SAH-4036031060-219-S1-188-DP

Advanced

WR-19 Dual Polarized Choke Flange Feed Horn Antenna, 40 to 60 GHz

Description:

SAH-4036031060-219-S1-188-DP is a dual polarized, WR-19 choke flange feed horn antenna assembly that operates from 40 to 60 GHz. The assembly features an integrated orthomode transducer (OMT) that provides high port isolation and a broad band scalar horn that provides low sidelobe levels. The OMT enables the antenna to separate a circular or elliptical polarized waveform into two linear, orthogonal waveforms or vice versa. The dual polarized horn also supports either vertical or horizontal polarized waveguide forms with 40 dB typical isolation between the V and H ports. At center frequency, the horn antenna exhibits 10 dBi nominal gain, typical half power beamwidth of 60 degrees and typical sidelobe levels of -30 dB. The horizontal and vertical ports are WR-19 waveguides with UG-383/U-M anti-cocking flanges. Coaxial port configurations are also available under different model numbers.

Features:

- Full Band Operation
- Linear and Circular Polarization
- High Port Isolation

Applications:

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

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	40 GHz		60 GHz
Gain		10 dBi	
3 dB Beamwidth, E-plane @ 50 GHz		60°	
3 dB Beamwidth, H-plane @ 50 GHz		60°	
Sidelobe Levels		-30 dB	
V and H Port Isolation		40 dB	
Port Return Loss		15 dB	
Specification Temperature		+25 ˚C	
Operating Temperature	-40 ˚C		+85 ˚C

Mechanical Specifications:

Item	Specification
Horizontal and Vertical Ports	WR-19 Waveguides with UG-383/U-M Anti-Cocking Flanges
Material	Aluminum, Brass
Finish	Gold Plated
Weight	7.0 Oz
Outline	AH-CU10-219-188-DP

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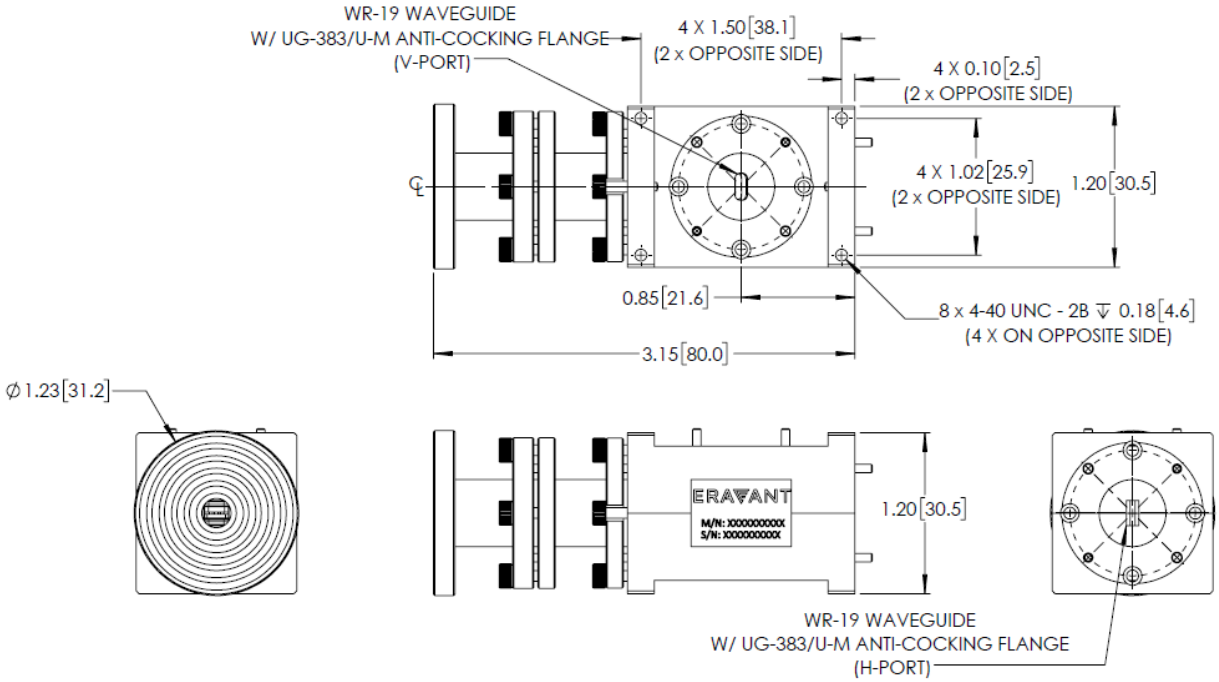
Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- Eravant reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the antenna or waveguide will cause performance degradation and possible device damage.

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