

U-Band Standard Gain Horn

40 to 60 GHz, WR19, 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-WR19 model operates at the U-band between 40 and 60 GHz with 26 dBi nominal mid-band gain and a typical VSWR of 1.06.

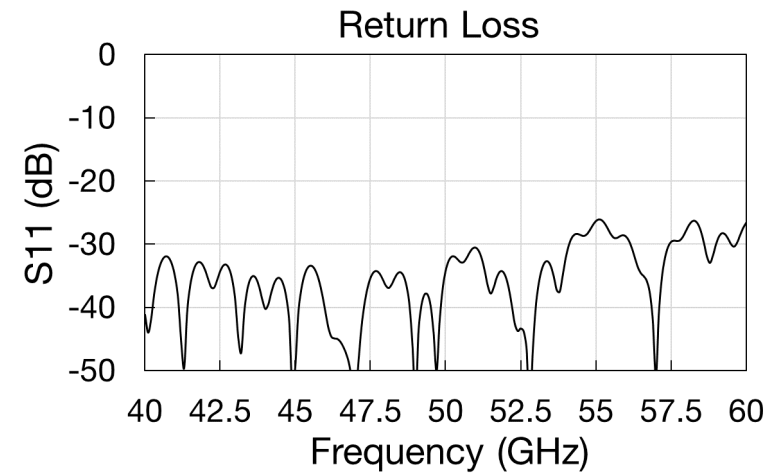
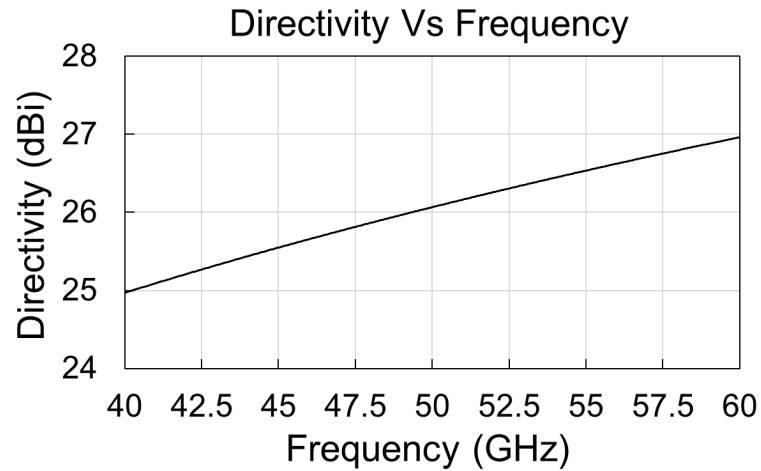
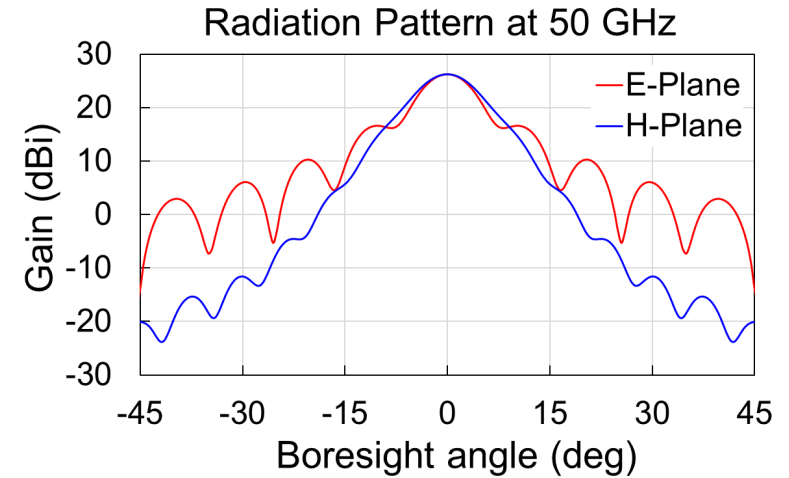
APPLICATIONS

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

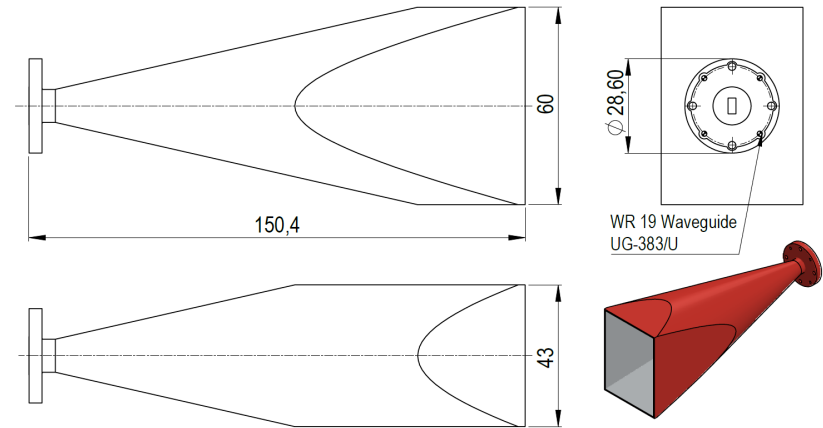
Parameter	Minimum	Typical	Maximum
Frequency	40 GHz	50 GHz	60 GHz
Directivity	25 dBi	26 dBi	27 dBi
3 dB Beamwidth, E-plane		7.7 deg	
3 dB Beamwidth, H-plane		8.5 deg	
Sidelobe, E-plane		-10 dB	-9 dB
Sidelobe, H-plane		-33 dB	-30 dB
S11		-30 dB	-25 dB



MECHANICAL SPECIFICATIONS

Parameter	Description
Antenna Port	WR-19 (4.775 mm x 2.388 mm)
Flange	UG-383/U
Length	150.4 mm
Total weight	190 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.