

698-960 MHz / 1710-2700 MHz / 3400-4200 MHz
Low PIM Rated DAS V-pol Panel Antenna, 5-8.5 dBi,
Wall Mount, Type N Female Connector



PE51FP1013

Features

- Low Passive Intermodulation (PIM) <-153 dBc @ 2x20W
- Vertical Polarization
- Low return loss, stable performance
- Type N Female connector for long lasting consistent results
- Covers 5G, WiFi and LTE frequency bands including 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
- MIMO DAS (Distributed Antenna Systems)
- Wall Mounts

Description

The PE51FP1013 from Pasternack is a high performance, low PIM rated, wall mount panel antenna designed for in-building Distributed Antenna System (DAS) Networks. The PE51FP1013 operates from 698 to 4200 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 PE51FP1013 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 PE51FP1013 can be used to distribute Cellular and WiFi signals throughout a building or area.

The directional 55 to 80 degree antenna with vertical polarization PE51FP1013 from Pasternack has a Type N connector and 5-8.5 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 698-4200 MHz PE51FP1013 helps meets the most demanding PIM requirements for 5G and LTE/4G bands.

The Type N connectorized PE51FP1013 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 wall mount panel 5G cellular antennas.

Configuration

Design	Panel
Band Type	Wide
Radiation Pattern	Directional
Polarization	Vertical
Connector Type	N Female
Number of Ports	1

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	698		4,200	MHz
Input VSWR			1.8:1	
Impedance		50		Ohms
Gain		5	8.5	dBi
Input Power			50	Watts
Passive Intermodulation		-153		dBc

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
3rd Order, 2 x 20 W				

Specifications by Band

Description	Band 1	Band 2	Band 3	Band 4	Band 5	Units
Range	0.698 to 0.806	0.806 to 0.96	1.71 to 2.17	2.2 to 2.7	3.4 to 4.2	GHz
Gain	5	6	7	7.5	8.5	dBi
Horizontal HPBW	80	80	65	60	55	
Vertical HPBW	73	70	60	60	30	Degrees
Front to Back Ratio	5	8	10	15		dB

Mechanical Specifications

Radome Material ABS

Size

Length 7.09 in [180.09 mm]
Width 6.69 in [169.93 mm]
Height 2.36 in [59.94 mm]
Weight 0.88 lbs [399.16 g]

Environmental Specifications

Temperature

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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Typical Radiation Pattern

Appendix

Electrical Downtilt: Angle in the antenna's elevation pattern in which the maximum gain occurs.

Gain: Antenna's average gain.

Front to Back Ratio @ 180°±30°: Average difference between the antenna's maximum gain and the maximum gain in the antenna's back lobe over ±30° angles.

Cross-polarization Ratio (dB): Typical difference between the co-polarization and cross-polarization gain across the sector's 3 dB Beam Width.

Dedicated to serving the needs of the Wireless Internet Service Provider (WISP) market, KP Performance Antennas offers purpose built products that reliably perform in the field. KP Performance Antennas product line consists of Yagi, Grid, Omni, Dish and other style antennas that operate in the 900 MHz, 2.4 GHz, 3 GHz, and 5 GHz frequencies.

698-960 MHz / 1710-2700 MHz / 3400-4200 MHz Low PIM Rated DAS V-pol Panel Antenna, 5-8.5 dBi, Wall 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.

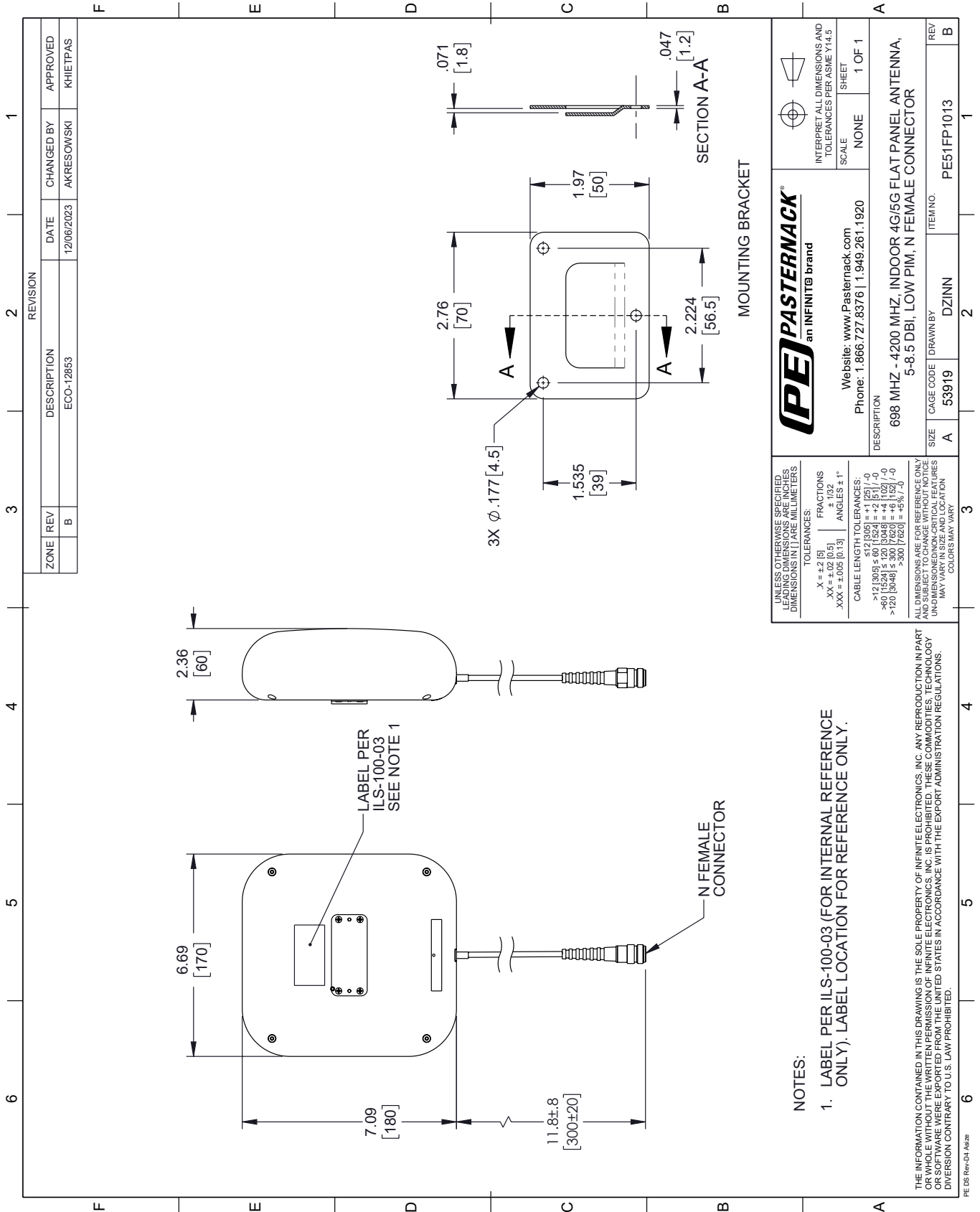
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [698-960 MHz / 1710-2700 MHz / 3400-4200 MHz Low PIM Rated DAS V-pol Panel Antenna, 5-8.5 dBi, Wall Mount, Type N Female Connector PE51FP1013](https://www.pasternack.com/698-960-mhz-1710-2700-mhz-3400-4200-mhz-low-pim-rated-das-v-pol-panel-antenna-5-8.5-dbi-wall-mount-2-x-type-n-female-connector-pe51fp1013)

URL: <https://www.pasternack.com/698-960-mhz-1710-2700-mhz-3400-4200-mhz-low-pim-rated-das-v-pol-panel-antenna-5-8.5-dbi-wall-mount-2-x-type-n-female-connector-pe51fp1013-p.aspx>

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PE51FP1013 CAD Drawing

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 Panel Antenna, 5-8.5 dBi, Wall Mount, Type N Female Connector



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 IN INCHES. DIMENSIONS IN [] ARE MILLIMETERS.

TOLERANCES:
 .X = ±.2 [5]
 .XX = ±.02 [0.5]
 .XXX = ±.005 [0.13]

FRACTIONS: ±.1/32
 ANGLES: ±1°

CABLE LENGTH TOLERANCES:
 <12 [305] ≤ 60 [1524] = ±.1 [2.5] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.8 [20] / -0
 >300 [7620] = ±.8% / 0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

SCALE: NONE
 SHEET: 1 OF 1

DESCRIPTION: 698 MHz - 4200 MHz, INDOOR 4G/5G FLAT PANEL ANTENNA, 5-8.5 DBI, LOW PIM, N FEMALE CONNECTOR

REV	B
ITEM NO.	PE51FP1013
SIZE	A
CAGE CODE	53919
DRAWN BY	DZINN