

## Pacific Wireless

693 E Draper Heights Way Suite 210  
Draper, UT 84020  
TEL (801) 572-3024  
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www.pacwireless.com

# PAWVA24-16

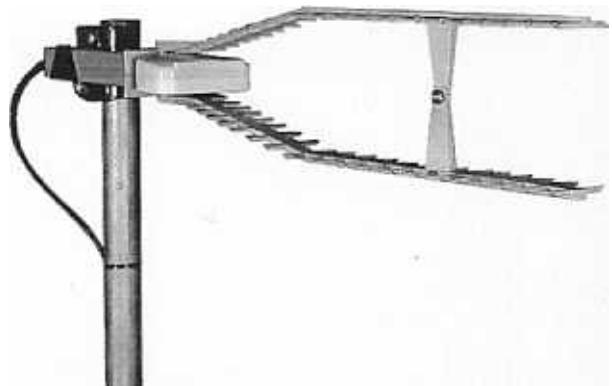
## DATA SHEET

### Vagi Series Antenna

### 2400 to 2485 MHz Operation

#### Features

- Compact, Low Profile 16 dBi Antenna Gain
- Low Cost compared to other 16dBi Gain Antennas
- Very Low Wind Loading. Aesthetic design
- QuikClamp Bracket for 1.0" to 1.5" Pole Diameter
- 45 Deg tilt and 360 Deg rotation adjustments
- Vertical or Horizontal Polarization
- 24" Pigtail with Type N Female or N Male Connector
- Rugged, Lightweight and Waterproof
- Frequency Options Available between 1700 and 2700 Mhz



\*16dBi Directional Vagi Antenna – Horizontal

#### Applications

- 2.4 GHz ISM Band Applications
- WISP CPE Equipment
- Point to Multi-point Systems
- Wireless Broadband Systems
- Wireless Internet Access
- Building to building high speed links

#### Description

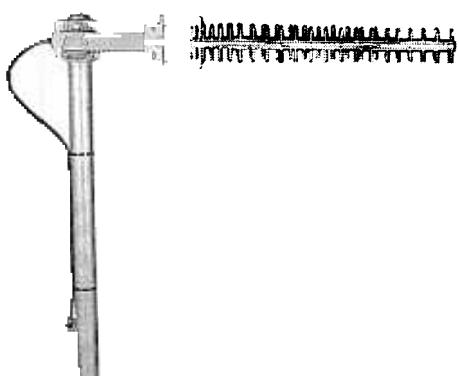
The Vagi Series antenna system offered by Pacific Wireless is constructed of Die Cast Aluminum Alloy with anti-corrosion alodine finish. They come standard with a choice of an N Female or N Male connector and an adjustable 45 Deg Tilt galvanized steel QuikClamp bracket which accommodates a 1" to 1.5" pole diameter. The Vagi Series antenna can be used in a wide variety of wireless systems where low cost, good performance and low wind loading are important factors. They have been approved for use by many homeowner associations with strict CC&R restrictions. Various frequency options are available between 1700 and 2700 MHz (*Contact Pacific Wireless*).

#### Specifications

Parameter	Model	Min	Typ	Max	Units
<b>Frequency Range</b>	PAWVA24-16	2400	2485	2485	MHz
<b>Input Return Loss (S<sub>11</sub>)</b>			-12		dB
<b>VSWR</b>			1.5:1		
<b>Impedance</b>			50		OHM
<b>Input Power</b>			100		W
<b>Pole Diameter (OD)</b>		1 25		1.5 38	inch mm
<b>Operating Temperature</b>		-45		+70	Deg C

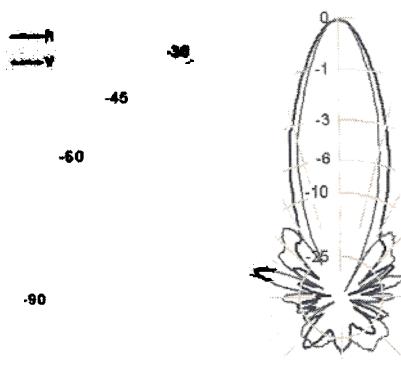
\*Note: Pacific Wireless does not supply the mounting pole

2400 - 2485 MHZ		PAWVA24-16
<i>Gain</i>		16dB
<i>3db Beam Angle (E-Plane)</i>		25 deg
<i>Vertical Polarity</i>		
<i>3dB Beam Angle (H-Plane)</i>		30 deg
<i>Horizontal Polarity</i>		
<i>Front to Back</i>		> 19dB
<i>Rated Wind Velocity</i>		125mph (56m/sec)
<i>Weight</i>		1.5 Lbs (0.56 Kg)
<i>Dimension L x W x H</i>		22" x 3" x 4" (559 x 76 x 102mm)



16dBi VAGI Shown in Vertical Polarization

## Antenna Patterns at 2.45GHz



### Notes:

- All shipments F.O.B. Draper, UT 84020
- All antennas carry a 2 Year Warranty

120

136

150

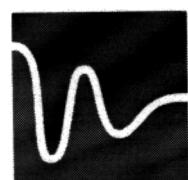
160

### System Ordering:

**PAWVA24-16** 16dB Vagi Series 2.4GHz Antenna with N Male Connector

**PAWVA24-16F** 16dB Vagi Series 2.4GHz Antenna with N Female Connector

For further information contact:



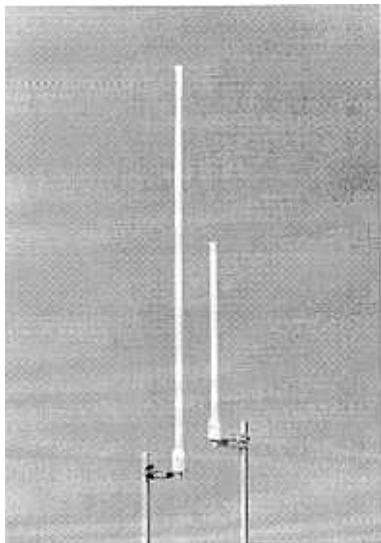
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**Omni Directional Antennas****2400 to 2485 MHz Operation****Features**

- 9 and 12 dB Antenna Gain
- 50 Ω Passive Feed
- Type N Female Connector
- Optimized for 2.4GHz ISM Band
- Rugged, Lightweight and Waterproof
- 360 deg coverage

**Applications**

- 2.4 GHz ISM Band Applications
- Point to Multi-point Systems
- Wireless Broadband Systems

**Description**

The Omni Directional antenna systems offered by Pacific Wireless are constructed of UV-stable fiberglass. They feature 50 ohm passive feeds that come standard with type N female connectors. They can be used in a wide variety of wireless systems.

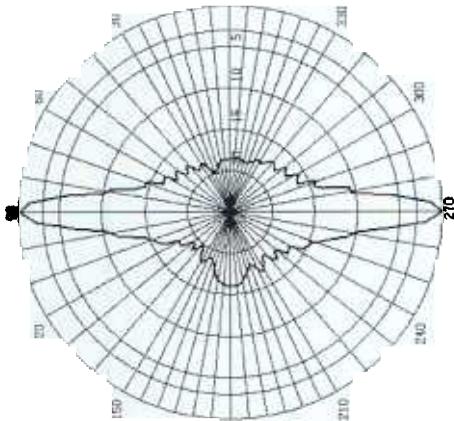
**Specifications**

Parameter	Min	Typ	Max	Units
<i>Frequency Range</i>	2400		2485	MHz
<i>Input Return Loss (S<sub>11</sub>)</i>			-12	dB
<i>VSWR</i>			1.5:1	
<i>Impedance</i>		50		OHM
<i>Input Power</i>			100	W
<i>Pole Diameter (OD)</i>	1 25		2 50	inch mm
<i>Operating Temperature</i>	-40		+70	Deg C

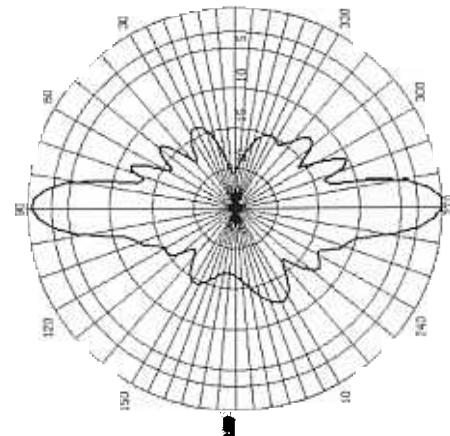
\*Note: Pacific Wireless does not supply the mounting pole or coax cable.

2400 - 2485 MHZ	PAWOD24-9	PAWOD24-12
<i>Gain</i>	9dBi	12dBi
<i>Vertical Beam Width</i>	14deg	7 deg
<i>Electrical Downtilt</i>	-	-
<i>Rated Wind Velocity</i>	125mph (56 M/sec)	125mph (56 M/sec)
<i>Weight</i>	1.1 Lbs (0.4Kg)	1.3 Lbs (0.49Kg)
<i>Dimension (L +/-1.0")</i>	20" (508mm)	40" (1016mm)
<i>Diameter Approx. 0.6" (15mm)</i>		

## Antenna Patterns at 2.45GHz



12dB Vertical Antenna Pattern



9dB Vertical Antenna Pattern

**Notes:**

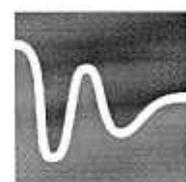
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- All antennas carry a 2 Year Warranty

**System Ordering:** PAWOD24-     

Antenna Gain

9 – 9dBi  
12 – 12dBi

**For further information contact:**



**Pacific Wireless**

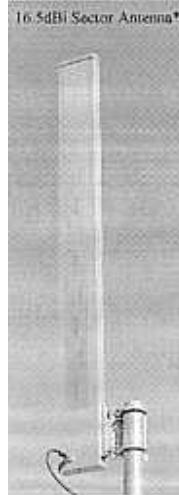
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## Sector Antenna Systems

### 2400 to 2500 MHz Operation

#### Features

- 50 Ω Passive Feed with Type N Female Connector
- Optimized for 2.4GHz ISM Band; 95 Degree Coverage (-3dB)
- 12 and 16.5 dBi Antenna Gain; Horizontal Polarity
- Rugged and Lightweight, 2 Year Warranty



#### Applications

- 2.4 GHz ISM Band Applications
- Multi-point Campus Connections
- Multi-point Wireless Bridges
- Multi-point Site Data Links
- Wireless Broadband
- Wireless Internet

#### Description

The Sector antenna systems offered by Pacific Wireless are constructed from rigid aluminum extrusion, these units are powder coated and sealed with PTFE tape providing lightweight, rigid, weatherproof units. They feature 50 ohm passive feeds that come standard with type N female connectors.

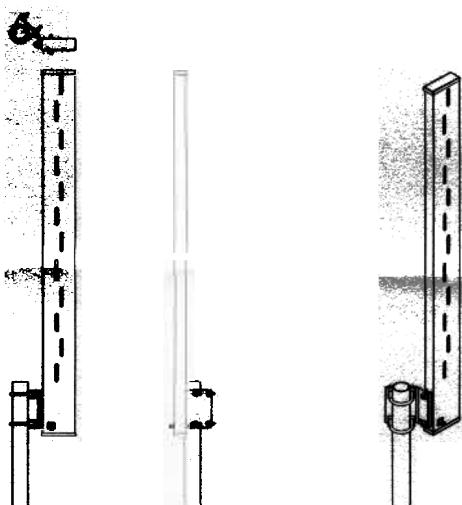
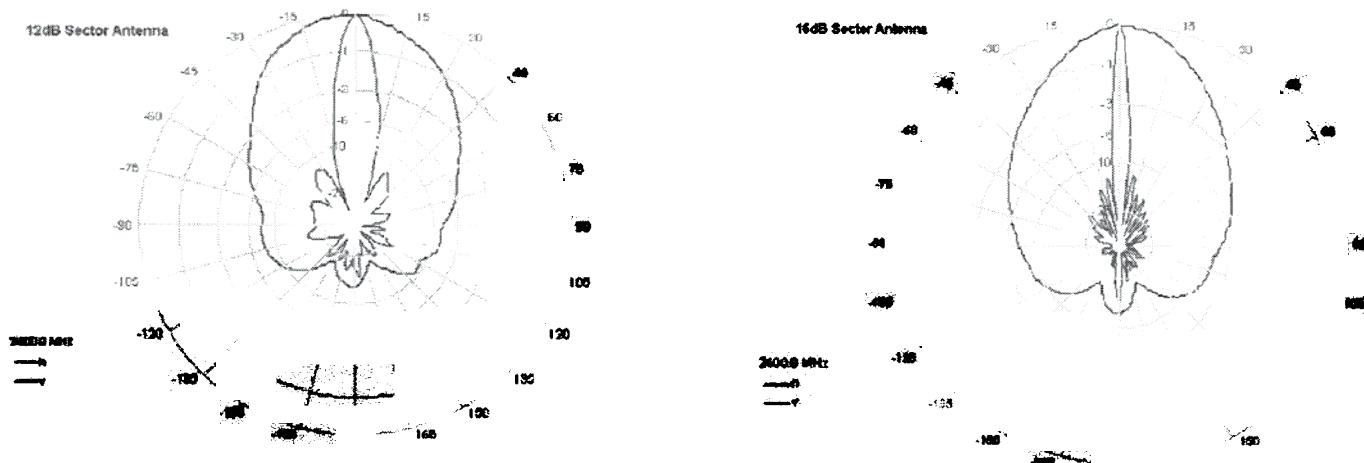
#### Specifications

Parameter	Model	Min	Typ	Max	Units
<b>Frequency Range</b>	PAWSA24-12 PAWSA24-16	2400 2400		2500 2500	MHz
<b>Input Return Loss (S<sub>11</sub>)</b>			-12		dB
<b>VSWR</b>			1.5:1		
<b>Impedance</b>			50		OHM
<b>Input Power</b>			100		W
<b>Pole Diameter (OD)</b>		2 (53)		2.5 (60)	Inch (mm)
<b>Operating Temperature</b>		-30		+65	Deg C

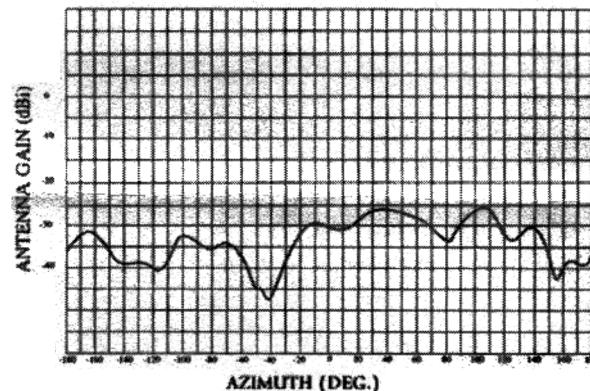
\*Note: Pacific Wireless does not supply the mounting pole or coax cable.

2400 - 2500 MHZ		PAWSA24-12	PAWSA24-16
<b>Gain</b>		12dB	16.5 dB
<b>Horizontal Beam Width</b>		95 deg	95 deg
<b>Vertical Beam Width</b>		18 deg	7 deg
<b>Polarization</b>		Horizontal	Horizontal
<b>Cross Pole</b>		25 dB	25 dB
<b>Front to Back</b>		14dB	13.4dB
<b>DownTilt</b>		10 deg	10 deg
<b>Wind Loading</b>	100MPH	25 lbf	63 lbf
	140MPH	48 lbf	124 lbf
	100MPH: 1/2" Radial Ice	34 lbf	80 lbf
<b>Weight</b>		6 Lbs	9 Lbs
		22" x 4.7" x 2.2"	60" x 4.7" x 2.2"

## Integrated Antenna Patterns



### SINGLE SIDED CROSS POLARISATION



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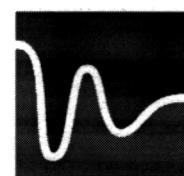
System Ordering: PAWSA24-     

Antenna Gain

12 – 12dBi

16 – 16dBi

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