

E-Band Focusing Lens Horn Antenna

60 to 90 GHz, WR12

DESCRIPTION

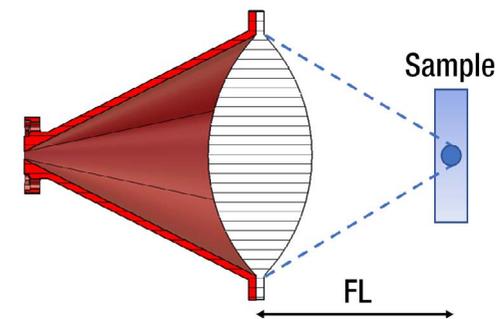
Anteral's Focusing Lens Horn Antennas are conical horn antennas with a **double-convex** Teflon (PTFE) lens added in the aperture, in order to apply phase correction and achieve superior focusing performance with minimum size.

The FLHA-F-WR12 model operates at the E-band between 60 and 90 GHz with a focal length of 71 mm and a diameter beam focus of 6 mm.

APPLICATIONS

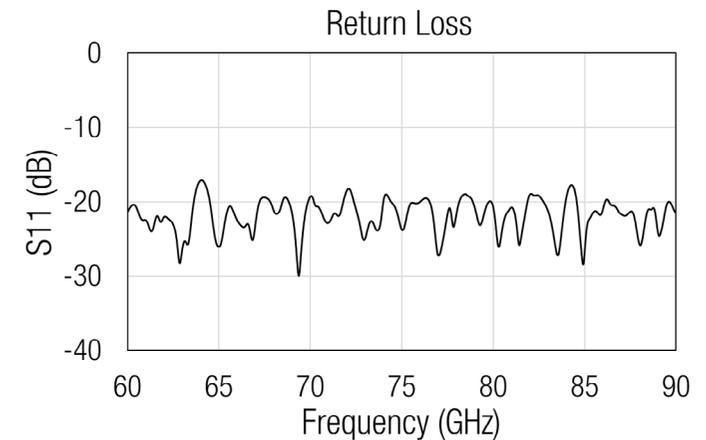
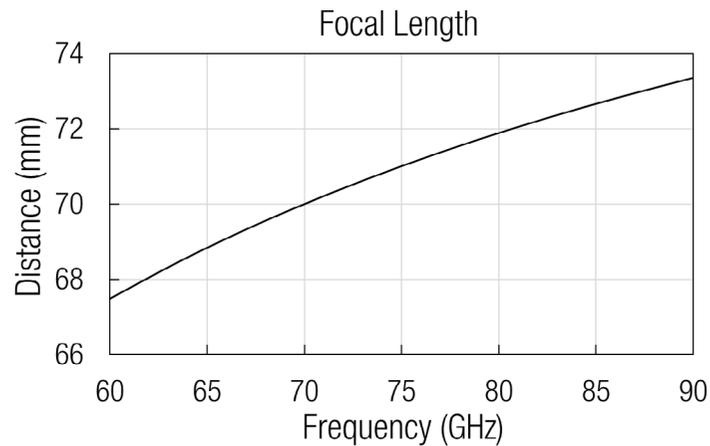
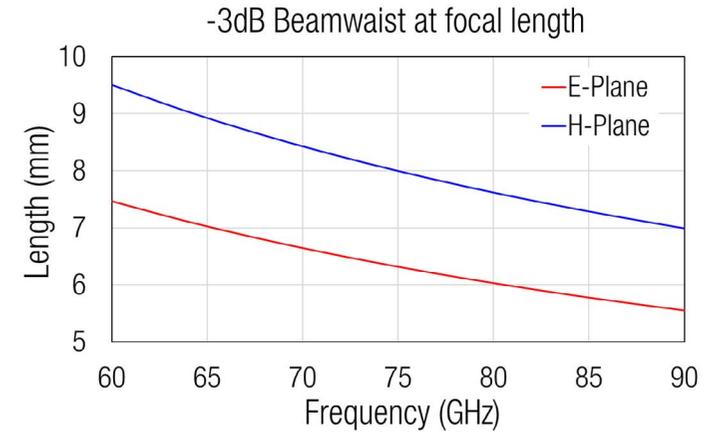
Focusing Lens Horn Antennas are especially useful when focusing beam is required with short focal distances. Therefore, these antennas are widely used in testing and material characterization.

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

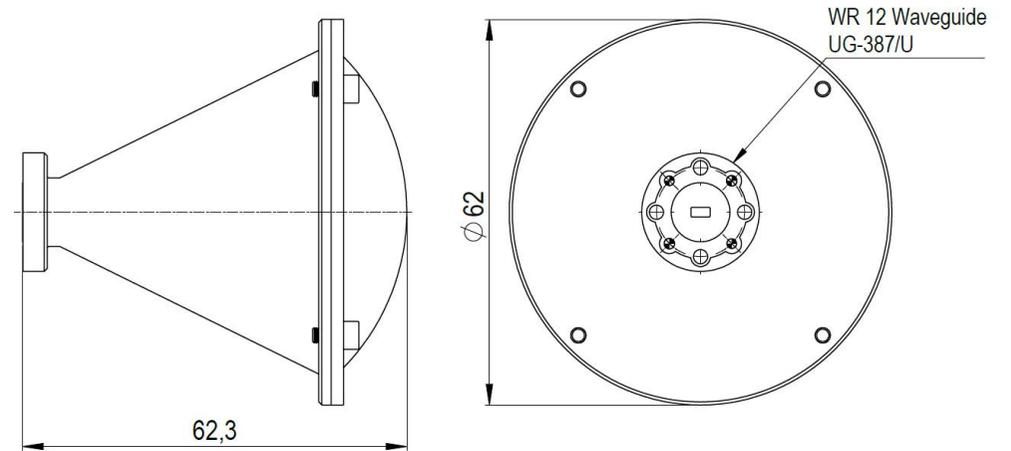
Parameter	Typical value
Frequency	60 - 90 GHz
Focal Length	71 mm
3 dB Beamwaist, E-plane	6.3 mm
3 dB Beamwaist, H-plane	8.0 mm
S11	-18 dB



MECHANICAL SPECIFICATIONS

Parameter	Description
Antenna Port*	WR-12 (3.099 mm x 1.549 mm)
Flange	UG-387/U
Total length	62.3 mm
Total diameter	62 mm
Total weight	90 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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