

Indoor DAS Ceiling Omni Antenna, 5 dBi, 698 MHz  
- 4200 MHz, 2 x Type N Female, Low PIM

## Antennas Technical Data Sheet

**PE51253**

### Features

- Indoor distribution of 5G, LTE, GSM/CDMA
- Rectangular shape enables seamless blend in with ceiling tiles
- In-building public or private networks
- LPWAN, LoRA, LTE-M, NB-IoT, IoT, M2M applications
- DAS (Distributed Antenna Systems)

### Applications

- Low Passive Intermodulation (PIM) <-153 dBc @ 2x20W
- Vertical Polarization
- Low return loss, stable performance
- 2 x N-Female connector
- Covers 5G frequency bands including 600 MHz and extended CBRS

### Description

Pasternack's Indoor DAS ceiling Omni Antenna PE51253 is in stock and ready to ship the same-day of order. The PE51253 indoor ceiling omni antenna comes with 5dBi gain and 2 x Type N female connectors. This indoor DAS ceiling omni antenna has a wide band frequency range from 698MHz to 4200MHz. The 2 port capabilities increase the 5G data speeds up to 2 x that of a single antenna. Pasternack's 2 x type N female increases the throughput, data speeds, quality of connection and allows more users to connect to the antenna.

Our omni antenna specialists are ready and available to answer any questions you may have on the PE51253 indoor DAS ceiling omni antenna. The 5dBi ceiling omni antenna low profile designs allow for seamless installation indoors without creating eyesores or potential interference with indoor personnel. These ceiling antennas have low loss pigtailed that allows for installation flexibility.

Contact Pasternack's expert technical support for assistance with the indoor DAS ceiling omni antenna or any Antenna. Our knowledgeable sales team simplifies the purchasing process and ensures that your ceiling Omni antenna will be exact to specification.

The omni antenna PE51253 from Pasternack provides a higher quality connection and improved longevity. Order your 2-port low Indoor DAS ceiling Omni Antenna PE51253 from Pasternack today. There is no MOQ (minimum order quantity) and the product ships same day from our warehouse.

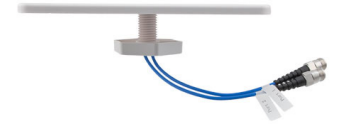
### Configuration

|                   |                  |
|-------------------|------------------|
| Design            | Ceiling          |
| Band Type         | Wide             |
| Radiation Pattern | Omni Directional |
| Polarization      | Horizontal       |
| Connector Type    | N Female         |
| Interface 2       | N Female         |
| Number of Ports   | 2                |

### Electrical Specifications

| Description     | Minimum | Typical | Maximum | Units |
|-----------------|---------|---------|---------|-------|
| Frequency Range | 698     |         | 4,200   | MHz   |
| Input VSWR      |         |         | 1.8:1   |       |
| Impedance       |         | 50      |         | Ohms  |
| Gain            | 2.5     |         | 5       | dBi   |

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Indoor DAS Ceiling Omni Antenna, 5 dBi, 698 MHz - 4200 MHz, 2 x Type N Female, Low PIM PE51253](#)



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|  |      |       |
|--|------|-------|
| Input Power                                    | 50   | Watts |
| Passive Intermodulation<br>3rd order, 2 x 20 W | -153 | dBc   |

### Specifications by Band

| Description            | Band 1        | Band 2        | Band 3      | Band 4     | Band 5 | Units   |
|------------------------|---------------|---------------|-------------|------------|--------|---------|
| Range                  | 0.698 to 0.96 | 1.427 to 1.71 | 1.71 to 2.7 | 3.3 to 4.2 |        | GHz     |
| Gain                   | 2.5           | 3.5           | 4.5         | 5          |        | dBi     |
| Port to Port Isolation | 16            | 18            | 20          | 25         |        | dB      |
| Horizontal Beam Width  | 360           | 360           | 360         | 360        |        | Degrees |
| Vertical Beam Width    | 360           | 360           | 360         | 360        |        | Degrees |
| VSWR Max               | 1.8:1         | 1.8:1         | 1.8:1       | 1.8:1      |        |         |

### Mechanical Specifications

|                 |                     |
|-----------------|---------------------|
| Radome Material | ABS                 |
| <b>Size</b>     |                     |
| Overall Length  | 10.0394 in [255 mm] |
| Width           | 7.48031 in [190 mm] |
| Height          | 0.393701 in [10 mm] |
| Weight          | 1.22 lbs [553.38 g] |

### Environmental Specifications

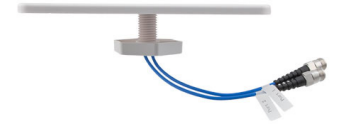
|                    |                  |
|--------------------|------------------|
| <b>Temperature</b> |                  |
| Operating Range    | -55 to +60 deg C |
| Humidity           | <95              |

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

### Plotted and Other Data

Notes:

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Indoor DAS Ceiling Omni Antenna, 5 dBi, 698 MHz - 4200 MHz, 2 x Type N Female, Low PIM PE51253](#)



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Indoor DAS Ceiling Omni Antenna, 5 dBi, 698 MHz - 4200 MHz, 2 x Type N Female, Low PIM 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: [Indoor DAS Ceiling Omni Antenna, 5 dBi, 698 MHz - 4200 MHz, 2 x Type N Female, Low PIM PE51253](https://www.pasternack.com/6-dbi-wide-band-ceiling-antenna-698-4200-mhz-n-type-female-connector-pe51253-p.aspx)

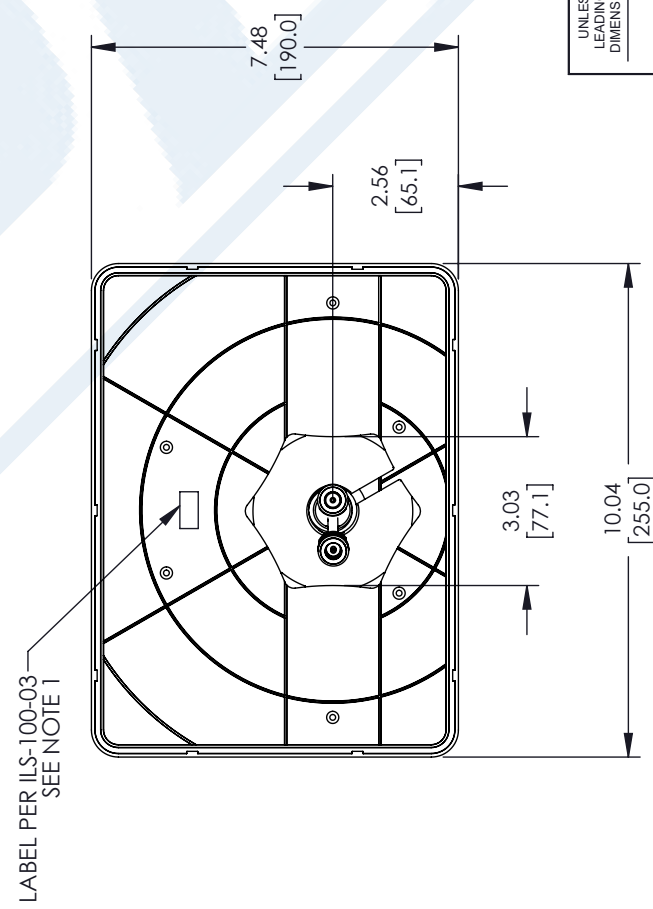
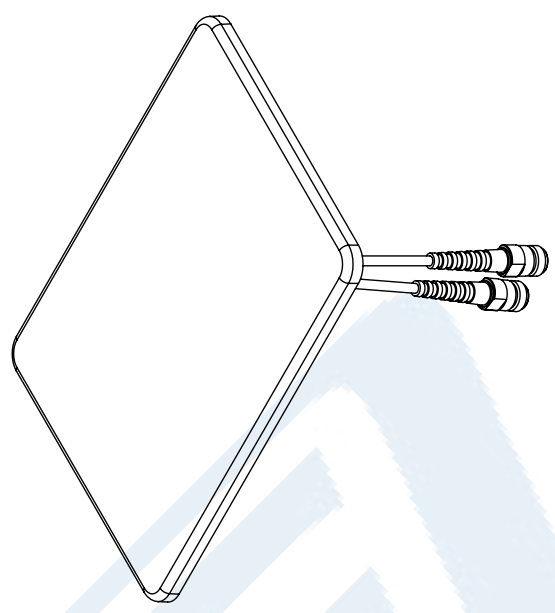
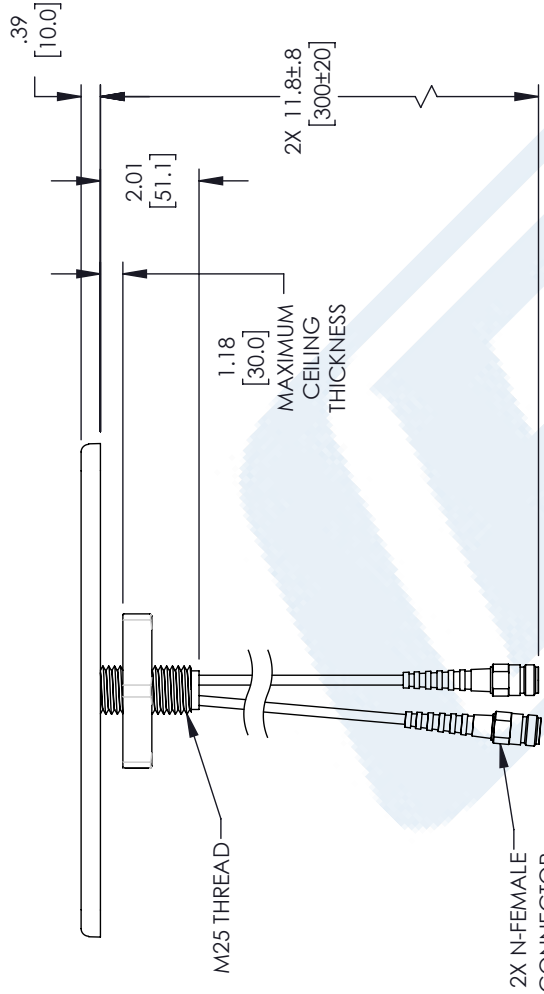
URL: <https://www.pasternack.com/6-dbi-wide-band-ceiling-antenna-698-4200-mhz-n-type-female-connector-pe51253-p.aspx>

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.

# PE51253 CAD Drawing

Indoor DAS Ceiling Omni Antenna, 5 dBi, 698 MHz -  
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| REVISIONS |                 |            |          |
|-----------|-----------------|------------|----------|
| REV.      | DESCRIPTION     | DATE       | APPROVED |
| A         | INITIAL RELEASE | 06/21/2022 | KHIETPAS |



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

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

Pasternack Enterprises, Inc.  
P. O. Box 16759, Irvine, CA 92623.  
Phone: 1.949.261.1920 | 1.866.727.8376  
Fax: 1.949.261.7451  
Website: www.pasternack.com  
E-mail: sales@pasternack.com

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

REV A

ITEM NO. PE51253

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