



617-960 MHz / 1350-2700 MHz / 3300-3800 MHz /  
4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna,  
Low Profile, 2 x 4.3-10 Female Connector

## Antennas Technical Data Sheet

PE51224

### Features

- Low Passive Intermodulation (PIM) <-153 dBc @ 2x20W
- Horizontal Polarization
- Low Profile 3/4" thick antenna
- Low return loss, stable performance
- 4.3-10 Female connector for long lasting consistent results
- Covers all sub 6 GHz 5G frequency bands including 600 MHz and extended CBRS

### Applications

- Indoor distribution of 5G, LTE, GSM/CDMA
- In-building public or private networks
- LPWAN, LoRA, LTE-M, NB-IoT, IoT, M2M applications
- DAS (Distributed Antenna Systems)
- Discrete Ceiling Mounts

### Description

The PE51224 from Pasternack is a high performance, low PIM rated, MIMO ceiling mount omnidirectional antenna designed for in-building Distributed Antenna System (DAS) Networks. The PE51224 operates from 617 to 6000 MHz which is ideal for 5G, LTE, CDMA, LPWAN/IoT/M2M applications including LoRA, LTE-M, and NB-IOT. The Multi-Band design of the Pasternack PE51224 antenna eliminates the need to purchase different antennas for each frequency. The same antenna can be used for a wide array of in-building wireless applications where wide coverage is desired. Pasternack's PE51224 can be used to distribute Cellular and WiFi signals throughout a building or area.

The omnidirectional antenna with 2xhorizontal polarization PE51224 from Pasternack has 4.3-10 connectors and 1.5-6 dBi of gain. The key to providing the best performance in telecommunications is to ensure the components used are low PIM rated. This helps meet the increasing demand for higher data rates and the ability to provide streaming video for mobile devices. With a low PIM rating of <-150 dBc, the 617-6000 MHz PE51224 helps meet the most demanding PIM requirements for 5G and LTE/4G bands.

The 4.3-10 connectorized PE51224 antenna from Pasternack excels in large open areas such as indoor courtyards, indoor sporting venues, convention centers and shopping malls. The mounting bracket and hardware are included for easy installation. Our Pasternack ISO 9001:2008 registered facilities in Irvine, CA ship all 4.3-10 RF, microwave and millimeter wave waveguide components from stock the same day you purchase them. Pasternack offers the broadest and deepest in-stock inventory and is where to buy 5G antennas. Our expert technical support and friendly, knowledgeable customer service personnel are available to assist you with your particular needs for MIMO ceiling mount omnidirectional 5G cellular antennas.

### Configuration

Design	Ceiling
Band Type	Wide
Radiation Pattern	Omni Directional
Polarization	Linear/Horizontal
Connector Type	4.3-10 Female
Interface 2	4.3-10 Female
Number of Ports	2

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	617		6000	MHz

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [617-960 MHz / 1350-2700 MHz / 3300-3800 MHz / 4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna, Low Profile, 2 x 4.3-10 Female Connector PE51224](#)



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Input VSWR		1.8:1	
Impedance	50		Ohms
Gain	1.5	6	dBi
Input Power		50	Watts
Passive Intermodulation 3rd Order, 2 x 20 W	-153		

### Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	0.617 to 0.96	1.35 to 1.55	1.69 to 2.7	3.3 to 3.8	4.9 to 6	GHz
Gain	2.2	3.5	4.5	6	6	dBi
Port to Port Isolation	16	18	20	30	30	dB
VSWR Max	1.8:1	1.8:1	1.8:1	1.8:1	1.8:1	

### Mechanical Specifications

Radome Material	ABS
<b>Size</b>	
Overall Length	10.47 in [265.94 mm]
Width	10.47 in [265.94 mm]
Height	0.71 in [18.03 mm]
Weight	1.1 lbs [498.95 g]

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-55 to +60 deg C
Humidity	< 95

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

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Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [617-960 MHz / 1350-2700 MHz / 3300-3800 MHz / 4900-6000 MHz Low PIM Rated HH-pol MIMO Omni Antenna, Low Profile, 2 x 4.3-10 Female Connector PE51224](https://www.pasternack.com/617-mhz-6000-mhz-indoor-5g-mimo-omni-antenna-1.5-6-dbi-low-pim-low-profile-hh-polarization-4.3-10-female-connector-hg65806dpcupr-4310f-p.aspx)

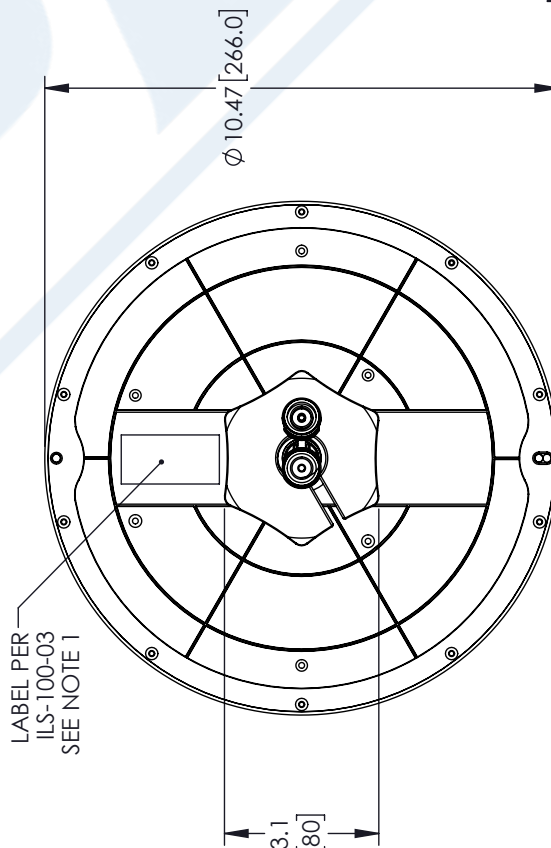
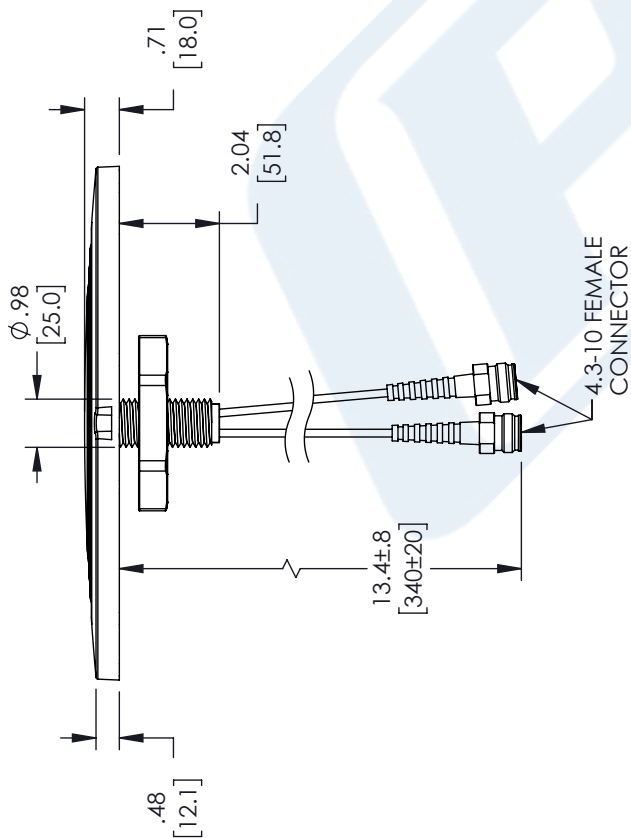
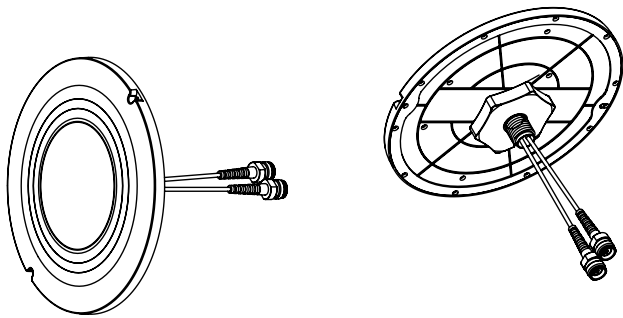
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# PE51224 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/19/2021	KHIETPAS



**NOTES:**

1. LABEL PER ILS-100-03 (FOR INTERNAL REFERENCE ONLY)  
 LABEL LOCATION FOR REFERENCE ONLY.

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UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X = ±.2 [5.08] FRACTIONS ± 1/32  
 .XX = ±.02 [ .51] ANGLES ± 1°  
 .XXX = ±.005 [ .13] CABLE LENGTH (L), TOLERANCES:  
 L ≤ 12 [305] = +1 [25] / -0  
 12 [305] < L ≤ 60 [1524] = +2 [51] / -0  
 60 [1524] < L ≤ 120 [3048] = +4 [102] / -0  
 120 [3048] < L ≤ 300 [7620] = +6 [152] / -0  
 300 [7620] < L = +5% / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

**PE PASTERNAK**  
 an INFINITI brand

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SCALE: N/A

SHEET 1 OF 1

THIRD-ANGLE PROJECTION

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SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	53919	DZINN	PE51224	A