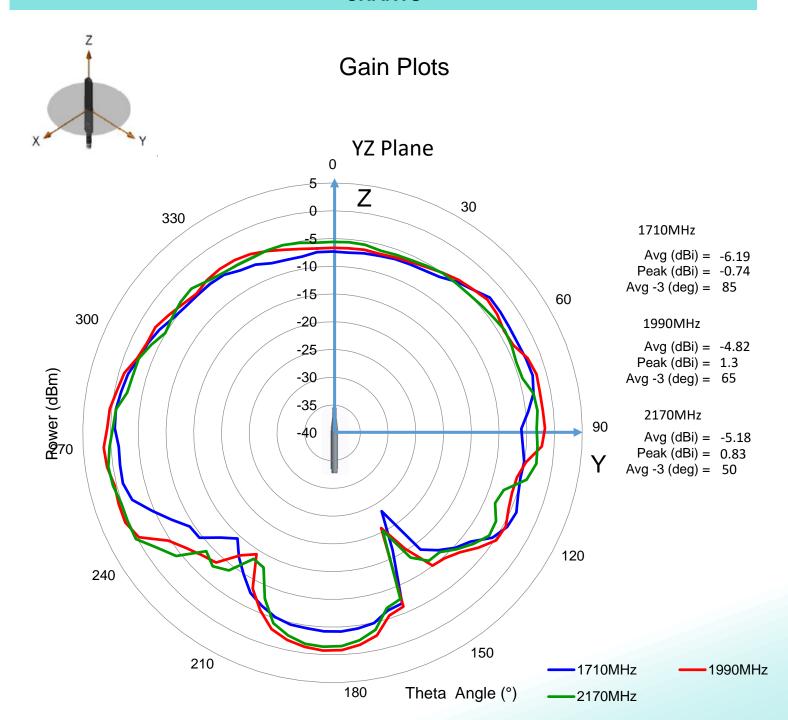
**Description: 824-960/1710-2170MHz Right** 

**Angle Stick Antenna** 

**PART NUMBER: W1903** 

**Series: External Antenna** 

## **CHARTS**



Issue: 1641