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### PAV69278PO/PAV69278PI

# LTE Vertical Low PIM Directional Panel Antenna 698-960 MHz/1710-2700 MHz



#### LTE MULTIBAND LOW PIM DIRECTIONAL PANEL ANTENNA

The PAV69278PO/PAV69278PI are low PIM, multiband, high gain directional panel antennas with vertical polarization that covers the 698-960 MHz/1710-2700 MHz, LTE700/Cellular/PCS/AWS/MDS and global GSM900/GSM1800/UMTS/LTE2600 bands. The radiation patterns are uniform and symmetrical, providing high-level signal density into defined coverage zones. These antennas greatly enhance the performance of LTE systems and are ideal for outdoor/indoor applications. They include all mounting brackets, anchors, and bolts. The antennas can also be mast mounted with bracket adapter and clamps.

#### **FEATURES**

- Performance optimized using Laird proprietary RF optimization tools.
- Low PIM performance minimizes interference and improves in-building wireless network coverage and capacity.
- Mounted with standard bracket or mast-mounted with bracket adapter and clamps.
- Multiple connector and coax options available.
- The PAV69278PO is IP67-rated for dust, dirt, and water ingress.

#### **APPLICATIONS**

- In-building or outdoor wireless networks
- Wireless Terminal, Point-of-Sale, and Machine-to-Machine
- Automatic meter reading
- Commercial and industrial security

PARAMETER	PERFORMANCE							
Frequency Bands, MHz	698-806	824-894	880-960	1710- 1880	1850- 1990	1910- 2170	2300- 2500	2500- 2700
Peak Gain, dBi (Typ)	7.0	7.6	7.6	8.3	8.7	8.2	8.4	7.1
Peak Gain, dBi (Max)	7.6	7.8	7.8	8.8	8.8	8.8	8.7	7.8
VSWR, Typ	<1.8:1	<1.7:1	<1.7:1	<1.8:1	<1.7:1	<1.9:1	<1.7:1	<1.5:1
VSWR, Max	<2.0:1	<2.0:1	<2.0:1	<2.0:1	<2.0:1	<2.0:1	<2.0:1	<2.0:1
PIM, 3rd Order, 2 x 20W (Typ)	<-150 dBc <-153 dBc							
PIM, 3rd Order, 2 x 20W (Max)	<-150 dBc			<-150 dBc				
Nominal Impedance	50 Ω							
Polarization	Vertical							
Frequency (MHz)	698-960/1710-2700 MHz							
Azimuth 3 dB Beamwidth	75°/63°							
Elevation 3 dB Beamwidth	64°/51°							
Front-to-Back Ratio	10 dB/25 dB							
Max Power (Ambient 25° C)	50 Watts							
Antenna Dimension (H x Dia)	249.4 x 248.5 x 61.3 mm (9.82" x 9.8" x 2.41")							
Weight	0.62 kg (1.35 lbs)							
Antenna Color	White							
Radome (PAV69278PO/PAV69278PI)	Luran ASA/Toyolac ABS, UV Stable, UL 94-HB Material							
Wind Operational	160 km/h (100 mph)							
Wind Survival	220 km/h (136 mph)							
Operating Temperature	-40° C to +70° C							
Storage Temperature	-40° C to +85° C							
Ingression Protection (PAV69278PO)	IP67							
Material Substance Compliance	RoHS							

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Laird warrants to the original end user customer of its products that its products are free from defects in material and workmanship. Subject to conditions and limitations Laird will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. This limited warranty is in force for the useful lifetime of the original end product into which the Laird product is installed. Useful lifetime of the original end product may vary but is not to exceed five (5) years from the original date of the end product purchase.



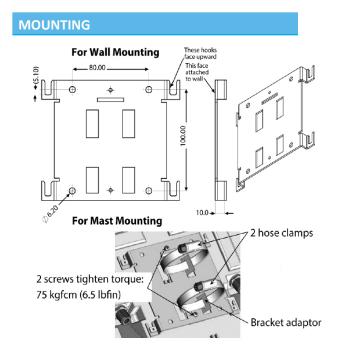


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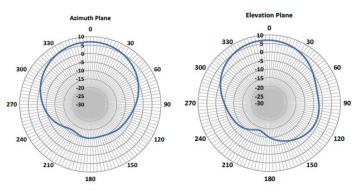
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CONFIGURATION						
PART NUMBER	CABLE LENGTH	CONNECTOR				
PAV69278PO-30NF	30 cm (12")	Type N-female				
PAV69278PO-30D43F	30 cm (12")	4.3-10 female				
PAV69278PO-FNF	N/A	Fixed N-female				
PAV69278PI-FNF	N/A	Type N-female				
PAV69278PI-30NF	30 cm (12")	Type N-female				
PAV69278PI-30D41F	30 cm (12")	4.1-9.5 female				
PAV69278PI-30D43F	30 cm (12")	4.3-10 female				

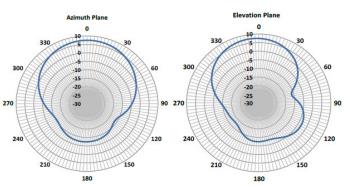


### **RADIATION PATTERNS**

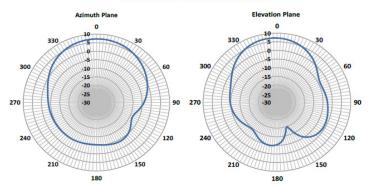
#### Radiation Pattern at 698 MHz



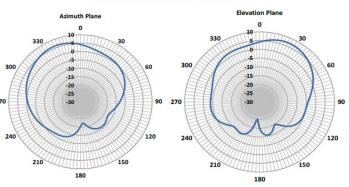
#### Radiation Pattern at 824 MHz



#### Radiation Pattern at 960 MHz



#### Radiation Pattern at 1710 MHz

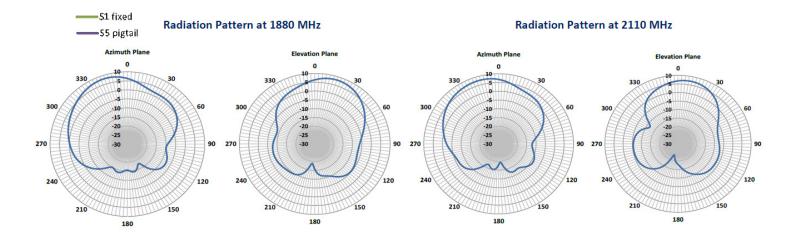




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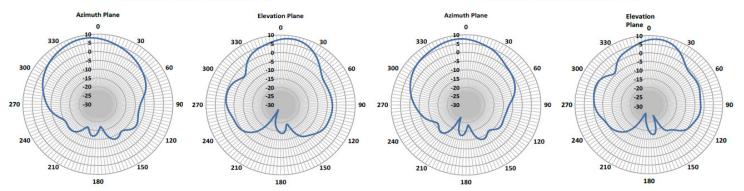
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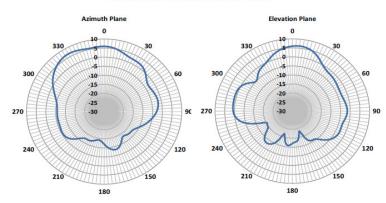


#### Radiation Pattern at 2305 MHz

#### Radiation Pattern at 2412 MHz



#### Radiation Pattern at 2700 MHz



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