

TECHNICAL DATA SHEET Description: 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

## **Features:**

- 740-806 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



#### 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

All dimensions are in mm / inches

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 1



Description: 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

### **ELECTRICAL SPECIFICATIONS**

Antenna Type	Yagi-Uda
Frequency	740-806 MHz
Nominal Impedance	50 Ω
VSWR	2:1 Max
Gain	8.8 dBi
Efficiency	85%
Horizontal / Vertical -3 dB Bandwidth	83 ° / 53 °
Horizontal / Vertical Side Lobe Level	-14 dB / -15 dB
Front to Back Ratio	-14 dB min
Polarization	Linear
Power Withstanding	300 W

#### **MECHANICAL SPECIFICATIONS**

Overall Length
Weight
Antenna Color
Antenna Material
Connector type
Fixing System
Azimuth Adjustment

489 mm 495 g **Powder Coat Black** Aluminum N Female Pole Clamp 360°



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.

Issue: 1835



Description: 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

### **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^2 - 9/200 Hz
Random Vibration Level (ASD)	1 m^2/s^2 - 10/200 Hz
	0.3 m^2/s^3 - 200/2000 Hz
Shocks	100 m/s^2
Drop Test	1.0 m
RoHS Compliant	Yes

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



3

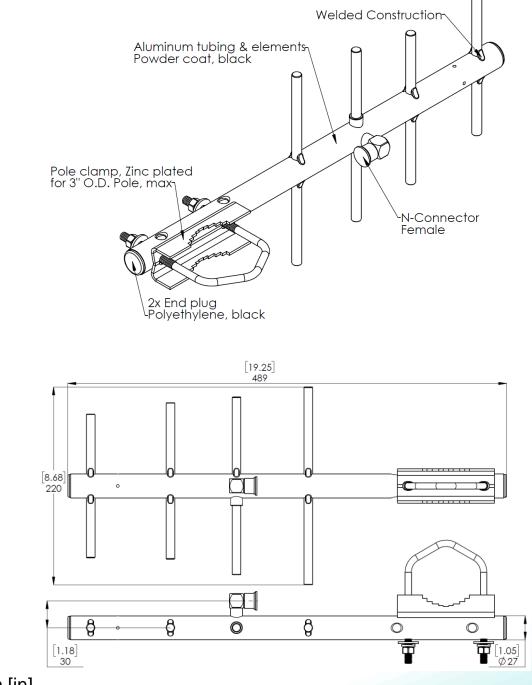


Description: 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

## Series: Yagi

PART NUMBER: YA6740W

### **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



4

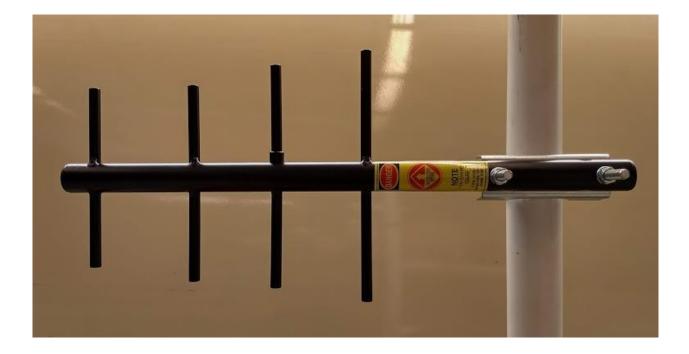


Description: 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

## **TEST SETUP**



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

How does this look?

Issue: 1835

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



5

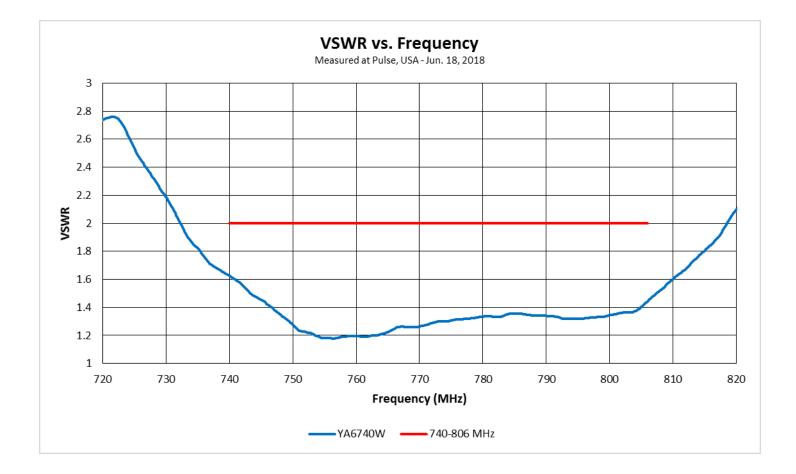


**Description:** 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

## **CHARTS**



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

6

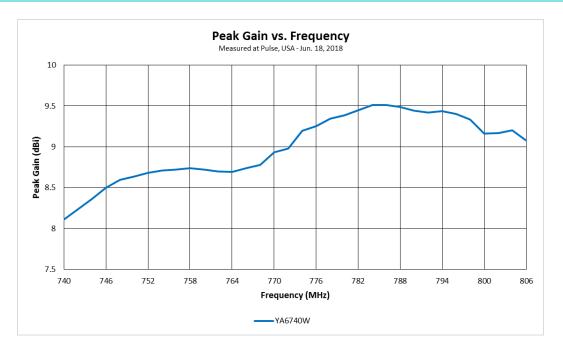


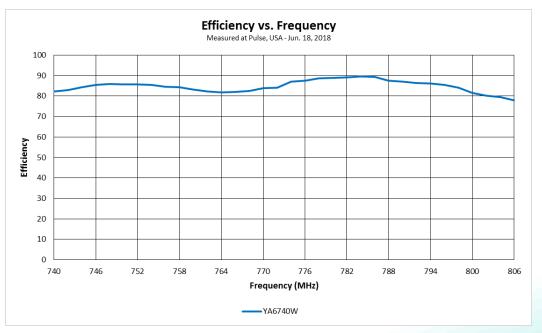
**Description:** 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

## 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



7

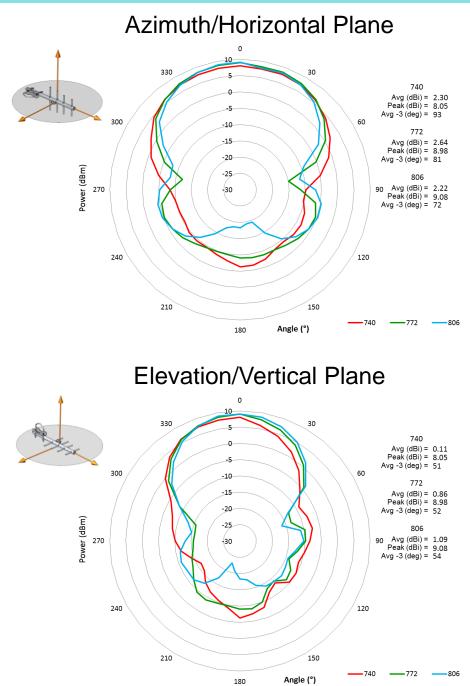


**Description:** 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

Series: Yagi

PART NUMBER: YA6740W

### 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



8



Series: Yagi

**Description**: 740-806 MHz 8 dBi 4-Element Yagi, Black, All-Welded, N-female connector

### PART NUMBER: YA6740W

## PACKAGING

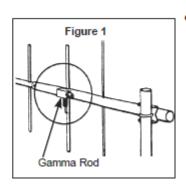
- 1 cardboard box containing:
- 1 antenna
- 1 cardboard partition
- 1 plastic bag containing:
  - 1 bracket kit
  - 1 instructions for antenna installation
  - 1 warning regarding electrocution hazards
- 1 bag of air
- 1 label on cardboard box with part number, date code, characteristics

# ASSEMBLY

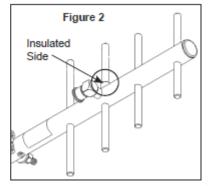
#### INSTALLATION INSTRUCTIONS

#### 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).



Issue: 1835

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



9