



WR-51 Waveguide Standard Gain Horn Antenna
 Operating from 15 GHz to 22 GHz with a Nominal
 10 dBi Gain with Square Cover Flange

Waveguide Antennas Technical Data Sheet

PE9853-10

Features

- Rectangular Waveguide Interface
- 15 GHz to 22 GHz
- 10 dBi Nominal Gain
- Square Cover Flange

Applications

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems

Description

Pasternack's PE9853-10 WR-51 waveguide standard gain horn antenna operating from 15 GHz to 22 GHz with a nominal 10 dBi gain is part of our full line of RF components available for same-day shipping. This Pasternack pyramidal horn antenna has a lightweight anodized aluminum body and a precision tolerance square cover flange. The PE9853-10 WR-51 waveguide standard gain horn antenna offers low gain variation across its operating frequency range and 55.1 degrees of half power beam width.

Waveguide standard gain horn antennas are used in a wide variety of applications due to their high power handling capability, low loss, high directivity, and near constant electrical performance across a broad bandwidth. Pasternack's WR-51 standard gain horns are available in 10, 15 and 20 dB models with pyramidal shape and rectangular waveguide input.

Configuration

Design	WR-51 Standard Gain Horn
Pattern	Directional
Polarization	Linear

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	15		22	GHz
Nominal Gain		10		dBi
Horizontal Half Power Beam Width		54.2		Degrees
Vertical Half Power Beam Width		55.1		Degrees

Electrical Specification Notes:
 Half power beam width is calculated by computer simulation.

Mechanical Specifications

Size	
Length	1.43 in [36.32 mm]
Width	1.31 in [33.27 mm]
Height	1.31 in [33.27 mm]
Weight	0.008 lbs [3.63 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange PE9853-10](#)



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Waveguide Interface

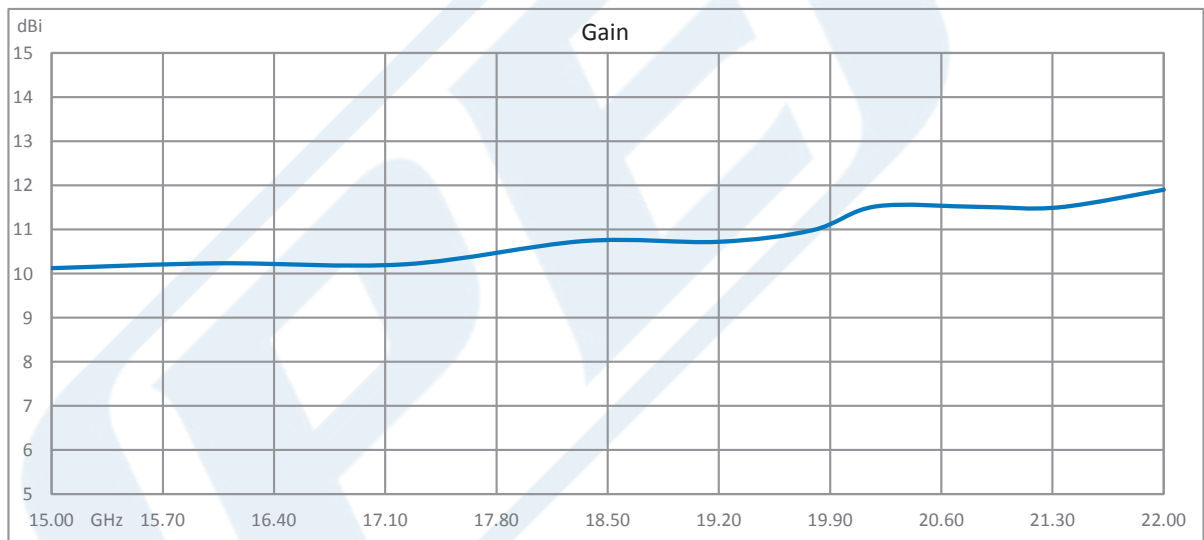
Waveguide Size
Flange Type
Body Material and Plating

WR-51
Square Cover
Anodized Aluminum, Paint

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

Plotted and Other Data

Typical Performance Data



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WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange 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: [WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange PE9853-10](https://www.pasternack.com/standard-gain-horn-waveguide-size-wr51-pe9853-10-p.aspx)

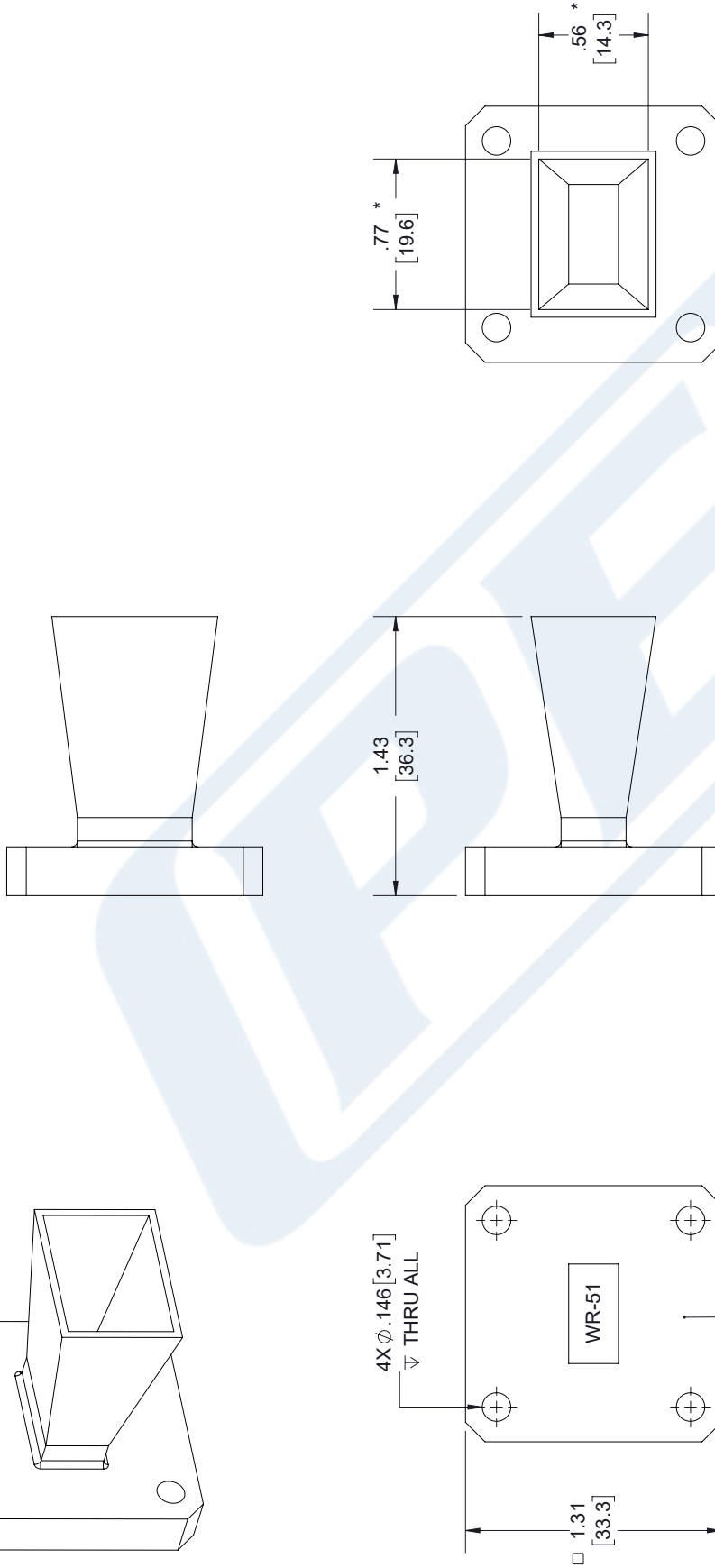
URL: <https://www.pasternack.com/standard-gain-horn-waveguide-size-wr51-pe9853-10-p.aspx>

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PE9853-10 CAD Drawing

WR-51 Waveguide Standard Gain Horn Antenna Operating from 15 GHz to 22 GHz with a Nominal 10 dBi Gain with Square Cover Flange

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1.3	PCR PE9853-10 20190826	09/03/19	M.MILLER



* INSIDE DIMENSION

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

TOLERANCES:
X±.2 [5.08] FRACTIONS
XX±.01 [.25] ±.132
XXX±.005 [.13] ANGLES ± 1°

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

PE PASTERNAK
an INFINITO brand

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SIZE [CAGE] DRAWN BY PART NUMBER REV
A 53919 K.Dang PE9853-10 1.3

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SHEET 1 OF 1
SCALE N/A

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