

# Standard Gain Horn

18 to 26.5 GHz, WR42, 20 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. No soldering for flanges and no screws for attaching parts are included.

The SGH-20-WR42 model operates between 18 and 26.5 GHz with 20 dBi nominal mid-band gain and a typical VSWR of 1.1.

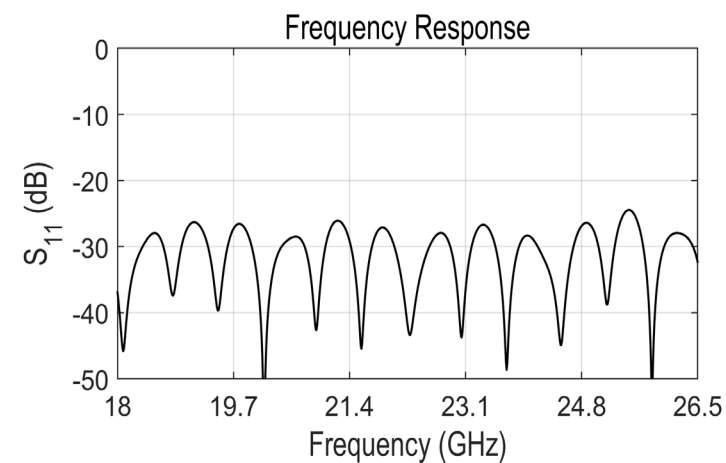
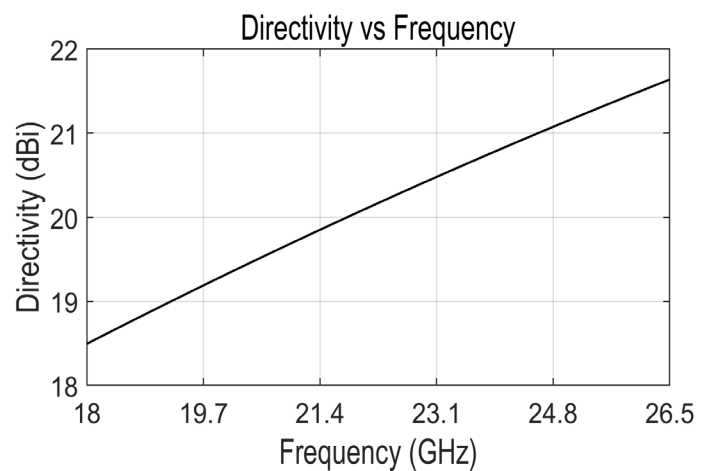
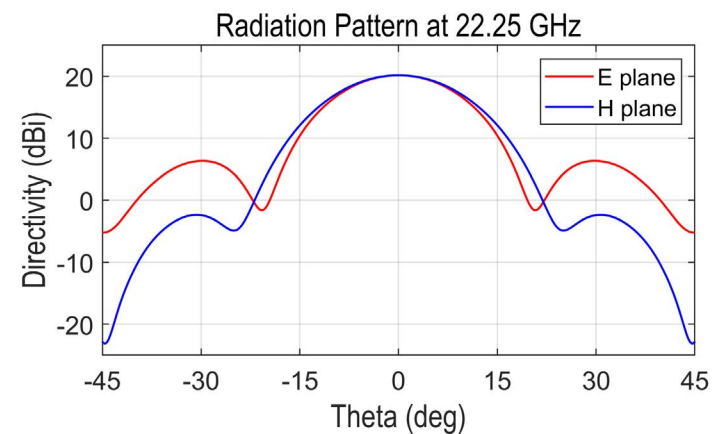
## APPLICATIONS

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

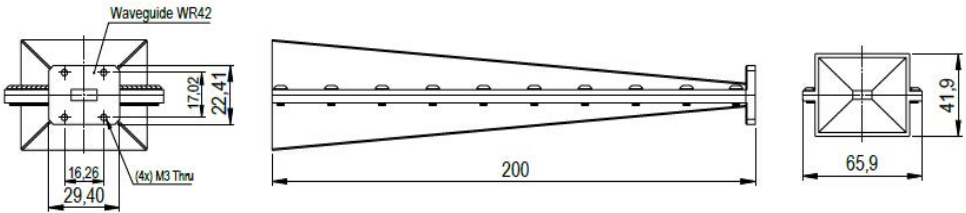
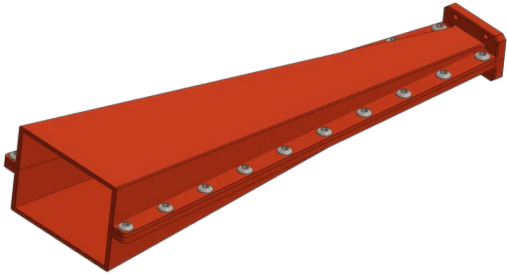
Parameter	Typical value
Frequency	18 - 26.5 GHz
Directivity	20 dBi
3 dB Beamwidth, E-plane	17.8 deg
3 dB Beamwidth, H-plane	18.9 deg
Sidelobe, E-plane	-13.8 dB
Sidelobe, H-plane	-22.5 dB
S11	-25 dB



MECHANICAL SPECIFICATIONS

Parameter	Description
Antenna Port	WR-42 (10.668 mm x 4.318 mm)
Length	200 mm
Total weight	157 g
Material	Aluminum
External Color	Ruby Red

MECHANICAL OUTLINE



Additional notes

Directivity and radiation pattern data are simulated. Actual values could vary slightly.  
The return loss performance of all items is checked before delivery.

