



WR-19 Waveguide Dual Polarized Scalar Feed
Horn Antenna, 40 GHz to 60 GHz Frequency
Range, 13 dBi Gain, UG-383/U-Mod Flange

Waveguide Antennas Technical Data Sheet

PEWAN1116

Features

- 40 GHz to 60 GHz Frequency Range
- Linear and Circular Polarization
- High Port Isolation
- High Cross-Polarization Rejection

Applications

- 5G Systems
- Radar Systems
- Communication Systems
- Circular and Linear Waveform Separation and Combination

Description

Pasternack's PEWAN1116 is a WR-19 dual polarized scalar feed horn antenna that operates in the frequency range of 40 GHz to 60 GHz. PEWAN1116 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 35 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-19 waveguide with UG-383/U-M threaded flange.

Configuration

Design: WR-19 Dual Polarized Scalar Feed Horn
Polarization: Linear/Circular

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	40		60	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: 3.4 in [86.36 mm]
Width: 1.2 in [30.48 mm]
Height: 1.2 in [30.48 mm]
Weight: 0.4435 lbs [201.17 g]

Waveguide Interface

Waveguide Size: WR-19
Flange Designation: UG-383/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-19 Waveguide Dual Polarized Scalar Feed Horn Antenna, 40 GHz to 60 GHz Frequency Range, 13 dBi Gain, UG-383/U-Mod Flange PEWAN1116](#)



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Environmental Specifications

Temperature

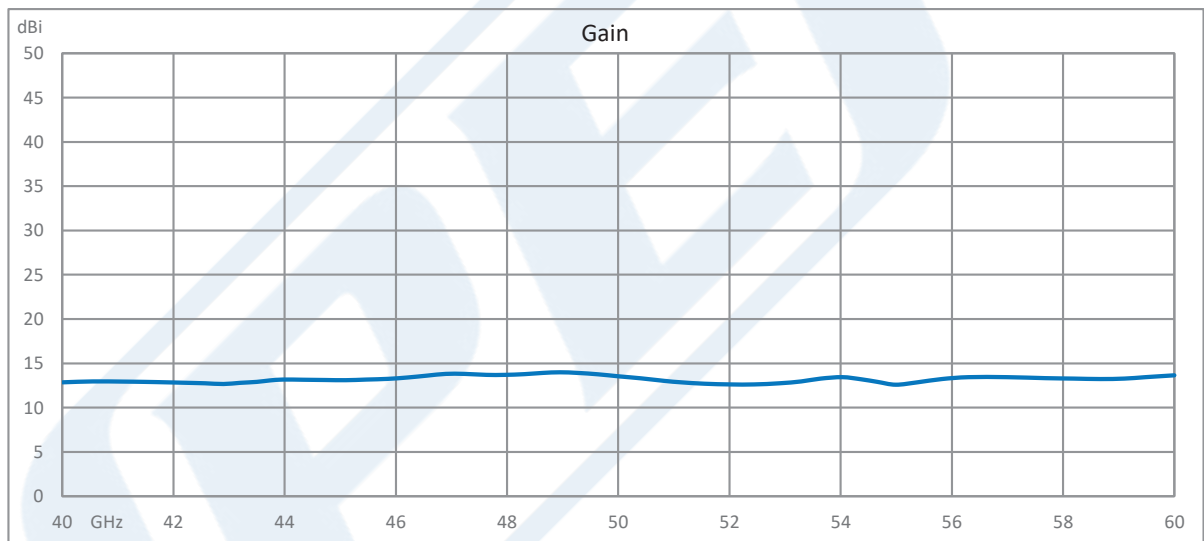
Operating Range

-40 to 85 deg C

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

Plotted and Other Data

Typical Performance Data



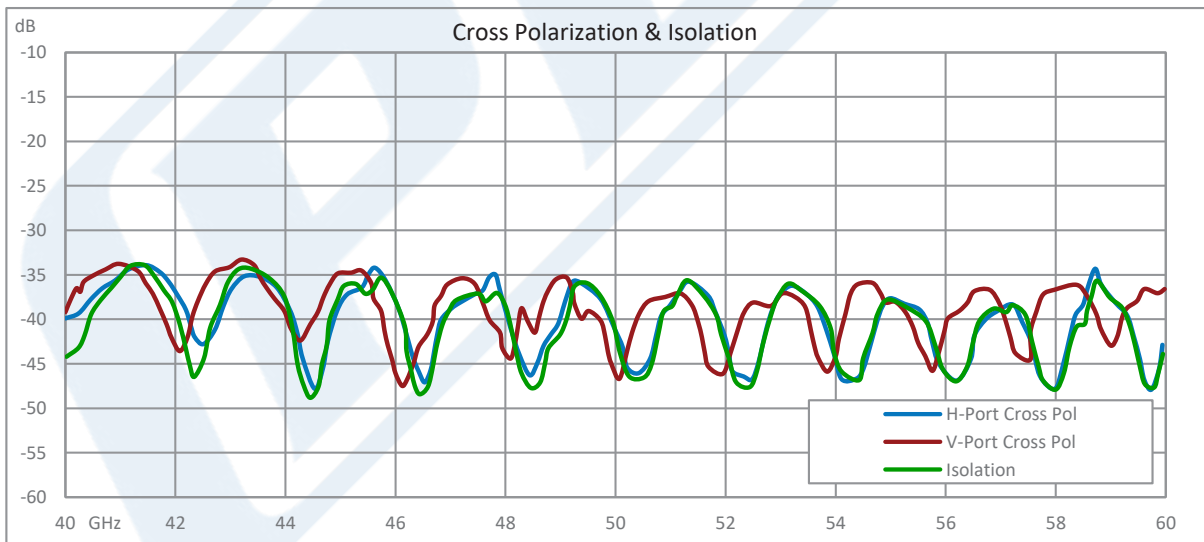
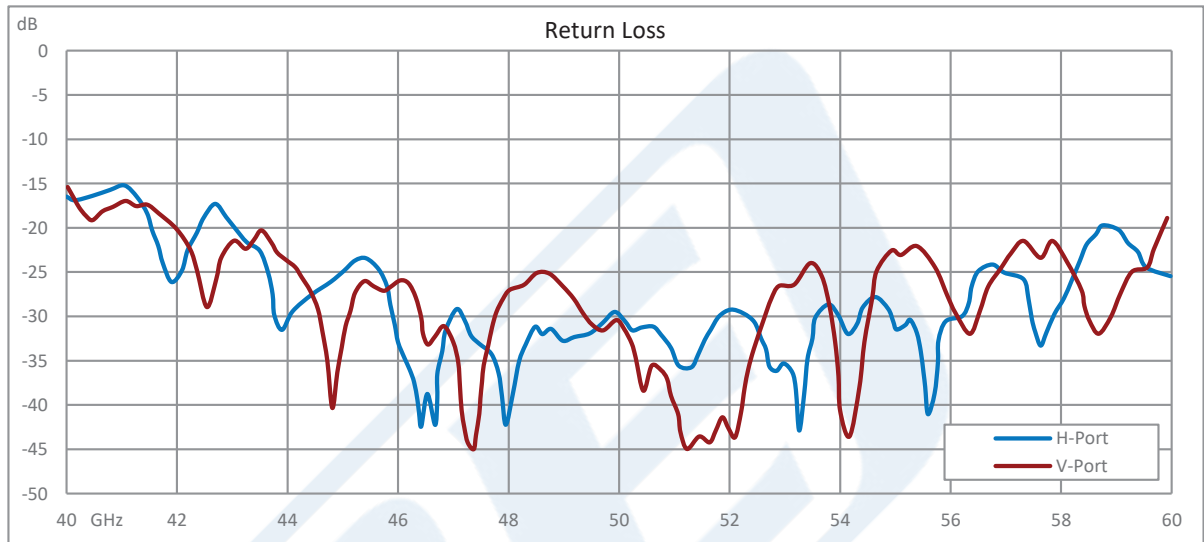
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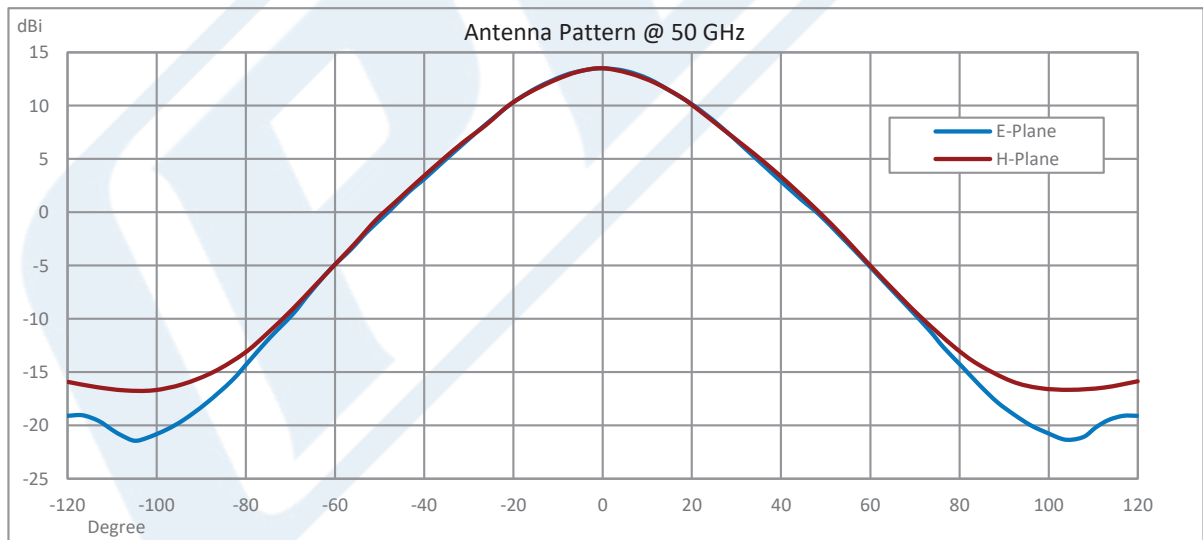
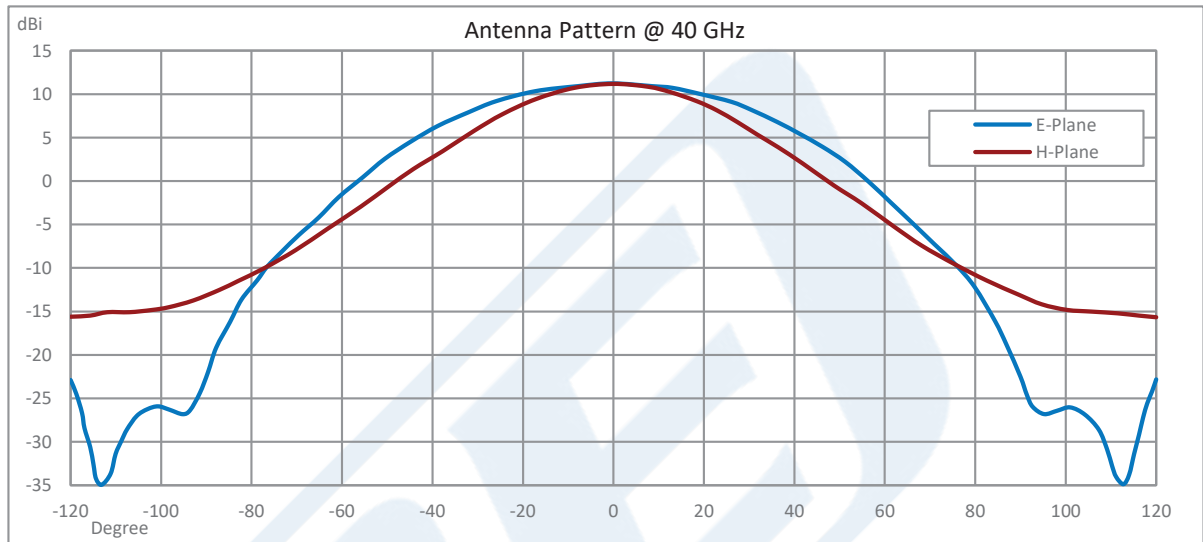
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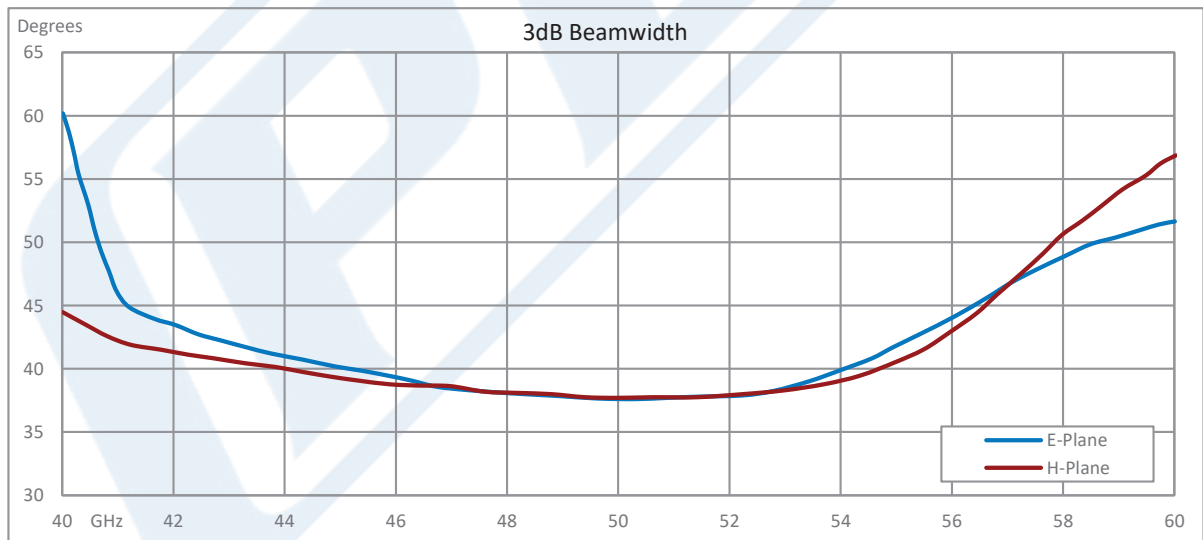
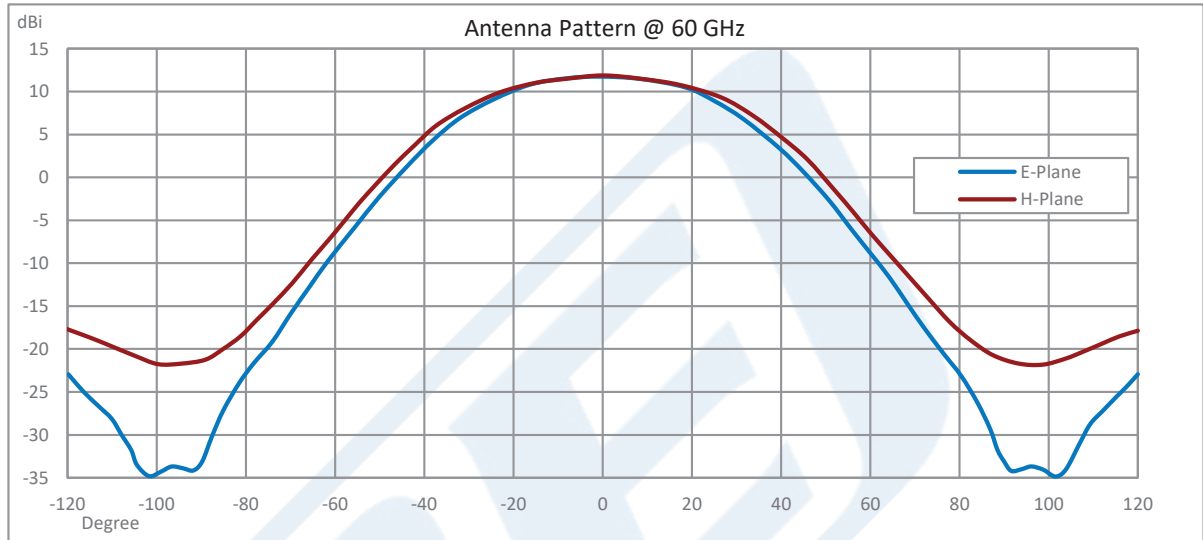
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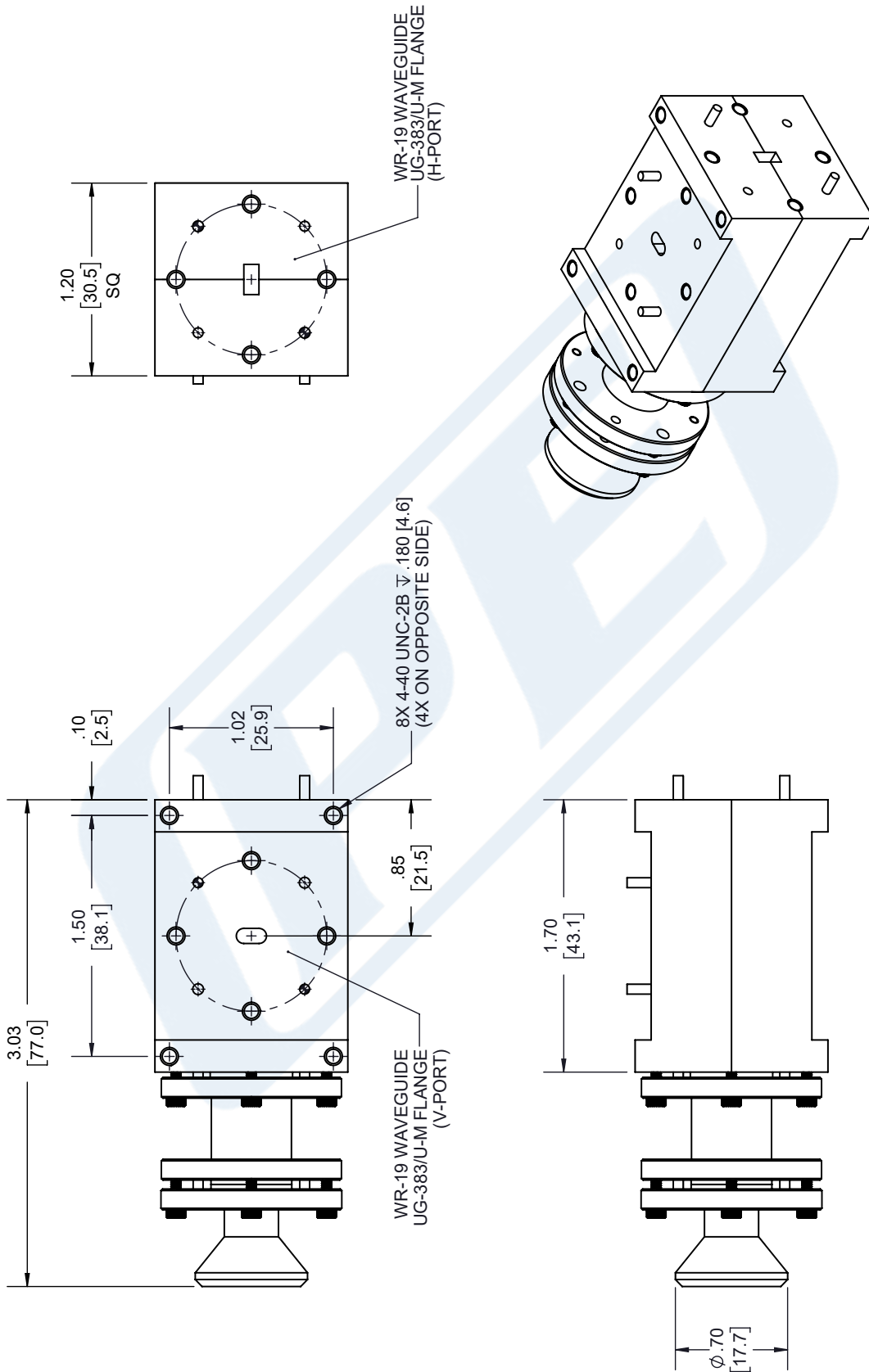
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PEWAN1116 CAD Drawing

WR-19 Waveguide Dual Polarized Scalar Feed Horn Antenna, 40 GHz to 60 GHz Frequency Range, 13 dBi Gain, UG-383/U-Mod Flange

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

PASTERNAK
PEWAN1116
D/C: YYWW



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [] ARE MILLIMETERS	
TOLERANCES:	FRACTIONS
X±.2 [5.08]	+1/32
XX±.01 [25]	ANGLES ± 1°
XXX±.005 [13]	
ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.	
THIRD-ANGLE PROJECTION	

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SIZE	CAGE	DRAWN BY	PART NUMBER
A	53919	K.DANG	PEWAN1116
SHEET 1 OF 1			REV A
SCALE N/A			

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