

High Gain Lens Horn Antenna

WR-06/110-170GHz/40.6dBi Gain

Model: TLHGLA-110170-40-6.5

High Gain Lens horn antenna TLHGLA-110170-40-6.5 is a operating from 110 to 170GHz with a typical 40.6dBi gain and low VSWR 1.6:1 with rectangular waveguide WR-6.5 input. The antenna is ideally suited for antenna measurement, material measurement, system intergration and other applications.

Features:

- Operating Frequency 110 to 170GHz
- Nominal RF Gain: 40.6dBi Typ
- High Return Loss
- 3dB Beamwidth, E-Plane:1.3 deg
- 3dB Beamwidth, H-Plane:1.4 deg
- Sidelobe, E-Plane:-31.7 dB
- Sidelobe, H-Plane:-32.7 dB

Applications:

- Radar/Communication Systems
- Antenna Gain Measurements
- System Setups

Electrical Characteristics:

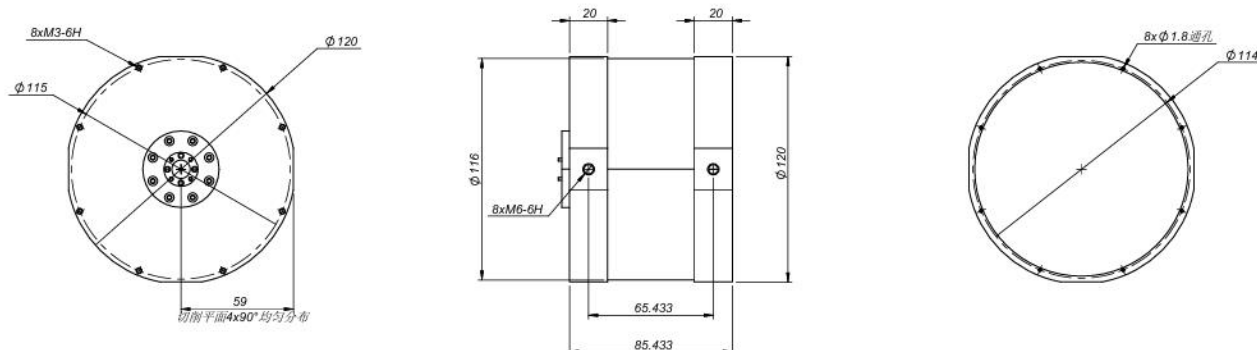
Parameter		Min	Typ	Max	Units
Frequency Range		110		170	GHz
Gain			40.6		dBi
VSWR				1.6	:1
Polarization mode			Linear		
3dB Beamwidth	@E Plane		1.3		°
	@H Plane		1.4		°
Sidelobe	@E Plane		-31.7		dB
	@H Plane		-32.7		dB

Envrionmental And Physical Characteristics:

Description	Parameter	Units
Material	Aluminium	
Connectors	WR-6.5/UG-387/U	
Size	89.4*ø120	mm

Outline Drawing:

Unit:mm; Tolerance:±0.1mm

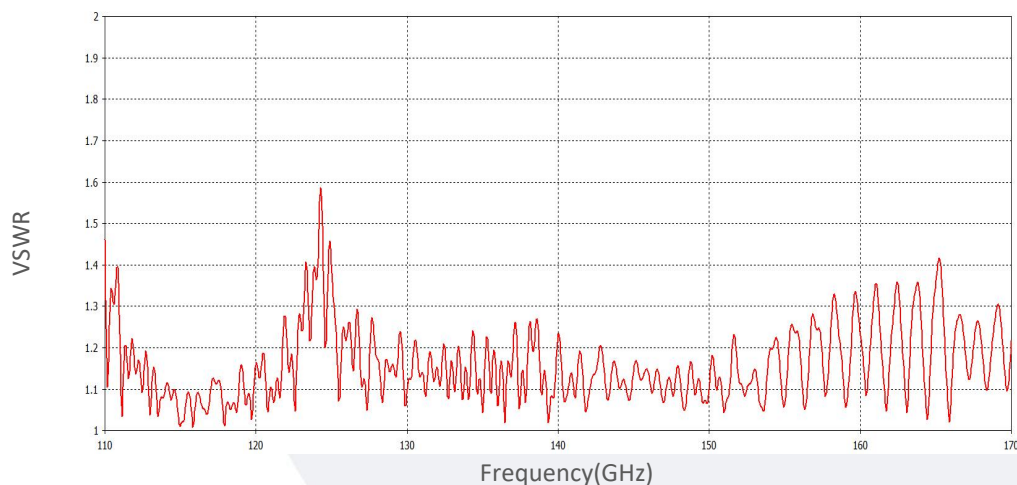


Ordering Information:

Base Number	Description	Revision
TLHGLA-110170-40-6.5	High Gain Lens Horn Antenna,110-170GHz, Gain: 40.6dBi Typ	Rev.1.0

Simulation Data:

VSWR vs Frequency

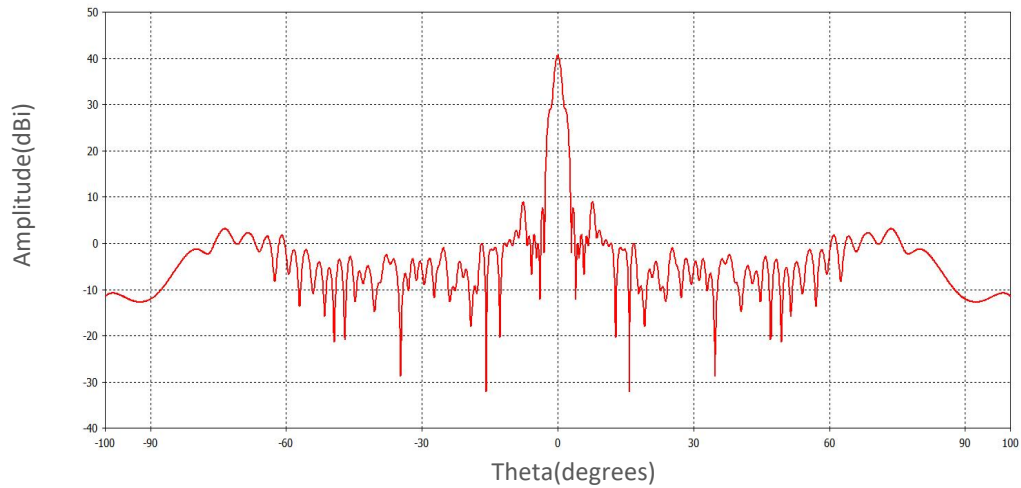


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

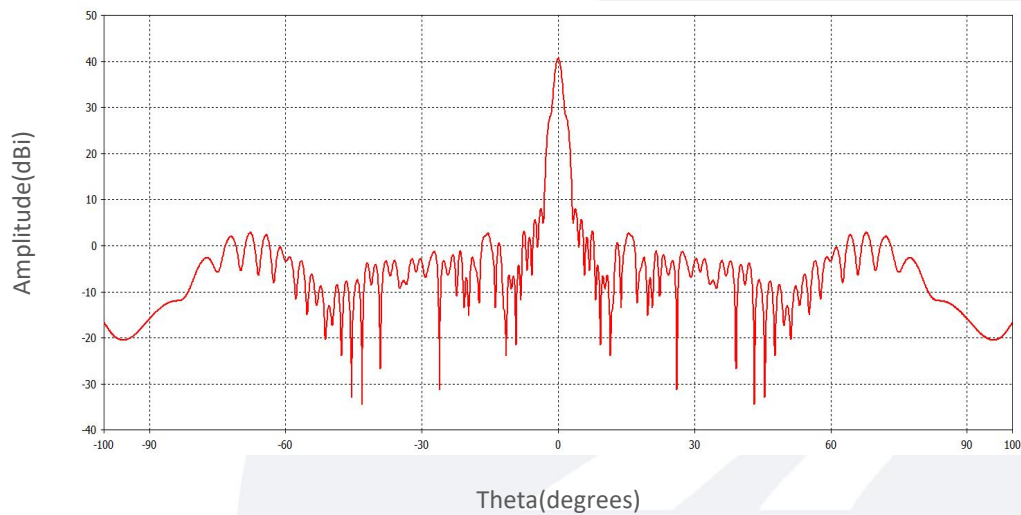
Simulation Data:

140GHz:

Amplitude vs Theta



Amplitude vs Theta



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.