mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





Smart Technology. Delivered.™

PDQ24496 2400 to 2500 MHz/4900 to 5950 MHz 4-Port MIMO Directional Antenna





Standard Articulating Mount

Americas: +1.847 839.6925 IAS-AmericasSales@lairdtech.com Europe: +44.1628.858941 IAS-EUSales@lairdtech.com Asia: IAS-AsiaSales@lairdtech.com

Middle East & Affrica: +44.1628.858941 IAS-MEASales@lairdtech.com www.lairdtech.com

4-PORT MIMO DUAL-BAND, DUAL POLARIZED DIRECTIONAL PANEL ANTENNA

The Laird patent pending PDQ24496 antenna is a 4-port dual-band, dual polarized directional panel antenna for use in 802.11n MIMO indoor and outdoor applications. The antenna is an excellent choice for high density Wi-Fi applications where adjacent interference is of concern. The dual-band frequency coverage means that a single type of antenna can be deployed with any MIMO radio in the 2400-2500 MHz and 4900-5950 MHz bands. In addition, the uniform and symmetrical radiation patterns will provide a high-level signal density into engineered coverage areas.

FEATURES: Rolls

- Ultra thin, compact ASA UV stable white housing
- Four radiating elements optimized for indoor & outdoor
- 802.11n or 802.11ac MIMO applications
- Articulating arm mount can be anchored directly to a vertical surface or mast mounted & oriented for optimal signal radiation
- Both horizontal & vertical polarization for multipath mitigation

• IP-67 Rated and RoHS compliant

MARKETS/APPLICATIONS:

- High density WiFi
- Sports entertainment- outdoor stadiums, arenas
- & convention centers
- Hospitality- hotels & casinos
- Transportation- airport, bus, & train terminals
- Retail- stores & indoor pedestrian malls
- Education- libraries & museums

PARAMETER	SPECIFICATIONS		
Antenna Model	PDQ24496		
No. of Ports	4		
Frequency Bands, MHz	2400-2500	4900-5950	
Average Peak Gain, dBi	6.4	4.8	
Maximum Peak Gain, dBi	6.8	6.5	
Max Gain ± 30° above Horizon, dBi	N/A	3.2	
Azimuth 3 dB Beamwidth, Typ (V-pol/H-pol)	68°/63°	58°/57°	
Elevation 3dB Beamwidth, Typ (V-pol/H-pol)	62°/71°	58°/56°	
VSWR, Avg	1.5:1	1.3:1	
VSWR, Max	<2.0:1	<2.0:1	
Port-to-Port Isolation, Avg	43 dB	41 dB	
Port-to-Port Isolation, Max	>30 dB	>30 dB	
Nominal Impedance	50 Ω		
Polarization	2-ports Vertical, 2-ports Horizontal		
Front-to-Back Ratio	> 15 dB		
Maximum Input Power (per port)	1 W (ambient temp of 25°C/77°F)		
Dimensions	254 x 254 x 41 mm (10" x 10" x 1.6")		
Weight (w/out mount)	1.14 kg (2.50 lbs)		
Mounting	Articulating Mount, Mast or Flush Mount		
Cable Type	Low Temperature Plenum Rated Cable		
Wind Survival	200 km/h (125 mph)		
Wind Operational	160 km/hr (100 mph)		
Operating Temperature	-40°C to +70°C (-40°F to +158°F)		
Storage Temperature	-40°C to +85°C (-40°F to +185°F)		
Radome/Baseplate Material	Polycarbonate, UL94-V0, UV Stable White		
Ingress Protection	IP-67		
Material Compliance	RoHS Compliant		

MODEL NUMBER	CABLE LENGTH	CONNECTOR
PDQ24496-FNF	N/A	Fixed Type N Female
PDQ24496-91NF	4x- 91 cm (3.00 ft)	4x Type N Female
PDQ24496-91NM	4x- 91 cm (3.00 ft)	4x Type N Male



PDQ24496 4-Port Directional Antenna

RADIATION PATTERNS





Radiation Pattern at 2500 MHz

300

240

270

ELEVATION PLANE

0

10

0

-5

-10

-15

-20

-25

180

ELEVATION PLANE

0

180

120

120

150

150

330

210





Radiation Pattern at 5400 MHz

90

120

Radiation Pattern at 5950 MHz



ANT-DS-PDO24496 1116

210

Any information furnished by Laird Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2016 Laird Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trade marks or registered trade marks of Laird Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.



AZIMUTH PLANE

0

10

-15

20

33

300

240

270



