



617-960 MHz / 1710-2700 MHz / 3400-4200 MHz /  
4900-6000 MHz Low PIM Rated Dome V-pol Omni Antenna,  
Ceiling Mount, Type N Female Connector

## Antennas Technical Data Sheet

PE51219

### Features

- Low Passive Intermodulation (PIM) <-153 dBc @ 2x20W
- Vertical Polarization
- Low return loss, stable performance
- Type N Female connector with 12 inch pigtail
- 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)

### Description

The PE51219 from Pasternack is a high performance, low PIM rated, ceiling mount omnidirectional antenna designed for in-building Distributed Antenna System (DAS) Networks. The PE51219 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 PE51219 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 PE51219 can be used to distribute Cellular and WiFi signals throughout a building or area.

The omnidirectional antenna with vertical polarization PE51219 from Pasternack has Type N connectors and 1.8-4.5 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 PE51219 helps meet the most demanding PIM requirements for 5G and LTE/4G bands.

The Type N connectorized PE51219 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 ships all Type N 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 ceiling mount omnidirectional 5G cellular antennas.

### Configuration

Design	Ceiling
Band Type	Wide
Radiation Pattern	Omni Directional
Polarization	vertical
Connector Type	N Female
Number of Ports	1

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	617		6000	MHz
Input VSWR			1.8:1	
Impedance		50		Ohms
Gain		1.8	4.5	dBi

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 / 1710-2700 MHz / 3400-4200 MHz / 4900-6000 MHz Low PIM Rated Dome V-pol Omni Antenna, Ceiling Mount, Type N Female Connector PE51219](#)



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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 0.698	0.698 to 0.96	1.71 to 2.7	3.4 to 4.2	4.9 to 6	GHz
Gain	1.8	2	3	4	4.5	dBi
Horizontal Beam Width	360	360	360	360	360	Degrees
Vertical Beam Width	90	80	35	30	28	Degrees
VSWR Max	1.8:1	1.8:1	1.5:1	1.7:1	1.7:1	

### Mechanical Specifications

Radome Material	ABS
<b>Size</b>	
Overall Length	8.86 in [225.04 mm]
Width	8.86 in [225.04 mm]
Height	5.91 in [150.11 mm]
Weight	0.99 lbs [449.06 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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617-960 MHz / 1710-2700 MHz / 3400-4200 MHz / 4900-6000 MHz Low PIM Rated Dome V-pol Omni Antenna, Ceiling Mount, Type N Female Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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 / 1710-2700 MHz / 3400-4200 MHz / 4900-6000 MHz Low PIM Rated Dome V-pol Omni Antenna, Ceiling Mount, Type N Female Connector PE51219](https://www.pasternack.com/617-960-mhz-1710-2700-mhz-3400-4200-mhz-4900-6000-mhz-low-pim-rated-dome-v-pol-omni-antenna-ceiling-mount-type-n-female-connector-pe51219)

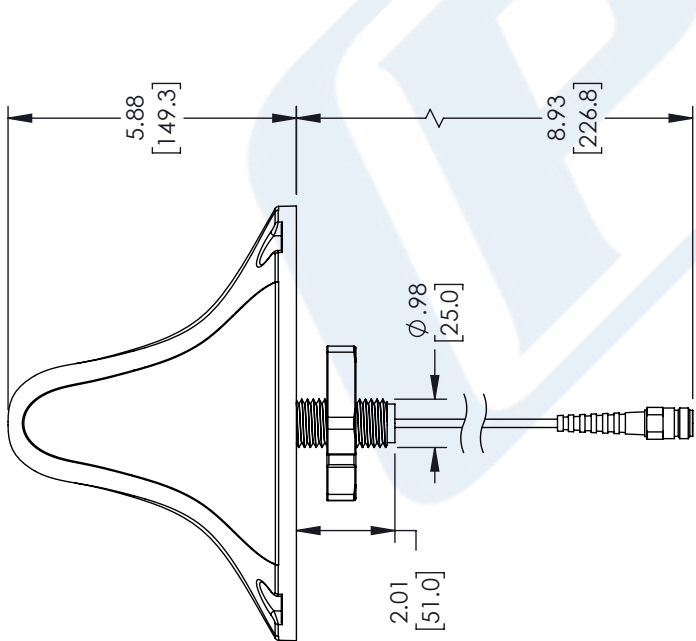
URL: <https://www.pasternack.com/617-mhz-6000-mhz-indoor-5g-omni-antenna-1.8-4.5-dbi-low-pim-n-female-connector-hg65805cupr-nf-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.

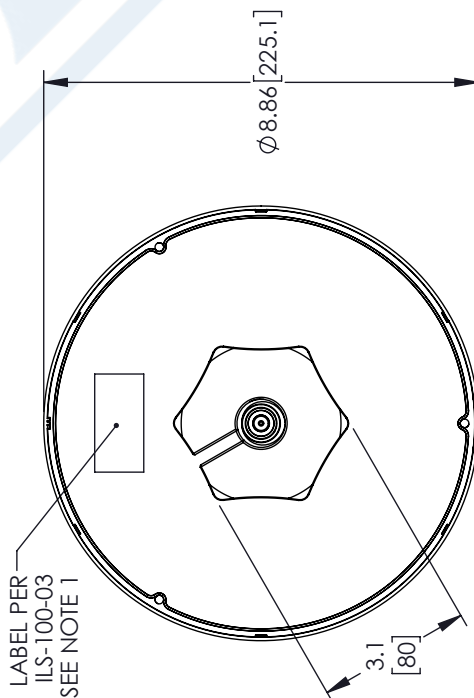
# PE51219 CAD Drawing

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	04/16/2021	KHIETPAS



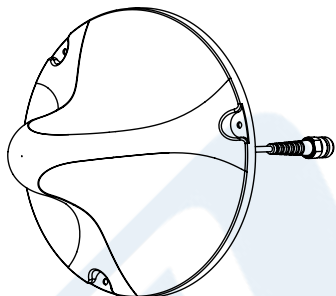
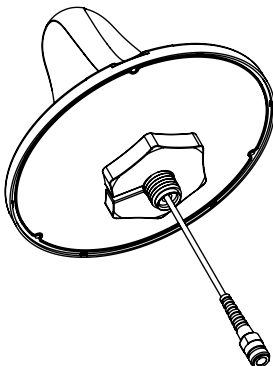
N FEMALE  
CONNECTOR



**NOTES:**

- 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.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

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SIZE A | CAGE CODE 53919 | DRAWN BY DZINN | ITEM NO. PE51219