



WR-10 Waveguide Dual Polarized Horn Antenna, 75 GHz to 110 GHz Frequency Range, 20 dBi Gain, UG-387/U-Mod Flange

Waveguide Antennas Technical Data Sheet

PEWAN1141

Features

- Full W Band Operations
- High Isolation
- Low Insertion Loss
- High Cross Polarization Rejection

Applications

- Radar Systems
- Communication Systems
- Circular and Waveform Separation and Combination

Description

Pasternack's PEWAN1141 is a full band, dual polarized, WR-10 horn antenna assembly that operates in the frequency range of 75 GHz to 110 GHz. The antenna features an integrated orthomode transducer that provides high port isolation. PEWAN1141 supports either vertical or horizontal polarized waveforms with a typical 35 dB cross polarization rejection, 20 dBi nominal gain at center frequency, typical 45 dB port isolation between the horizontal and vertical ports, typical half power beamwidth of 16 degrees on the E-plane, typical half power beamwidth of 18 degrees on the H-plane, and -19 dB sidelobe levels. The input of this antenna is a WR-10 waveguide with UG-385/U-M threaded flange.

Configuration

Design: WR-10 Dual Polarized Horn
Polarization: Linear/Circular

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	75		110	GHz
Nominal Gain		20		dBi
Horizontal Half Power Beam Width		18		Degrees
Vertical Half Power Beam Width		16		Degrees
VSWR		1:1		
V and H Port Isolation		45		dB
Cross Polarization Rejection		35		dB

Mechanical Specifications

Size

Length: 2.3 in [58.42 mm]
Width: 0.8 in [20.32 mm]
Height: 0.8 in [20.32 mm]
Weight: 0.1 lbs [45.36 g]

Waveguide Interface

Waveguide Size: WR-10

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-10 Waveguide Dual Polarized Horn Antenna, 75 GHz to 110 GHz Frequency Range, 20 dBi Gain, UG-387/U-Mod Flange PEWAN1141](#)



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Flange Type
Flange Designation
Body Material and Plating

Square Cover
UG-387/U-Mod
Aluminum, Gold

Environmental Specifications

Temperature

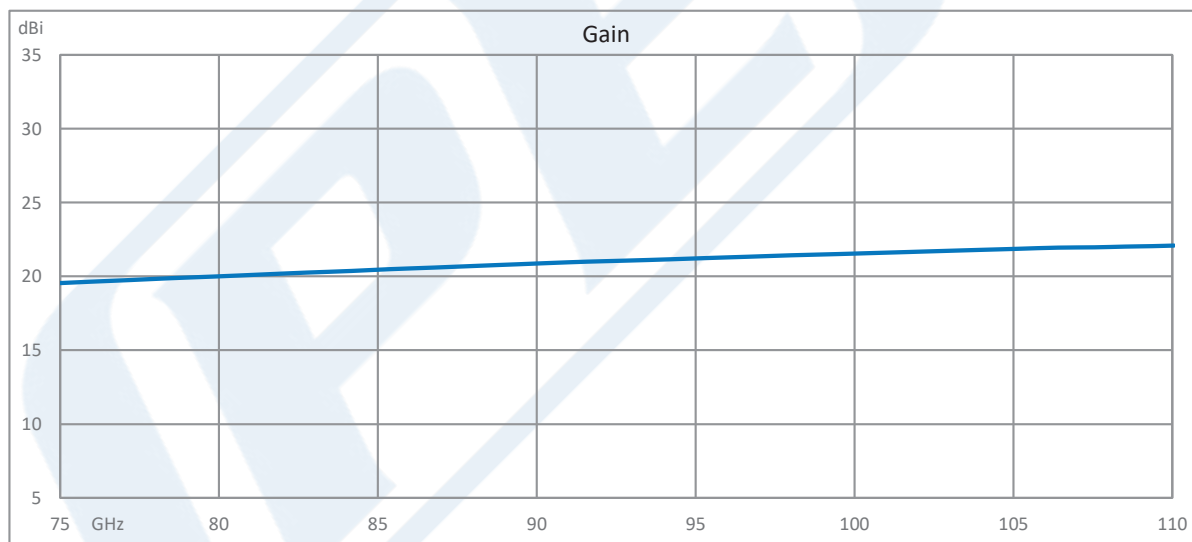
Operating Range

-40 to 85 deg C

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

Plotted and Other Data

Typical Performance Data



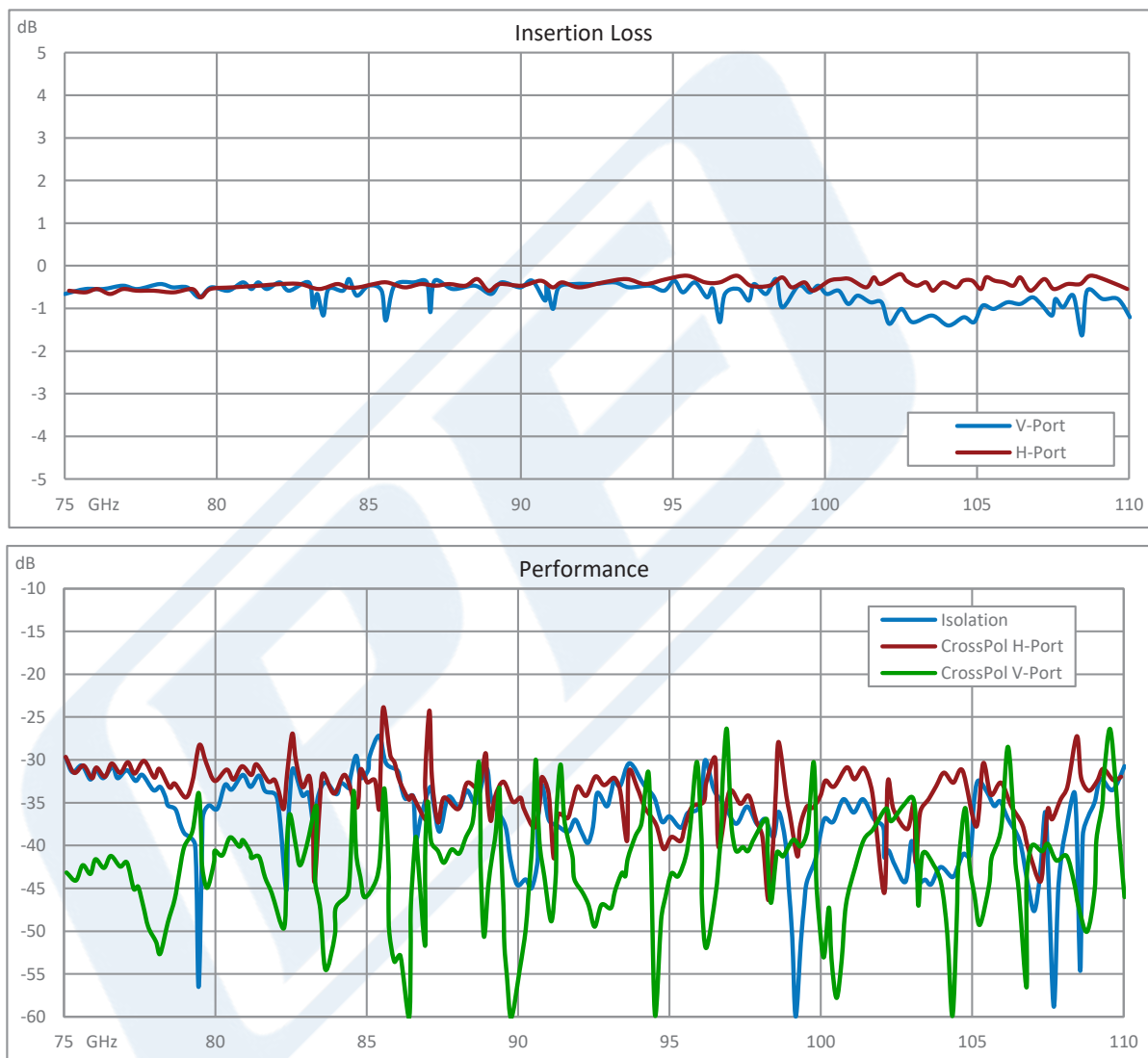
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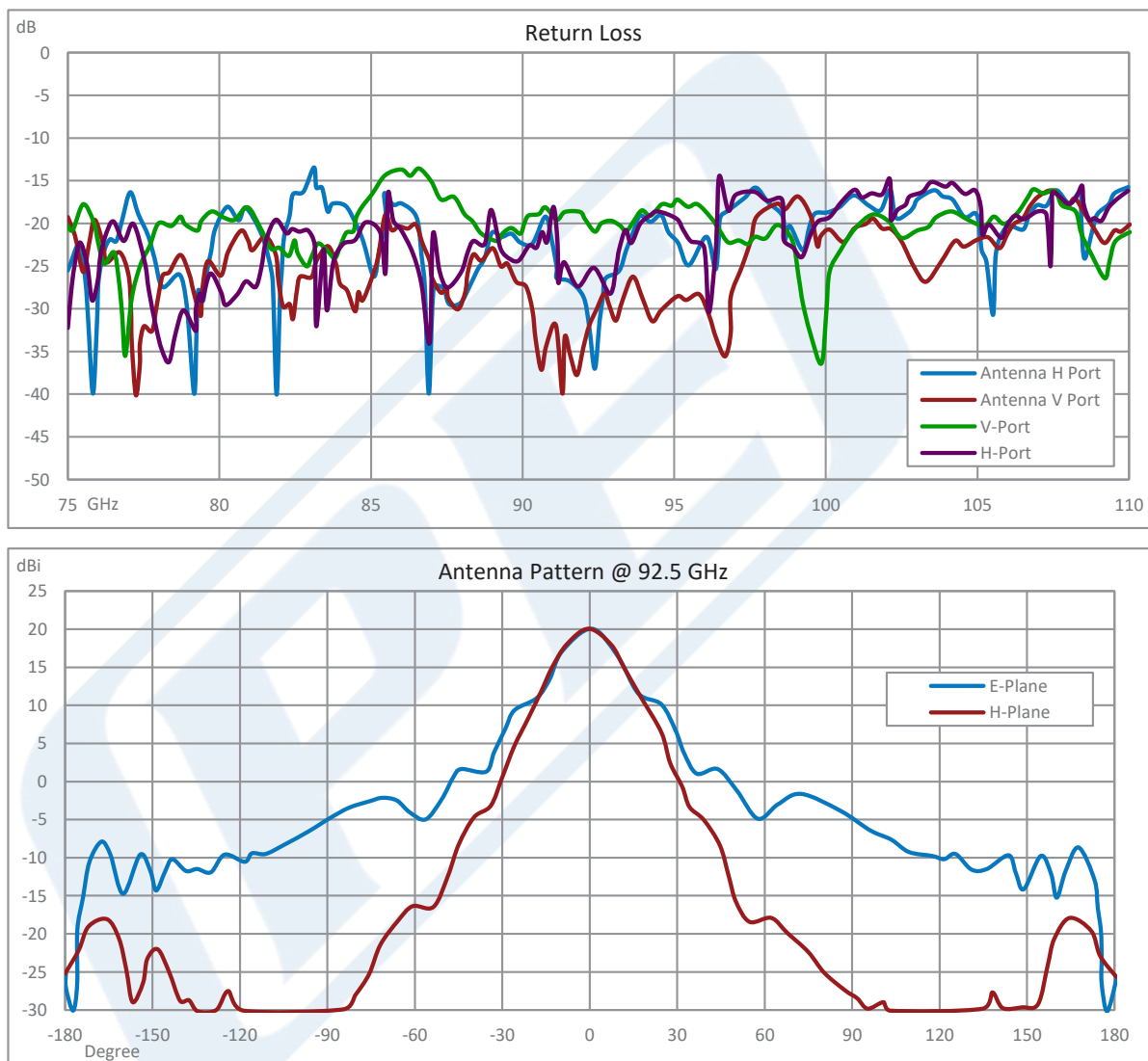
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WR-10 Waveguide Dual Polarized Horn Antenna, 75 GHz to 110 GHz Frequency Range, 20 dBi Gain, UG-387/U-Mod Flange from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products 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-10 Waveguide Dual Polarized Horn Antenna, 75 GHz to 110 GHz Frequency Range, 20 dBi Gain, UG-387/U-Mod Flange PEWAN1141](https://www.pasternack.com/wr-10-waveguide-gain-horn-antenna-20dbi-ug-387-mod-square-flange-pewan1141-p.aspx)

URL: <https://www.pasternack.com/wr-10-waveguide-gain-horn-antenna-20dbi-ug-387-mod-square-flange-pewan1141-p.aspx>

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PEWAN1141 CAD Drawing

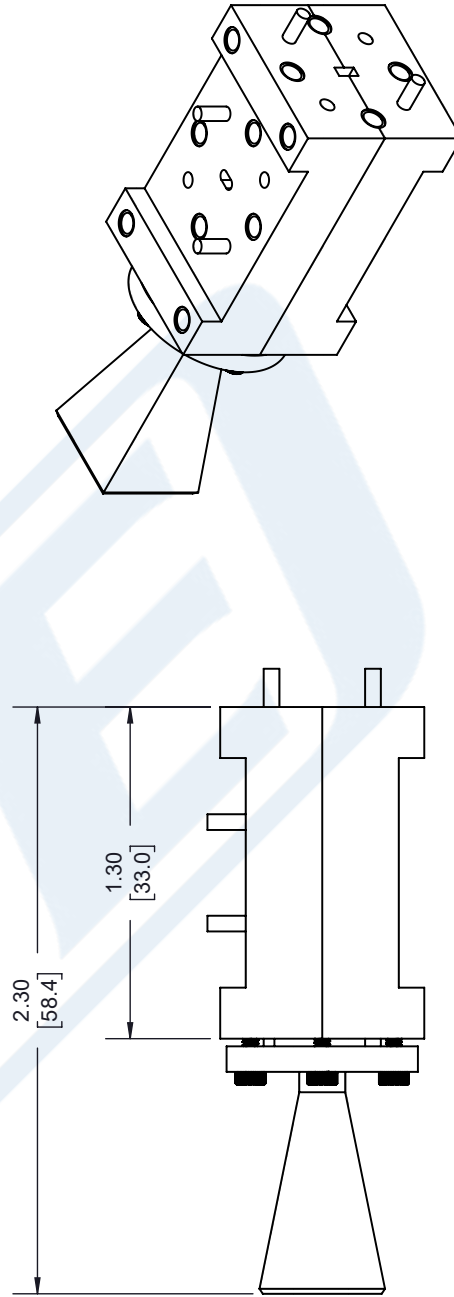
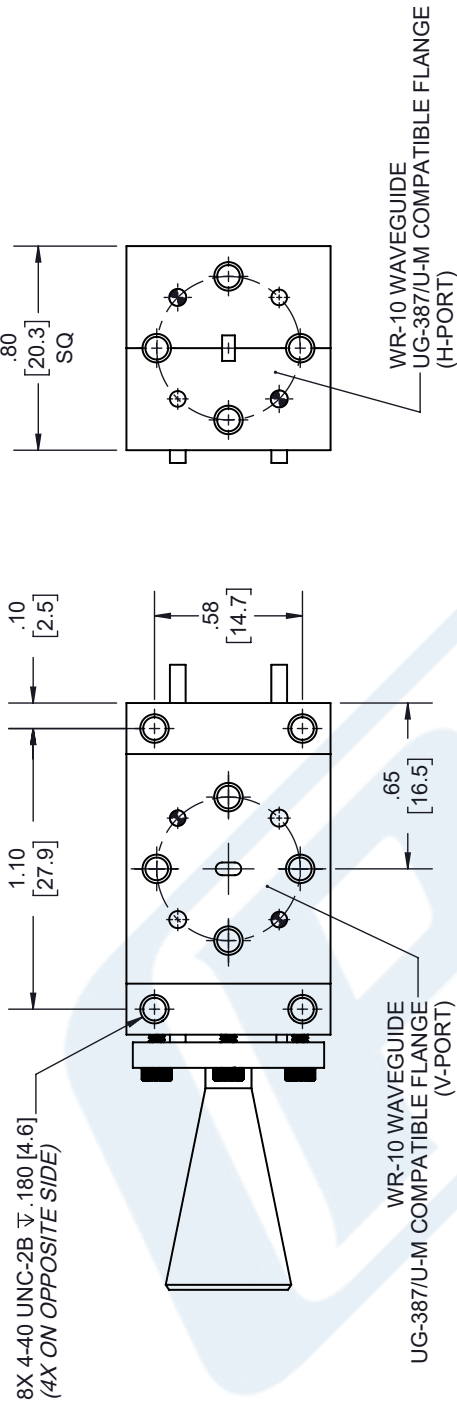
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Frequency Range, 20 dBi Gain, UG-387/U-Mod Flange

LABEL

PASTERNAK
PEWAN1141
D/C: YYWW

REVISIONS

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



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X $\pm$.2	[5.08]
XX $\pm$.01	[.25]
XXX $\pm$.005	[.13]
ANGLES $\pm$ 1°	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

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SIZE	CAGE
A	53919
DRAWN BY	K.DANG
PART NUMBER	PEWAN1141
REV	A

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SCALE	N/A

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