



### Features:

- 890-960 MHz
- Gain 8.8 dBi
- N connector
- 4 Elements
- All-Welded Aluminum
- Black Powder Coat
- Includes “U”-Bolt Bracket for maximum 3 in. diameter pole
- Wind loading 164 km/h = 100 MPH

### Applications:

- Harsh Environmental Conditions
- Highly Directional
- Remote Monitoring / Scada
- Mining, Industrial
- Oil / Gas
- Utility and SmartGrid
- Wastewater, Irrigation
- Municipal / Transportation

All dimensions are in mm / inches

Issue: 1835

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

Series: Yagi

Description: 890-960 MHz 8 dBi 4-Element  
Yagi, Black, All-Welded, N-female connector

PART NUMBER: YA6900W

**ELECTRICAL SPECIFICATIONS**

Antenna Type	Yagi-Uda
Frequency	890-960 MHz
Nominal Impedance	50 $\Omega$
VSWR	2:1 Max
Gain	8.8 dBi
Efficiency	87%
Horizontal / Vertical -3 dB Bandwidth	88 ° / 56 °
Horizontal / Vertical Side Lobe Level	-13 dB / -14 dB
Front to Back Ratio	-14 dB min
Polarization	Linear
Power Withstanding	300 W

**MECHANICAL SPECIFICATIONS**

Overall Length	445 mm
Weight	452 g
Antenna Color	Powder Coat Black
Antenna Material	Aluminum
Connector type	N Female
Fixing System	Pole Clamp
Azimuth Adjustment	360 °

Issue: 1835

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.

Series: Yagi

Description: 890-960 MHz 8 dBi 4-Element  
Yagi, Black, All-Welded, N-female connector

PART NUMBER: YA6900W

## ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 to +85 ° C
Storage Temperature	-40 to +85 ° C
Cyclic	-40 to +55 ° C (5 ° C/min)
Wind-loading	164 km/h / 100 mi/h
Humidity	93% @ +30 ° C
Cyclic	95% @ +30 ° C
Rain	15 mm/min (30 min)
Salt Mist	7 Days
Industrial Atmosphere	4 Days
Sinusoidal Vibration Displacement	3 mm - 2/9 Hz
Sinusoidal Vibration Acceleration	10 m/s <sup>2</sup> - 9/200 Hz
Random Vibration Level (ASD)	1 m <sup>2</sup> /s <sup>2</sup> - 10/200 Hz 0.3 m <sup>2</sup> /s <sup>3</sup> - 200/2000 Hz
Shocks	100 m/s <sup>2</sup>
Drop Test	1.0 m
RoHS Compliant	Yes

Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

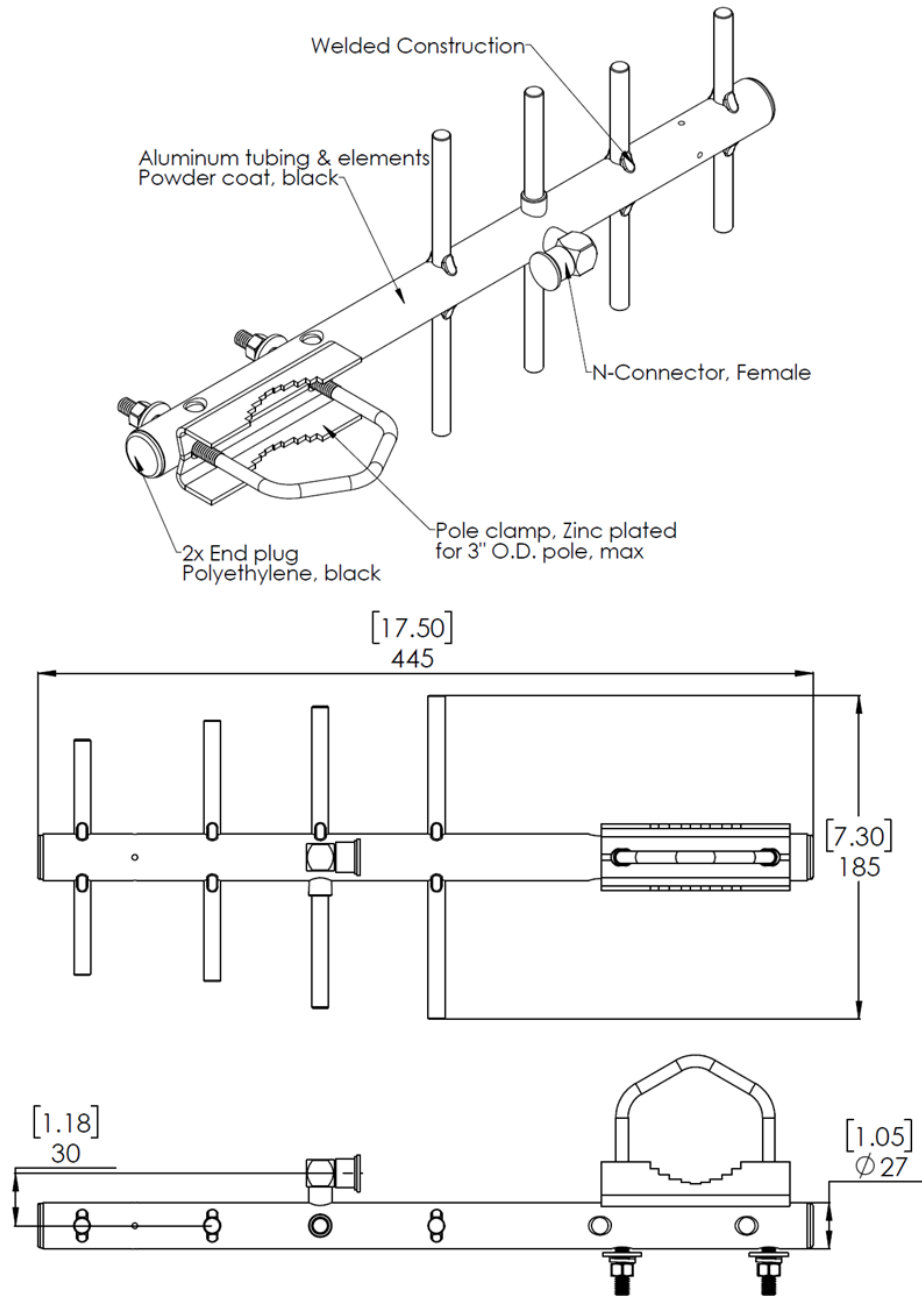
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 890-960 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6900W

MECHANICAL DRAWING



Unit: mm [in]

Issue: 1835

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.

Series: Yagi

Description: 890-960 MHz 8 dBi 4-Element  
Yagi, Black, All-Welded, N-female connector

PART NUMBER: YA6900W

## TEST SETUP



Antenna mounted vertically on post with  
insulator on driven element facing up

Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

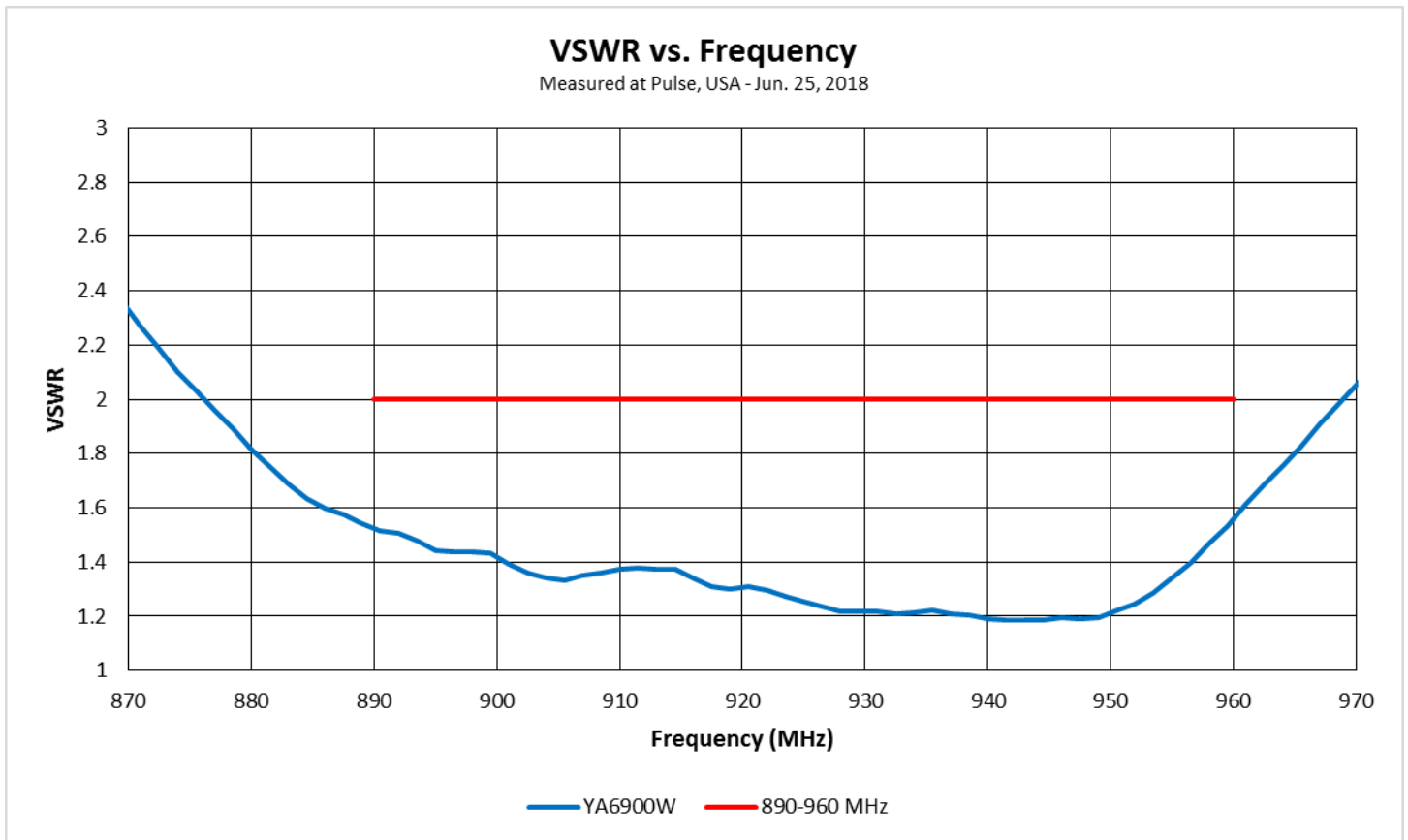
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 890-960 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6900W

CHARTS



Issue: 1835

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

CONFIDENTIAL AND PROPRIETARY INFORMATION

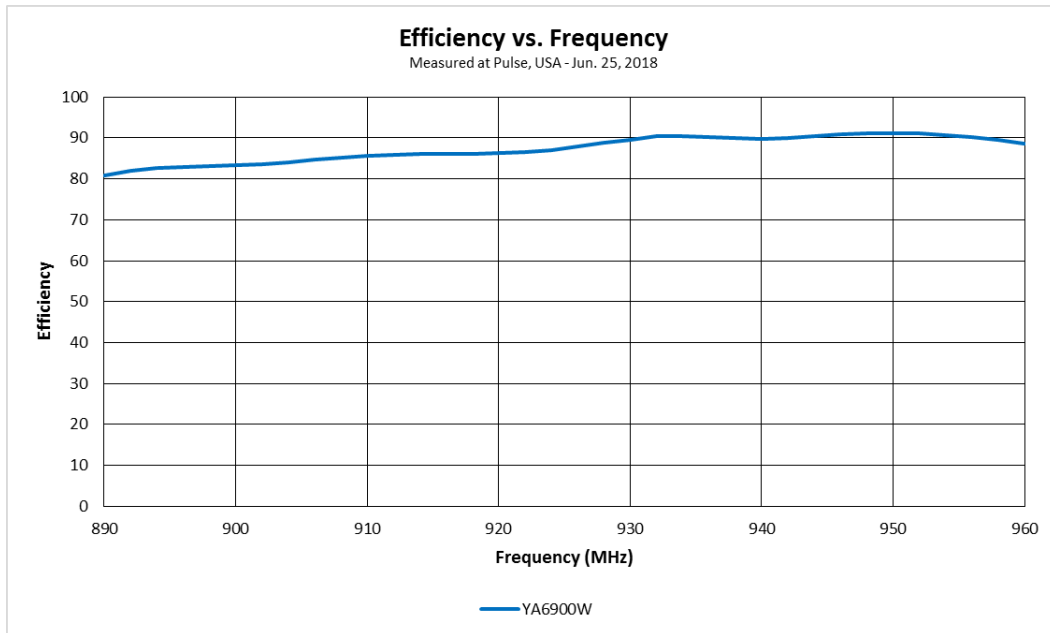
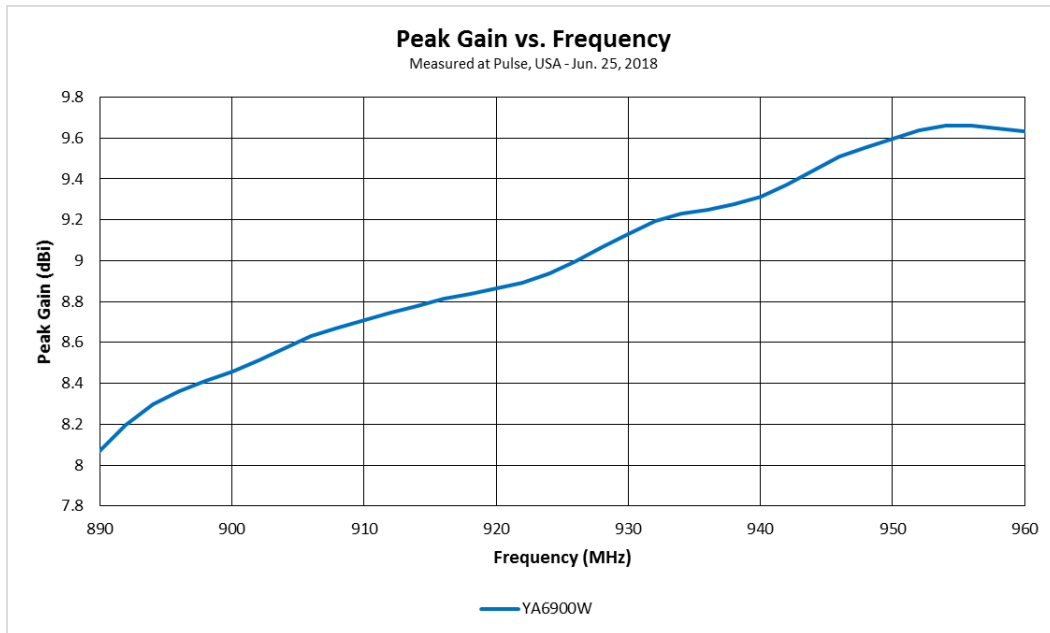
This document contains confidential and proprietary information of Pulse Electronics, Inc. (Pulse) and is protected by copyright, trade secret and other state and federal laws. Its receipt or possession does not convey any rights to reproduce, disclose its contents, or to manufacture, use or sell anything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

Description: 890-960 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6900W

CHARTS



Issue: 1835

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.

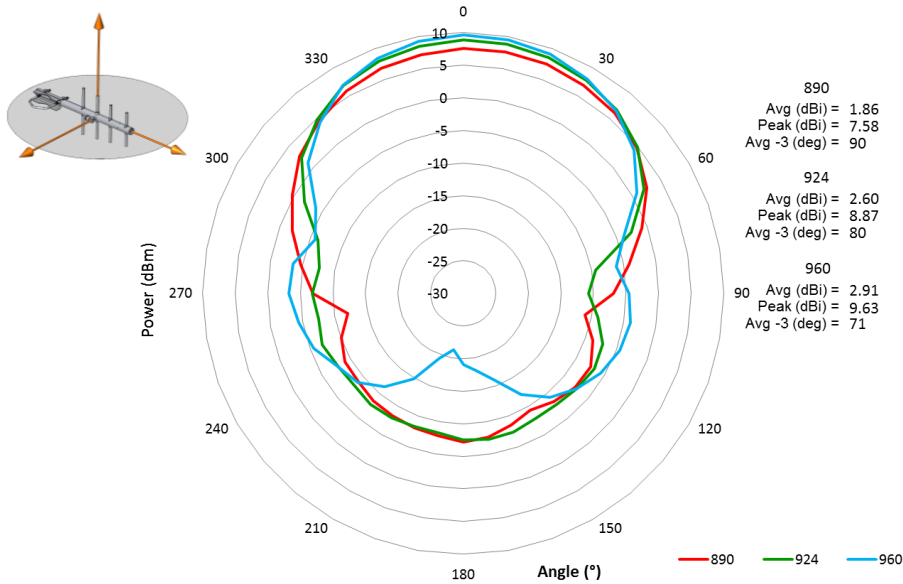
Description: 890-960 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

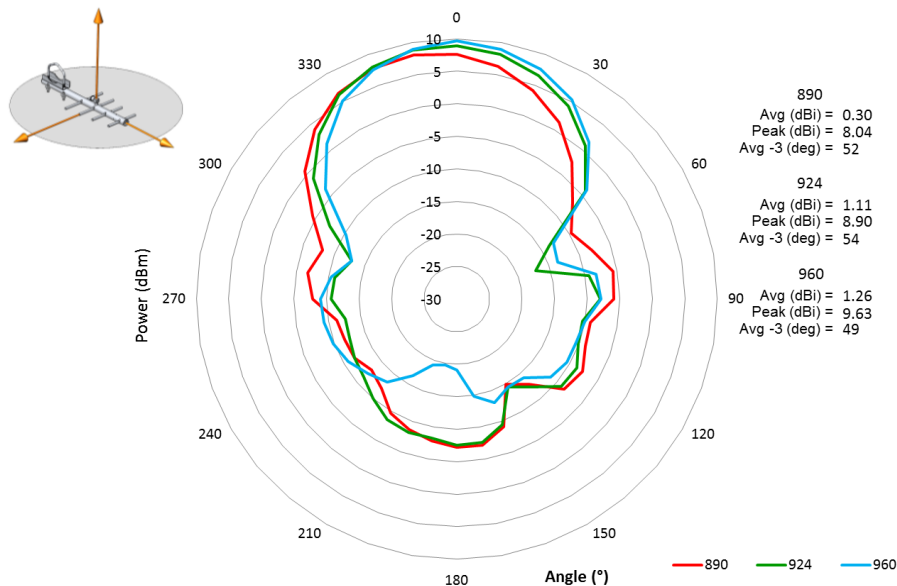
PART NUMBER: YA6900W

CHARTS

Azimuth/Horizontal Plane



Elevation/Vertical Plane



Issue: 1835

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.



Description: 890-960 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6900W

## PACKAGING

1 cardboard box containing:

- 1 antenna
- 1 cardboard partition
- 1 plastic bag containing:
  - 1 bracket kit
  - 1 instructions for antenna installation
  - 1 warning regarding electrocution hazards
- 1 bag of air

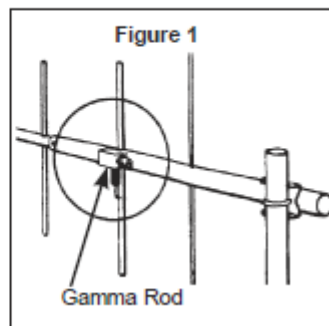
1 label on cardboard box with part number, date code, characteristics

## ASSEMBLY

### INSTALLATION INSTRUCTIONS

#### PRE-INSTALLATION

- Larsen Yagis are designed to mount vertically.
- YA3 Series (UHF): Gamma rod must be facing down for weather considerations (see Figure 1).



- YA5 and YA6 Series: The insulated side of the driven element should be facing up (see Figure 2).

