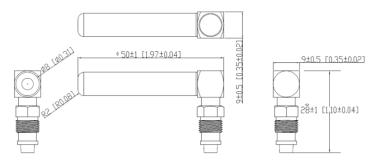


Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903





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 34th 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,4th Phase Suzhou New District Jiangsu Province, Suzhou 215009 PR China Tel: 86 512 6807 9998



1



Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

ELECTRICAL SPECIFICATIONS

Frequency	824-960/1710-2170	MHz
Nominal Impedance	50	Ω
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

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



2



Description: 824-960/1710-2170MHz Right **Angle Stick Antenna**

Series: External Antenna

PART NUMBER: W1903

MECHANICAL SPECIFICATIONS

Plastic radome

Color

Weight

Overall Length

PC+PBT

Black

12.05 g

50[1.97] MM[INCHES]

ENVIRONMENTAL SPECIFICATIONS

Operating temperature

Temperature cycling test

Salt mist

-35/+80 °C

-30/+75

24 hours

°C

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



3



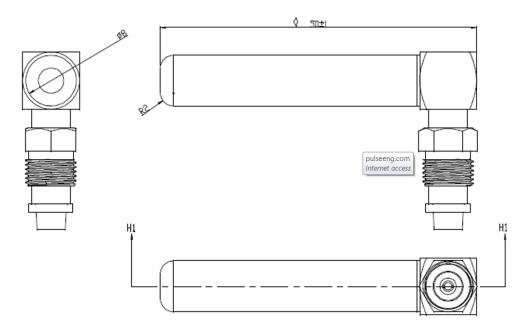
Description: 824-960/1710-2170MHz Right Angle Stick Antenna

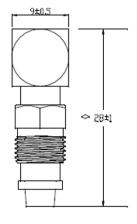
Series: External Antenna

PART NUMBER: W1903

MECHANICAL DRAWING







Issue: 1641

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



4



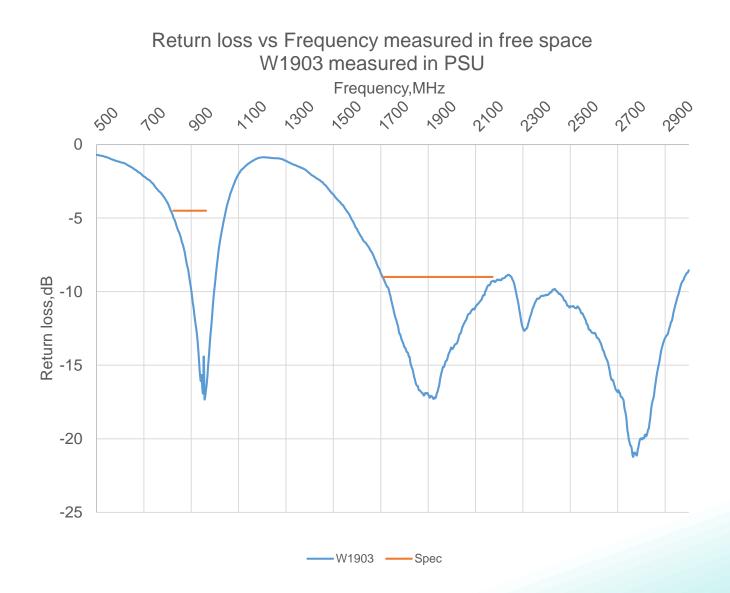
Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS

Return loss



Issue: 1641

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



5



Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS

Efficiency

Efficiency vs Frequency measured in free space W1903 measured in PSU 60 50 40 Efficiency,% 30 20 10 0 490 000 ~~00 1300 1500 1000 2,100 2300 100 ,700 Frequency,MHz W1903

Issue: 1641

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



6



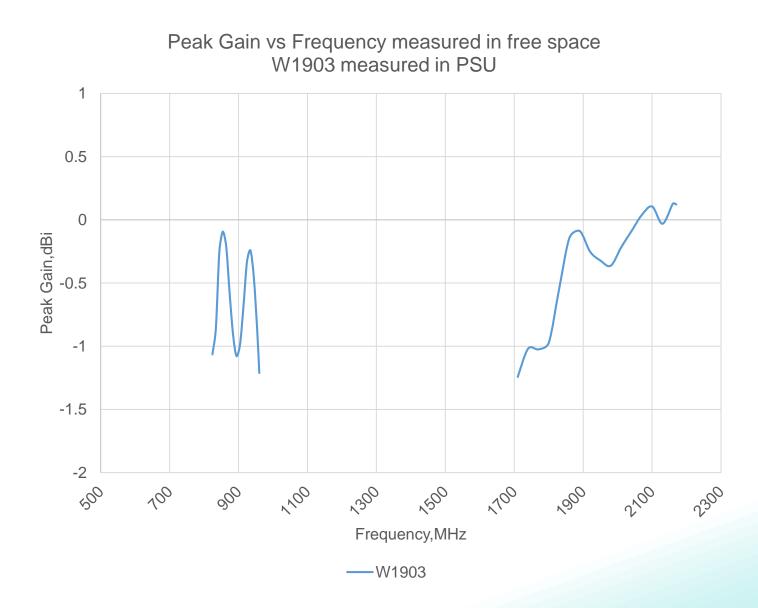
Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS

Peak Gain



Issue: 1641

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

7

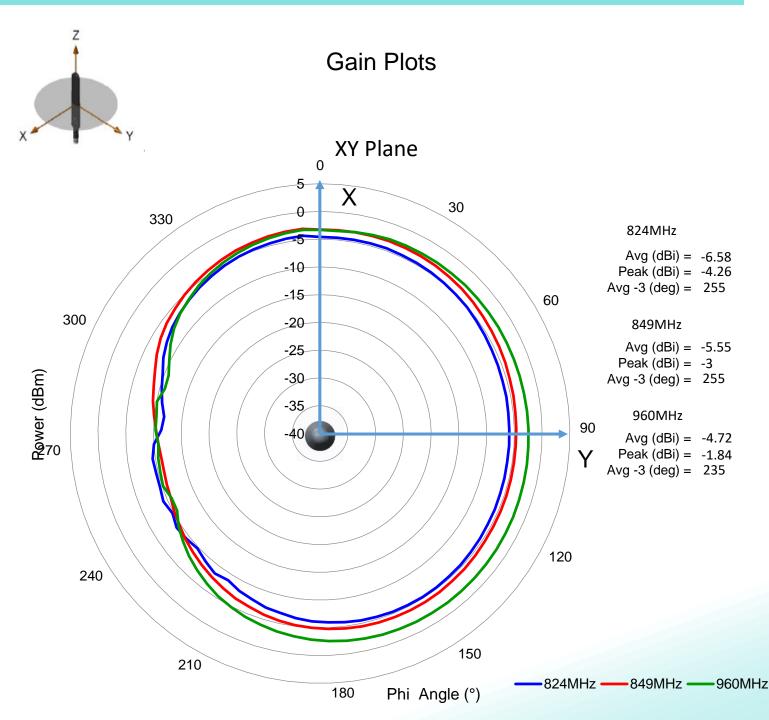


Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS



Issue: 1641

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

8



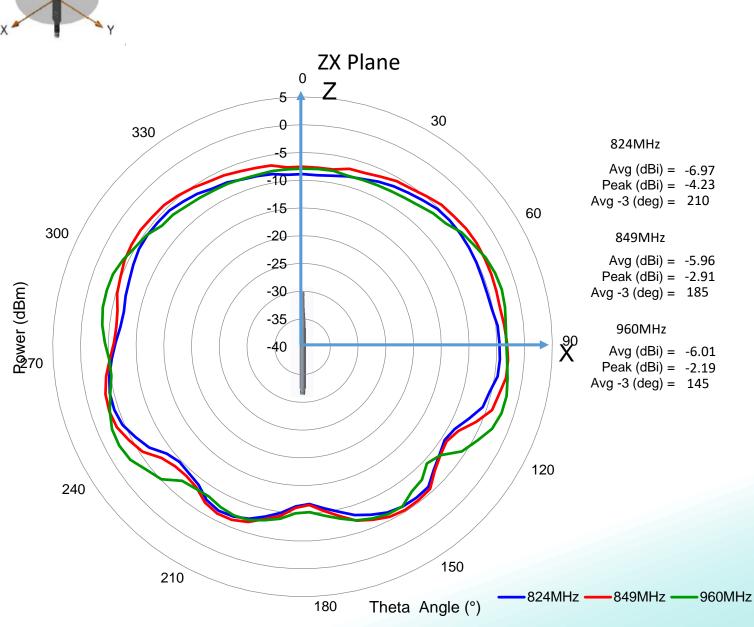
Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

7

PART NUMBER: W1903

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

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.

9

RoHS

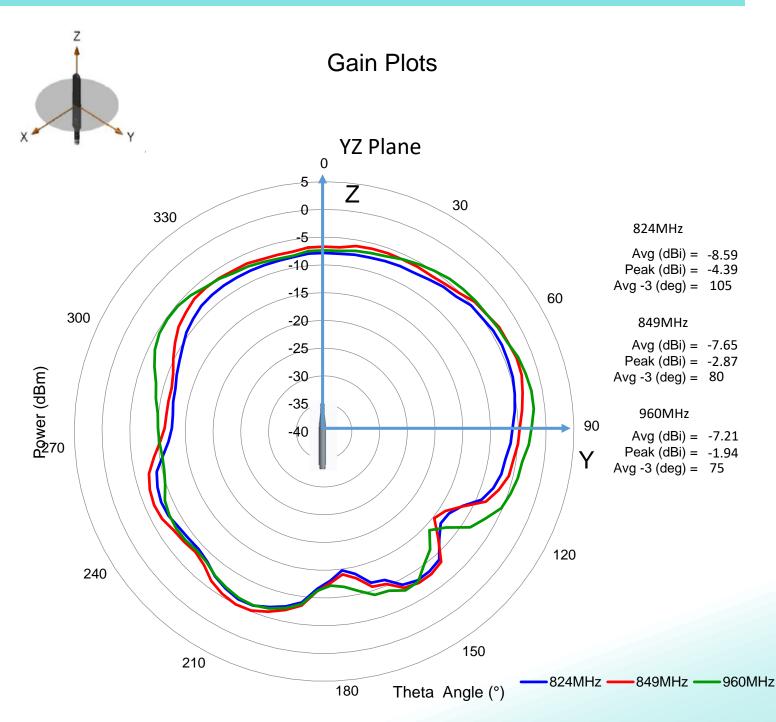


Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS



Issue: 1641

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

ROHS 10

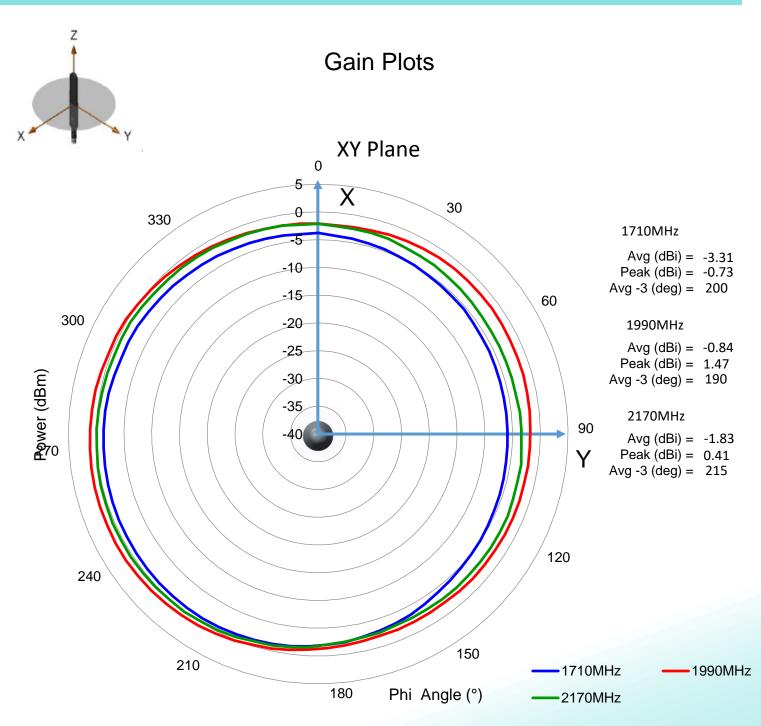


Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS



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.

11

RoHS



Description: 824-960/1710-2170MHz Right **Angle Stick Antenna**

Series: External Antenna

PART NUMBER: W1903

CHARTS 7 Gain Plots **ZX** Plane 0 5 30 330 1710MHz 5 Avg (dBi) = -4.6310 Peak (dBi) = -0.04 Avg - 3 (deg) = 85-15 60 300 -20 1990MHz Avg (dBi) = -3.08-25 Peak (dBi) = 1.7Rower (dBm) -30 Avg - 3 (deg) = 70-35 2170MHz 90 X 40 Avg (dBi) = -3.84 Peak(dBi) = 0.44Avg - 3 (deg) = 100120 240 150 210 -1710MHz -1990MHz 180 Theta Angle (°)

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.

-2170MHz

12

RoHS

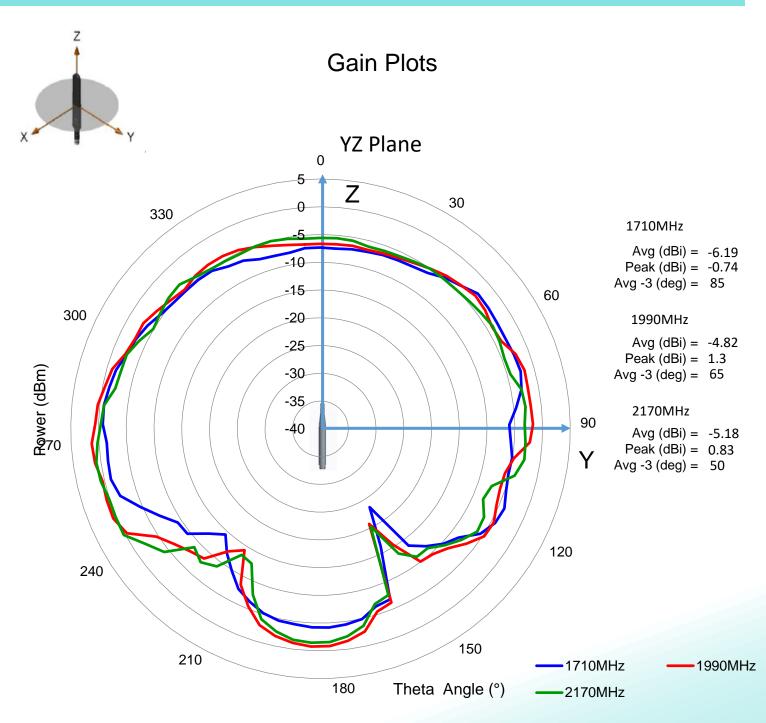


Description: 824-960/1710-2170MHz Right Angle Stick Antenna

Series: External Antenna

PART NUMBER: W1903

CHARTS



Issue: 1641

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

ROHS 13



Series: External Antenna

Description: 824-960/1710-2170MHz Right Angle Stick Antenna

PART NUMBER: W1903

PACKAGING

1PCS/PE bag 40PCS/Tray 8Tray/Carton box 320PCS/Carton box



Issue: 1641

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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse: W1903