## GROUNDING

System grounding and lightning protection are essential, especially for exterior-mounted antennas exposed to the elements. Never install an antenna where it may fall and contact electrical lines (refer to the National Electrical Code).

## SPECIFICATIONS

Model	J8999A
Frequency, MHz	2400-2500 & 4900-5990
Gain with specified cable (dBi):	6.9 / 7.7
VSWR max.	2.0:1
E-Plane (3 dB beamwidth):	66°/ 60°
H-Plane (3 dB beamwidth):	68°/ 52°
Polarization:	Linear, (Vertical)
Impedance (Ohms)	50
Front to back ratio (dB)	10 / 15
Weight Ib. (kg)	0.5 (0.225)
Dimensions, in.	5.156 x 5.156 x 1.375
(cm):	(13.1 x 13.1 x 3.49)
Mounting Style	Flush wall mount
Wind Surface Area ft <sup>2</sup> (m <sup>2</sup> )	0.12 (0.0006)
Wind Survival mph (km/hr)	120 (193)
Enclosure	PVC/Acrylic
RF Connector:	Reverse SMA (male)
Cable	33-inch CMP Plenum
Storage Temperature (min/max)	-40° / +65°C
Operating Temperature (min/max)	-30° / +55°C)

#### **HP WARRANTY INFORMATION**

See the Customer Support/Warranty booklet included with this product. A copy of the specific warranty terms applicable to your ProCurve products and replacement parts can be obtained from your HP Sales and Service Office or authorized dealer.

#### SUPPORT

Hewlett-Packard offers support 24 hours day, seven days a weekd through the use of a number of automated electronic services. See the Customer Support Warranty booklet that came with your product for information on how to use these services to get technical support. You can also get up-to-date support information from the ProCurve Web site: <u>www.procurve.com</u>

Additionally, your HP-authorized network reseller can provide you with assistance, both with services that they offer and with services offered by ProCurve.



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# ProCurve 7 dBi Dual Band Directional antenna

J8999A



## **APPLICATION**

Designed for wireless LAN service, the ProCurve J8999A is a directional patch array enclosed in a UV-stable weatherproof radome. The focused radiation pattern may be used to extend point-to-point link coverage or to provide targeted sector coverage in the 2.4 and 5 Ghz band.

### SAFETY

The ProCurve J8999A and all associated equipment should be installed in accordance with applicable local and national electrical code guidelines to ensure safe operation.

*Please read all instructions carefully before attempting to install and use this product.* 

## ANTENNA LOCATION

The J8999A may be mounted at interior or exterior locations. A line-ofsight signal path works best for point-to-point links. Although 5 Ghz signals penetrate cubical dividers and interior partitions with little attenuation, reinforced block walls, banks of metal cabinets, or steel shelving may attenuate signals or cause multipath, a condition where reflected signals interfere with the primary signal. Because antenna beamwidth is narrow, it is important to aim the antenna accurately during installation, in order to provide optimum gain and best performance.

## MOUNTING

The J8999A is supplied with a universal articulating mount that accepts mast diameters up to 2 inches (5.1cm) or mounts to any flat vertical surface. This mount is especially designed to provide wide-range articulation in both the azimuth and elevation planes.



## ASSEMBLY

Install the articulating mount to the antenna back plane, as shown in Figure-1:

- 1. Find the molded antenna mount (3) and four 8-32 nylon lock nuts (4). Use the nuts to attach the mount to the exposed studs on the back of the antenna.
- Find the molded articulating arm (2). Also, find a 1/4"-20 x 1-1/4" machine screw (5), 1/4" lock washer (6), 1/4" flat washer (7), and 1/ 4"-20 hex nut (8). Use hardware to secure the molded arm to the antenna mount as shown in Figure-1.
- For installation on flat surfaces, find the molded wall/mast mount (1) and use it as a drill template to mark hole locations. Drill four 3/16" diameter pilot holes and install wall anchors (9). Install the mount using four 8-18 x 3/4" self-tapping screws (10).
- 4. For pole or mast installations, find two worm clamps (11) and install as shown on the molded wall-mast mount (1). Encircle pole with each band and tighten.
- To attach the antenna assembly to the wall/mast mount, find a 1/4" x 1-1/4" machine screw (5) and install a 1/4" lock washer (6) and a 1/4" flat washer (7) as shown. Use the screw to attach the free end of the articulating arm to the mount, securing in place with a 1/4"-20 nut (8).
- 6. Loosen 1/4"pivot screws as needed to position antenna for desired azimuth and elevation steering. When antenna is in adjusted, tighten all hardware securely.

Hardware for MountingAntenna J8999A

KEY	DISPLAY	DESC	SIZE	QTY
7		FLAT WASHER	1/4"	2
11	Ø	HOSE CLAMP		2
2		ARTICULATIN G ARM		1
1		WALL / MAST MOUNT		1
3		ANTENNA MOUNT		3
9	C Mana	PLASTIC WALL ANCHOR	#8	4
10	Onn <sup>*</sup>	SS MACHINE SCREW	#8-18 x 3/4"	4
5	Gaaaaa	MACHINE SCREW	1/4" -20 x 1-1/4"	2
6	Ð	SS SPLIT LOCK WASHER	1/4"	2
8	8	SS HEX NUT	1/4" -20	2
4	8	SS / Nylon HEX NUT	8/32"	4









E Plane 2.5 GHz







# J8999A Radiation Plots, E Plane 4.9–5.99 GHz Band





E Plane 5.99 GHz



# J8999A Radiation Plots, H Plane 4.9-5.99 GHz Band



H Plane 5.99 GHz



dB