



WR-15 Waveguide Dual Polarized Scalar Feed
Horn Antenna, 50 GHz to 75 GHz Frequency
Range, 13 dBi Gain, UG-385/U-Mod Flange

Waveguide Antennas Technical Data Sheet

PEWAN1117

Features

- 50 GHz to 75 GHz Frequency Range
- Linear and Circular Polarizations
- High Port Isolation
- High Cross-Polarization Rejection

Applications

- IEEE 802.11.ad WiGig Systems
- 5G Systems
- Communication Systems
- Circular and Linear Waveform Separation and Combination

Description

Pasternack's PEWAN1117 is a WR-15 dual polarized scalar feed horn antenna that operates in the frequency range of 50 GHz to 75 GHz. PEWAN1117 features an integrated orthomode transducer that provides high port isolation and cross-polarization cancellation and a broad band scalar feed horn that provides low sidelobe levels. The antenna supports either vertical or horizontal polarized waveguide forms with a typical 30 dB cross polarization rejections, 13 dBi nominal gain at center frequency, typical 30 dB port isolation between horizontal and vertical ports, typical half power beamwidth of 40 degrees, and -25 dB sidelobe levels. The input of this antenna is a WR-15 waveguide with UG-385/U-M threaded flange.

Configuration

Design WR-15 Dual Polarized Scalar Feed Horn
Polarization Linear/Circular

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	50		75	GHz
Nominal Gain		13		dBi
Horizontal Half Power Beam Width		40		Degrees
Vertical Half Power Beam Width		40		Degrees
VSWR		1.4:1		

Mechanical Specifications

Size

Length 2.7 in [68.58 mm]
Width 0.8 in [20.32 mm]
Height 0.8 in [20.32 mm]
Weight 0.2245 lbs [101.83 g]

Waveguide Interface

Waveguide Size WR-15
Flange Designation UG-385/U-Mod
Body Material and Plating Aluminum, Gold

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-15 Waveguide Dual Polarized Scalar Feed Horn Antenna, 50 GHz to 75 GHz Frequency Range, 13 dBi Gain, UG-385/U-Mod Flange PEWAN1117](#)



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Environmental Specifications

Temperature

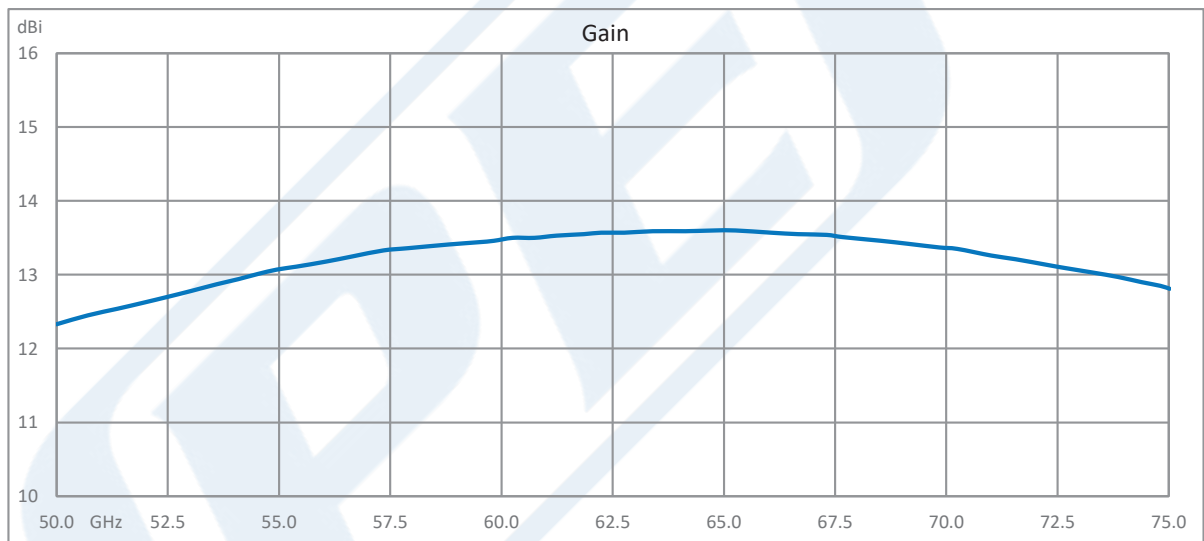
Operating Range

-40 to 85 deg C

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

Plotted and Other Data

Typical Performance Data



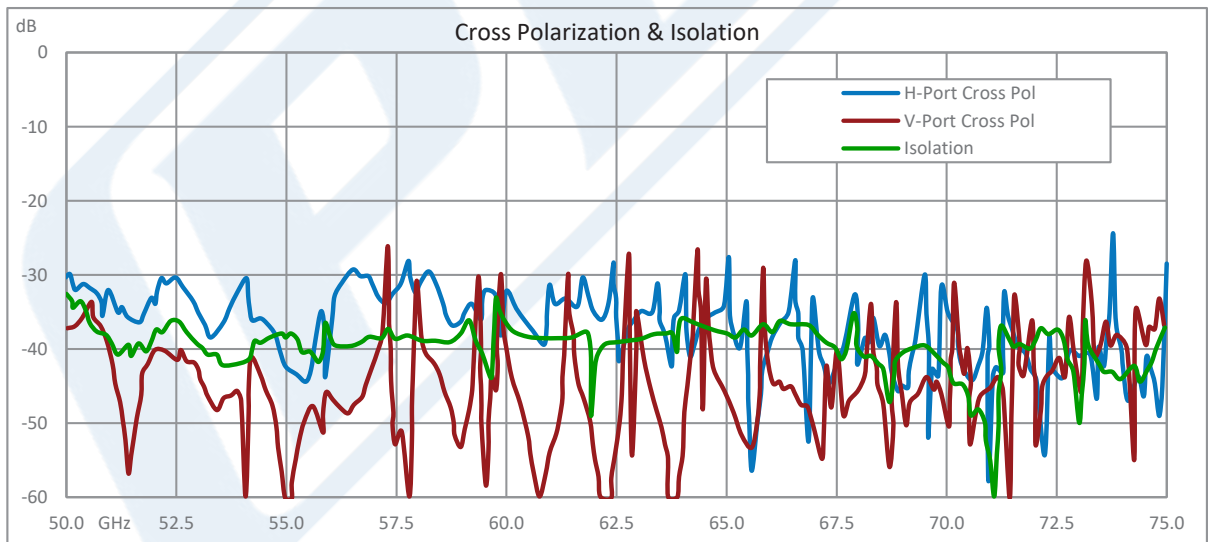
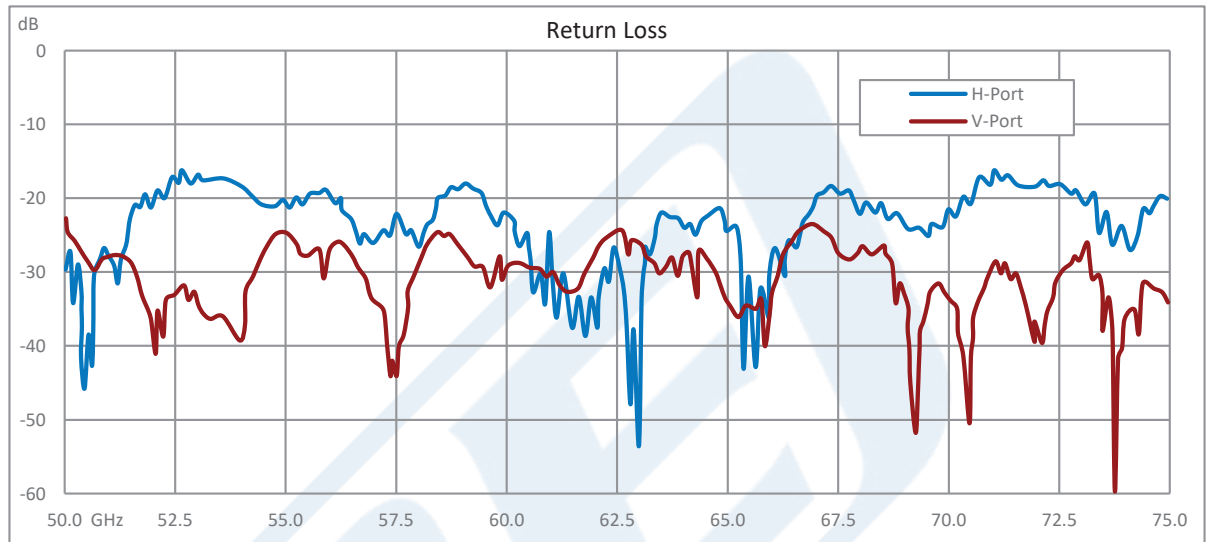
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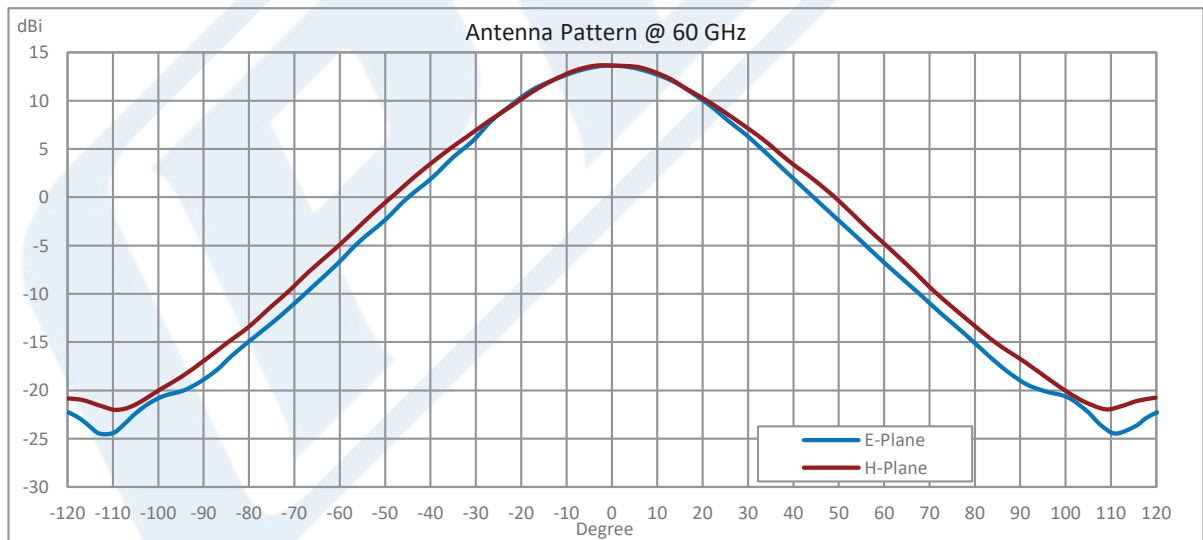
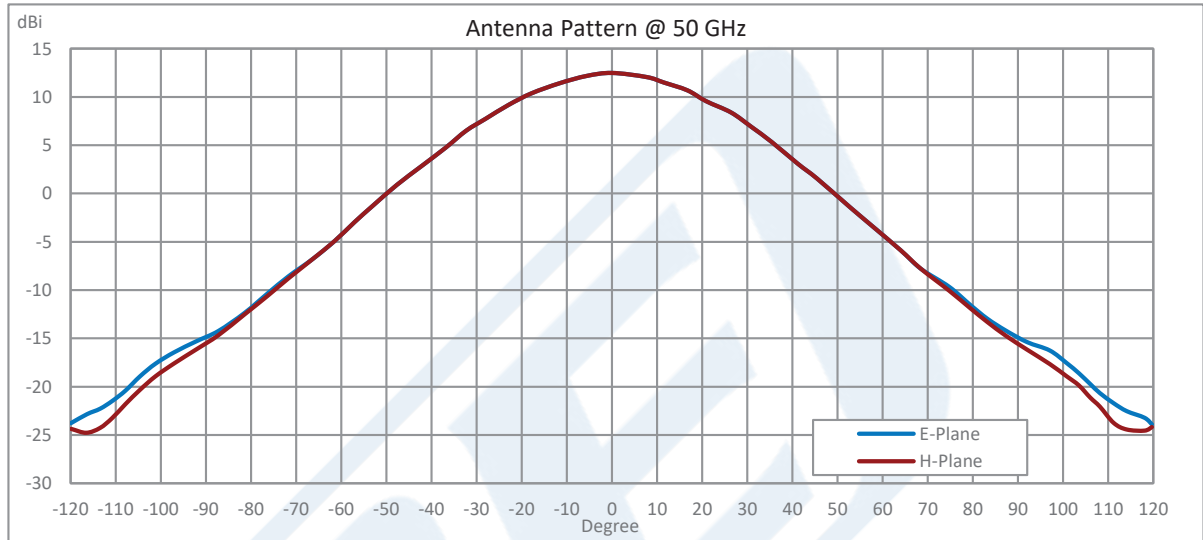
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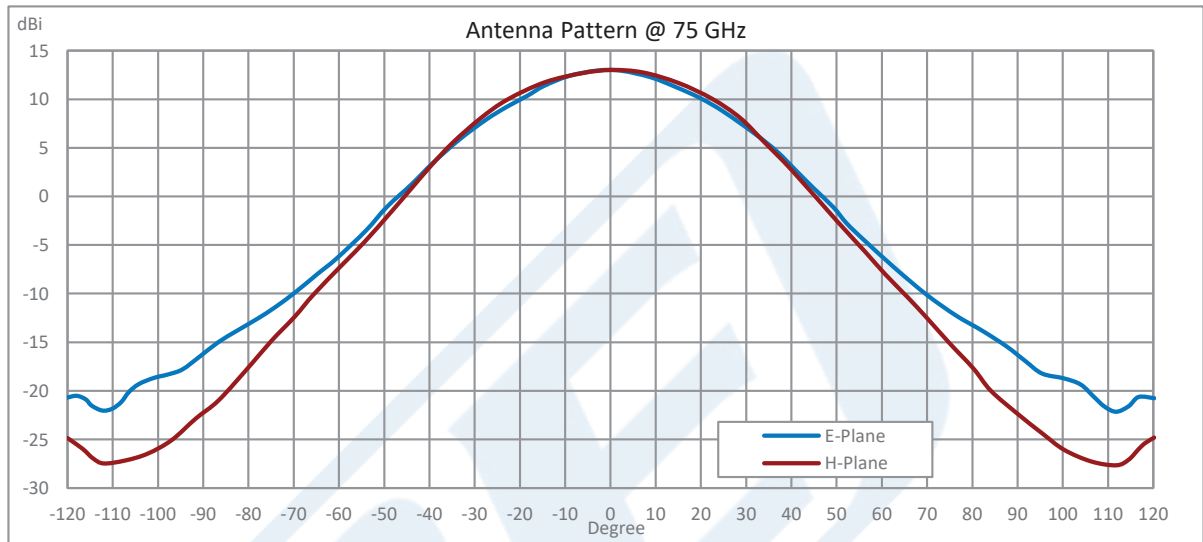
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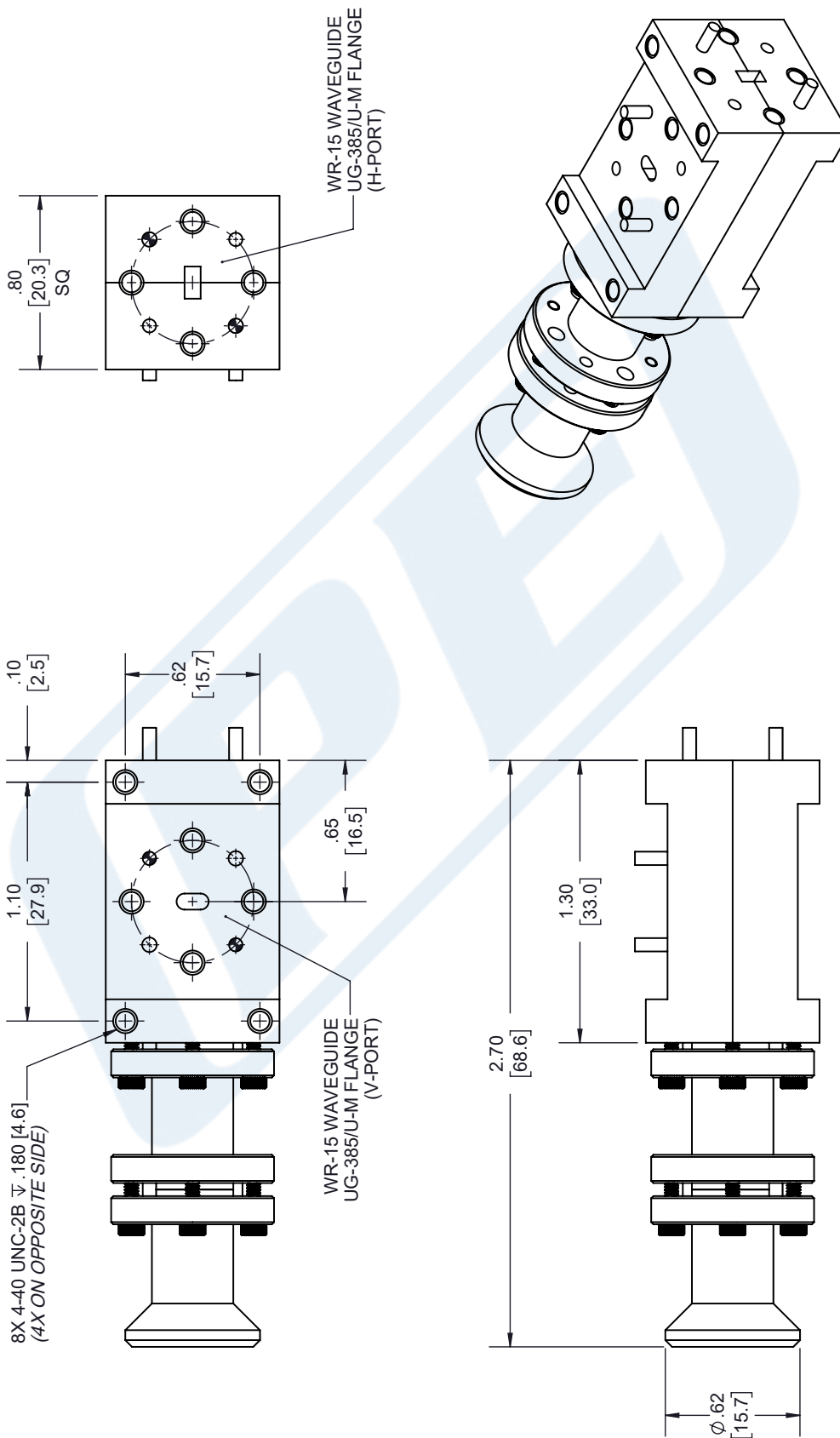
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PEWAN1117 CAD Drawing

WR-15 Waveguide Dual Polarized Scalar Feed Horn Antenna, 50 GHz to 75 GHz Frequency Range, 13 dBi Gain, UG-385/U-Mod Flange

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

PASTERNAK
PEWAN1117
D/C: YYWW



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

TOLERANCES:
X±.2 [5.08] FRACTIONS
XX±.01 [.25] ±1/32
XXX±.005 [.13] ANGLES ± 1°

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

THIRD-ANGLE PROJECTION

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SIZE: A CAGE: 53919 DRAWN BY: K.DANG PART NUMBER: PEWAN1117

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SHEET 1 OF 1
SCALE: N/A
REV: A