

F-Band Standard Gain Horn

90 to 140 GHz, WR08, 26 dBi Gain

DESCRIPTION

Anteral's Standard Gain Horns are high performance antennas designed to exhibit smooth gain response in the whole band and very low VSWR. The antenna exterior appearances are designed to minimize weight, improve robustness and offer a sharp aperture. They are manufactured from a single aluminum rod. No soldering for flanges and no screws for attaching parts are included.

The SGH-26-WR08 model operates at the F-band between 90 and 140 GHz with 26 dBi nominal mid-band gain and a typical VSWR of 1.12.

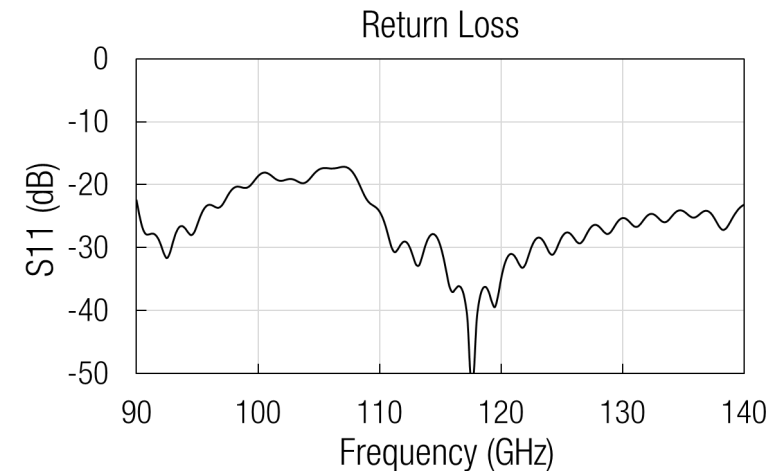
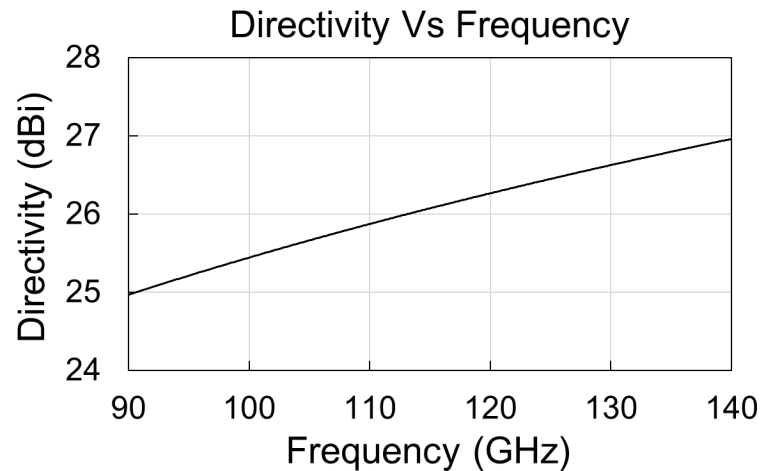
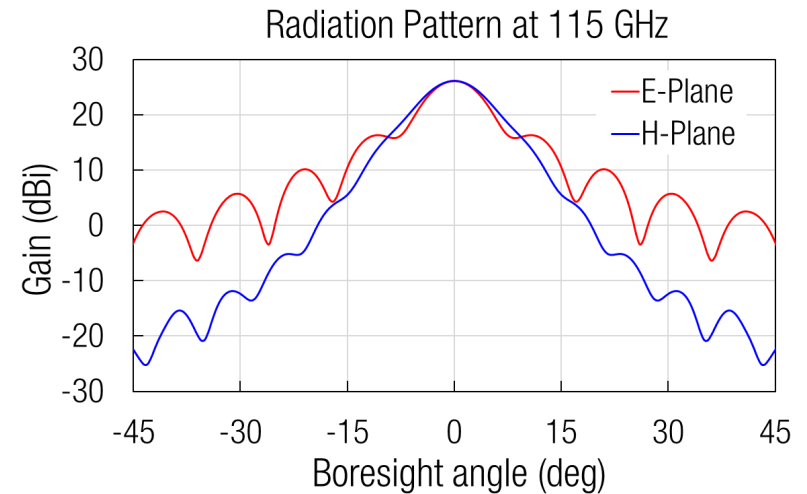
APPLICATIONS

This type of horns is especially suitable for laboratory test measurements, electromagnetic measurements and gain calibration. Moreover, custom bands and gain values can be requested.

Anteral also offers their **Lens Horn Antennas** with plano-convex Teflon (PTFE) lenses to exhibit high gain (>30 dBi) with minimum size.

ELECTRICAL SPECIFICATIONS

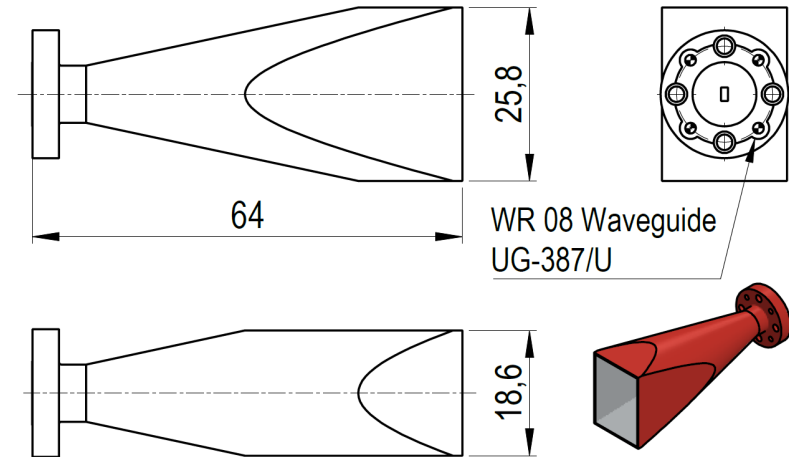
Parameter	Minimum	Typical	Maximum
Frequency	90 GHz	115 GHz	140 GHz
Directivity	25 dBi	26 dBi	27 dBi
3 dB Beamwidth, E-plane		7.7 deg	
3 dB Beamwidth, H-plane		8.5 deg	
Sidelobe, E-plane		-10 dB	-9 dB
Sidelobe, H-plane		-33 dB	-30 dB
S11		-25 dB	-20 dB



MECHANICAL SPECIFICATIONS

Parameter	Description
Antenna Port	WR-8.0 (2.032 mm x 1.016 mm)
Flange	UG-387/U
Length	64 mm
Total weight	22 g
Material	Aluminum
External Color	Ruby Red

MECHANICAL OUTLINE



Additional notes

Directivity and radiation pattern data are simulated. Actual values have been checked experimentally but they could vary slightly.

Return loss data are measured from a sample.

The return loss performance of all items is checked before delivery to fulfill specifications.