

# W-Band Focusing Lens Horn Antenna

## 75 to 110 GHz, WR10

### DESCRIPTION

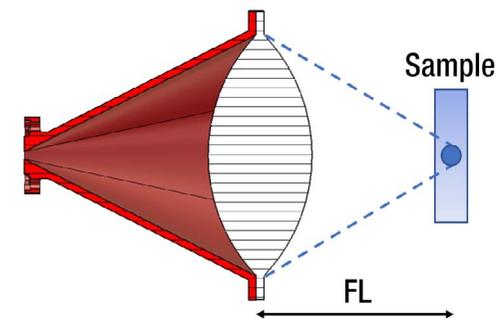
Anteral's Focusing Lens Horn Antennas are conical horn antennas with a **double-convex** Teflon (PTFE) lens added in the aperture, in order to apply phase correction and achieve superior focusing performance with minimum size.

The FLHA-F-WR10 model operates at the W-band between 75 and 110 GHz with a focal length of 58.2 mm and a diameter beam focus of 5 mm.

### APPLICATIONS

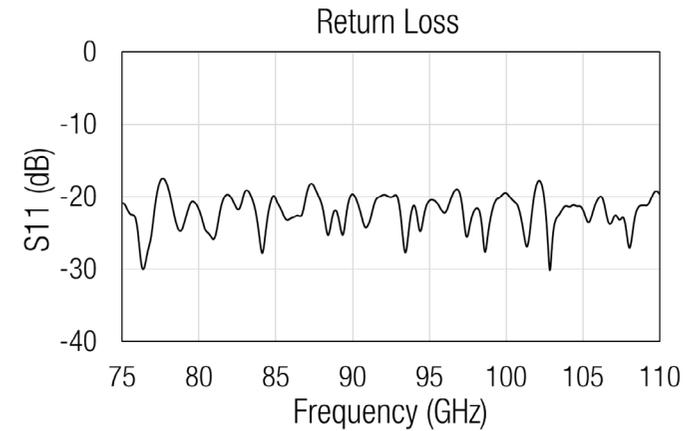
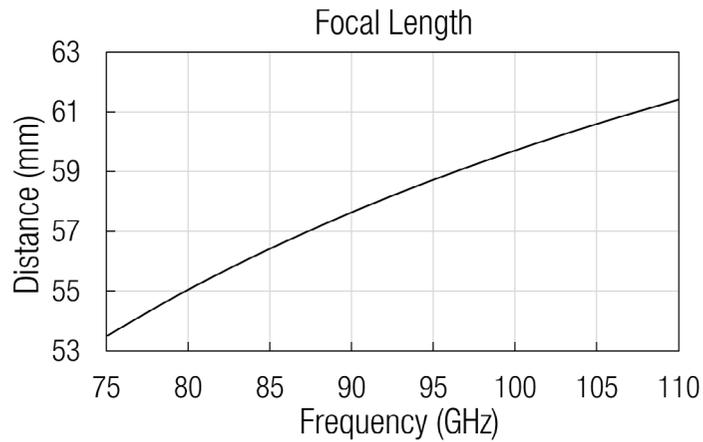
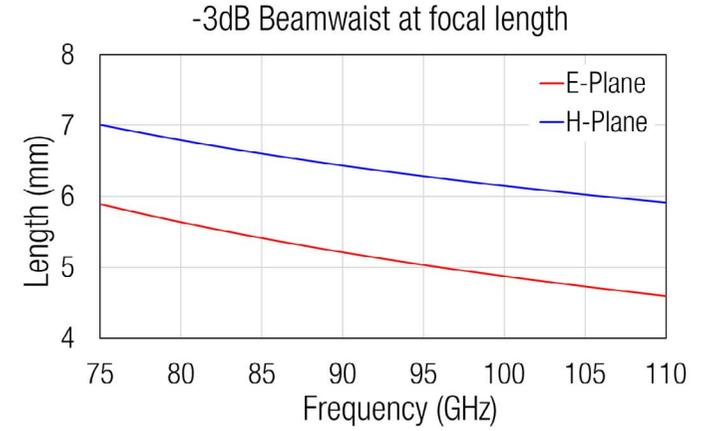
Focusing Lens Horn Antennas are especially useful when focusing beam is required with short focal distances. Therefore, these antennas are widely used in testing and material characterization.

Anteral also offers their **Lens Horn Antennas** with plano-convex lenses to exhibit high gain (>30 dB) in a very compact size which makes them optimal for radar applications, communication links or meteorological systems among others.



### ELECTRICAL SPECIFICATIONS

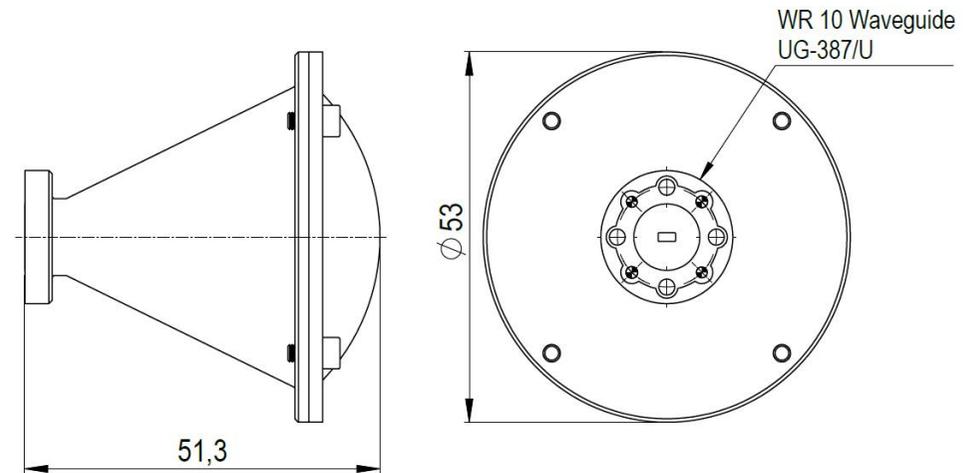
Parameter	Typical value
Frequency	75 - 110 GHz
Focal Length	58.2 mm
3 dB Beamwaist, E-plane	5.1 mm
3 dB Beamwaist, H-plane	6.4 mm
S11	-18 dB



### MECHANICAL SPECIFICATIONS

Parameter	Description
Antenna Port*	WR-10 (2.54 mm x 1.27 mm)
Flange	UG-387/U
Total length	51.3 mm
Total diameter	53 mm
Total weight	60 g
Horn Material	Aluminum
Lens Material	PTFE
External Color	Ruby Red

### MECHANICAL OUTLINE



#### Additional notes

Focal length and beamwaist data are simulated. Return loss data is measured from a sample. Actual values could vary slightly. The return loss performance of all items is checked before delivery.

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