



WR-12 Waveguide Dual Polarized Horn Antenna, 50 GHz to 75 GHz Frequency Range, 15 dBi Gain, UG-385/U Flange

Waveguide Antennas Technical Data Sheet

PEWAN1139

Features

- Full V Band Operations
- Linear and Circular Operations
- High Port Isolation
- High Cross Polarization Rejection

Applications

- IEEE 802.11ab WiGig
- Radar Systems
- Communication Systems
- Circular and Linear Waveform Separation and Combination

Description

Pasternack's PEWAN1139 is a full band, dual polarized, WR-15 horn antenna assembly that operates in the frequency range of 50 GHz to 75 GHz. The antenna features an integrated orthomode transducer that provides high port isolation. PEWAN1139 supports either vertical or horizontal polarized waveguide forms with a typical 35 dB cross polarization rejection, 15 dBi nominal gain at center frequency, typical 45 dB port isolation between the horizontal and vertical ports, typical half power beamwidth of 28 degrees on the E-plane, typical half power beamwidth of 33 degrees on the H-plane, and -15 dB sidelobe levels. The input of this antenna is a WR-15 waveguide with UG-387/U threaded flange.

Configuration

Design: WR-12 Dual Polarized Horn
 Polarization: Linear/Circular

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	50		75	GHz
Nominal Gain		15		dBi
Horizontal Half Power Beam Width		33		Degrees
Vertical Half Power Beam Width		28		Degrees
VSWR		1.4:1		
V and H Port Isolation		45		dB
Cross Polarization Rejection		35		dB
Port Return Loss		15		dB

Mechanical Specifications

Size:
 Length: 2.05 in [52.07 mm]
 Width: 0.8 in [20.32 mm]
 Height: 0.8 in [20.32 mm]
 Weight: 0.086 lbs [39.01 g]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-12 Waveguide Dual Polarized Horn Antenna, 50 GHz to 75 GHz Frequency Range, 15 dBi Gain, UG-385/U Flange PEWAN1139](#)



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Waveguide Interface

Waveguide Size	WR-12
Flange Type	Square Cover
Flange Designation	UG-385/U
Body Material and Plating	Aluminum, Gold

Environmental Specifications

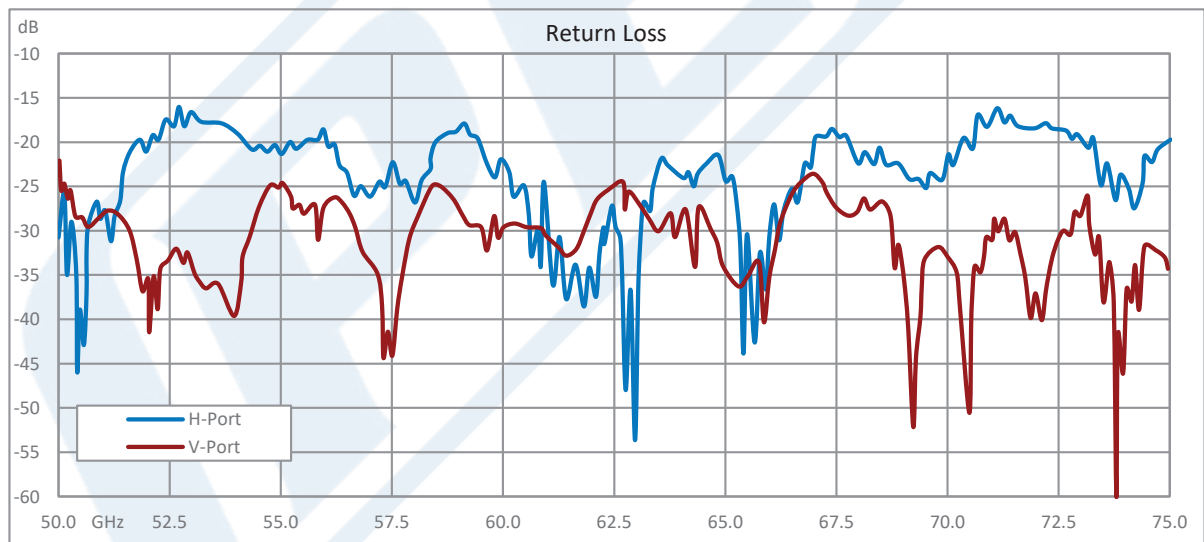
Temperature

Operating Range	-40 to 85 deg C
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Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Typical Performance Data



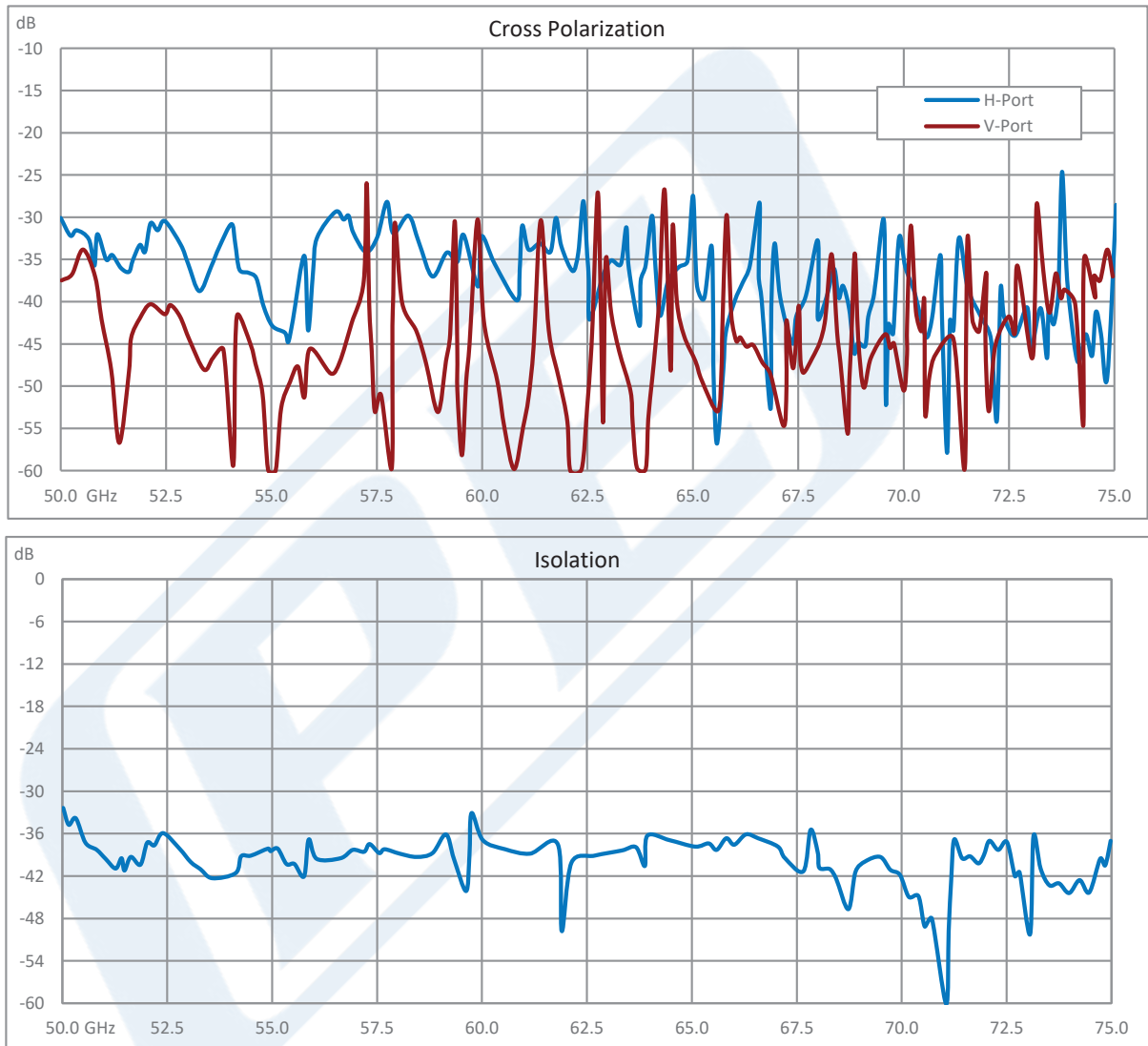
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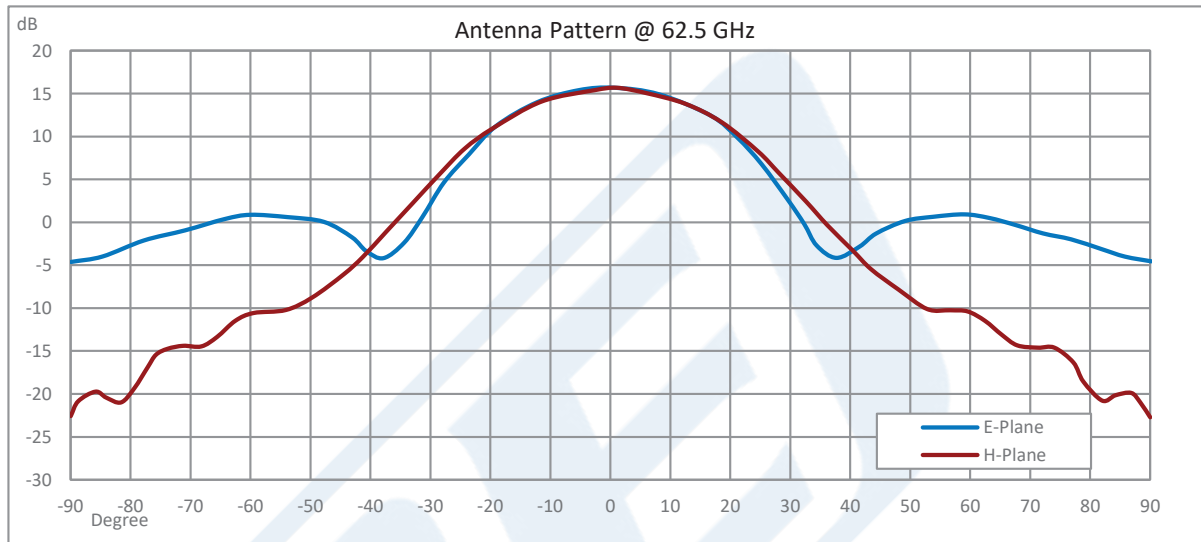
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WR-12 Waveguide Dual Polarized Horn Antenna, 50 GHz to 75 GHz Frequency Range, 15 dBi Gain, UG-385/U Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain 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-12 Waveguide Dual Polarized Horn Antenna, 50 GHz to 75 GHz Frequency Range, 15 dBi Gain, UG-385/U Flange PEWAN1139](https://www.pasternack.com/wr-12-waveguide-gain-horn-antenna-15dbi-ug-385-square-flange-pewan1139-p.aspx)

URL: <https://www.pasternack.com/wr-12-waveguide-gain-horn-antenna-15dbi-ug-385-square-flange-pewan1139-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.

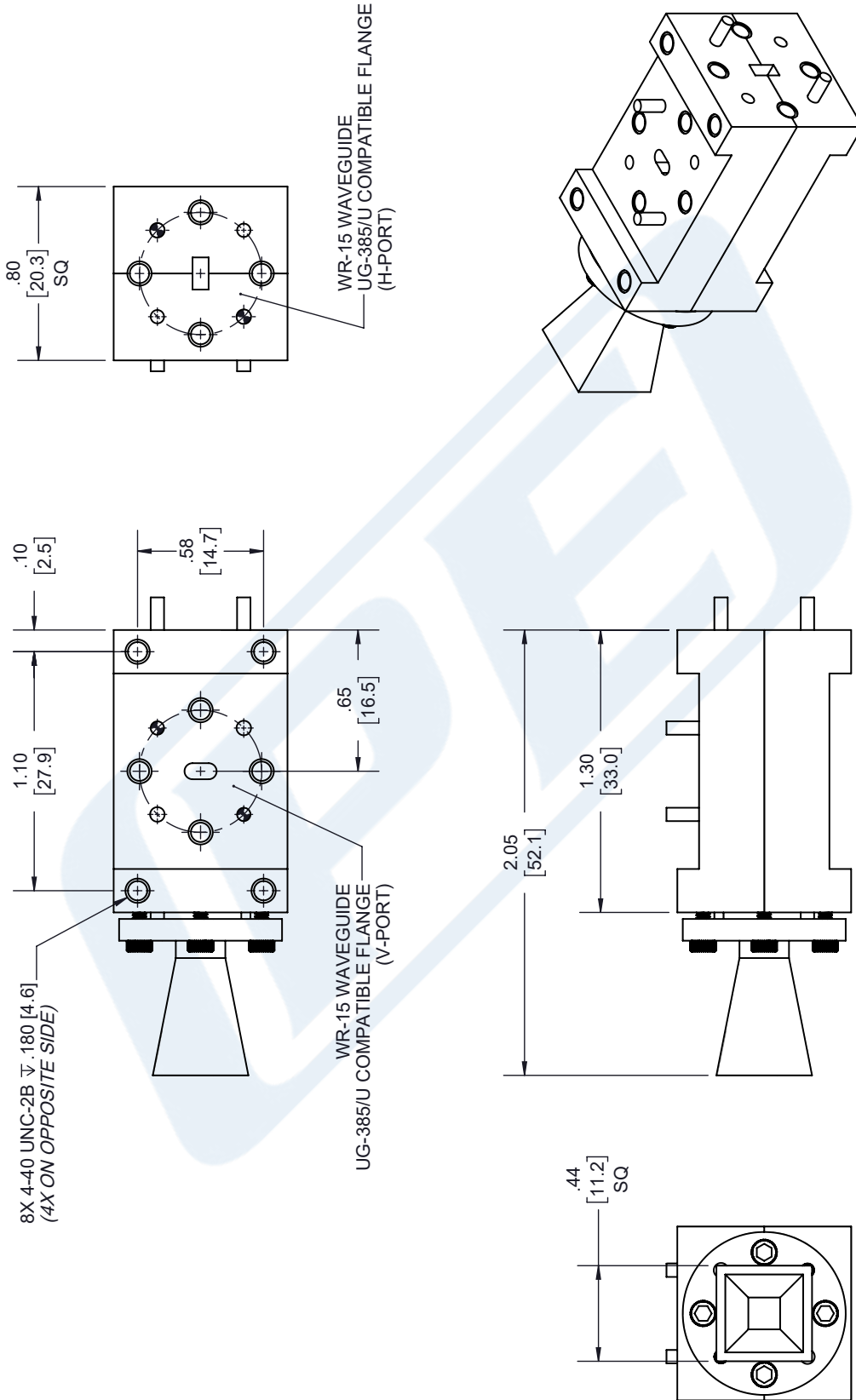
PEWAN1139 CAD Drawing

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Frequency Range, 15 dBi Gain, UG-385/U Flange

REVISIONS

REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	08/16/19	M.MILLER

PASTERNAK
PEWAN1139
D/C: YYWW



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

TOLERANCES:
 X \pm 2 [5.08] FRACTIONS
 XX \pm 01 [25] \pm 1/32
 XXX \pm .005 [1.3] ANGLES \pm 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]
 A 53919 K.DANG PEWAN1139

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SHEET 1 OF 1
SCALE N/A
REV A

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