

## HP-HA-19SG-U4060-R25

### Standard Gain Horn Waveguide Antenna

#### DESCRIPTION

Waveguide standard gain horn antennas are used in a wide variety of applications due to their high-power handling capability, low loss, high directivity, and near-constant electrical performance across a broad bandwidth. The HP-HA-19SG-U4060-R25 horn antenna operates from 40 GHz to 60 GHz with a nominal gain of 25 dBi. This pyramidal horn antenna has a gold-plated brass body and a precision tolerance UG-383/U-Mod round cover flange. The HP-HA-19SG-U4060-R25 WR-19 waveguide standard gain horn antenna offers low gain variation across its operating frequency range.

#### FEATURES

- Rectangular Waveguide Interface
- 40 GHz to 60 GHz
- 25 dBi Nominal Gain
- UG-383/U-Mod Round Cover Flange

#### APPLICATIONS

- Antenna Measurements
- Wireless Communication
- Laboratory Use
- Microwave Radio Systems

## ELECTRICAL SPECIFICATIONS

Description	Min	Typ	Max	Units
Frequency Range	40		60	GHz
Nominal Gain		25		dBi
Horizontal 3dB Beam Width		10		Deg
Vertical 3dB Beam Width		9		Deg
VSWR		1.15:1		

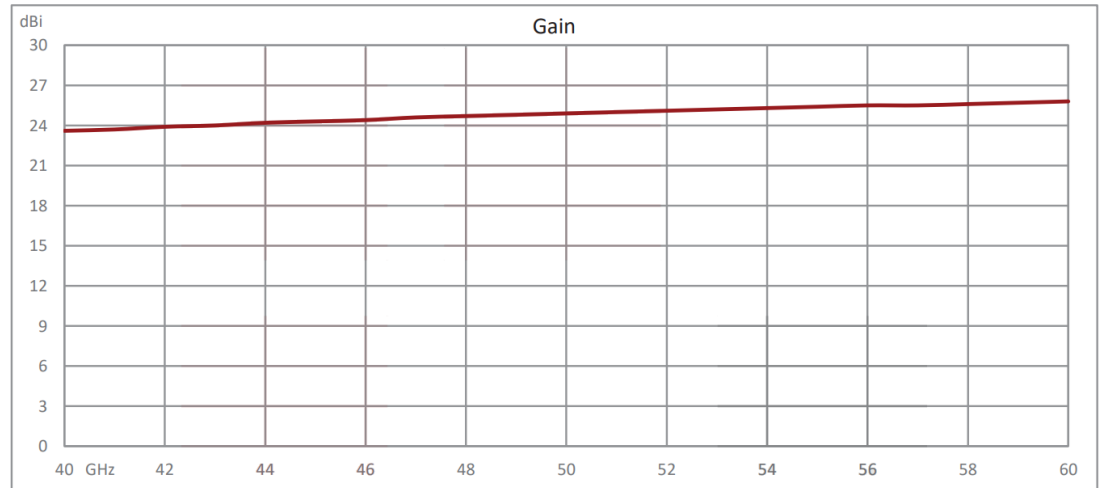
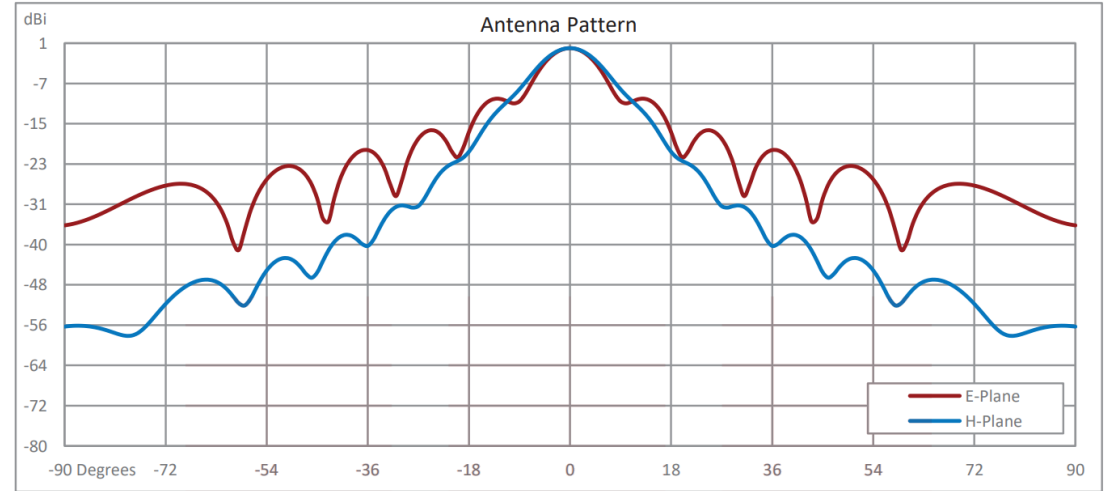
## MECHANICAL SPECIFICATIONS

Description	
Length	4.86 in [123.44 mm]
Width/Diameter	0.94 in [49.28 mm]
Height	1.507 in [38.28 mm]
Weight	0.17 lbs [77.11 g]

## WAVEGUIDE INTERFACE

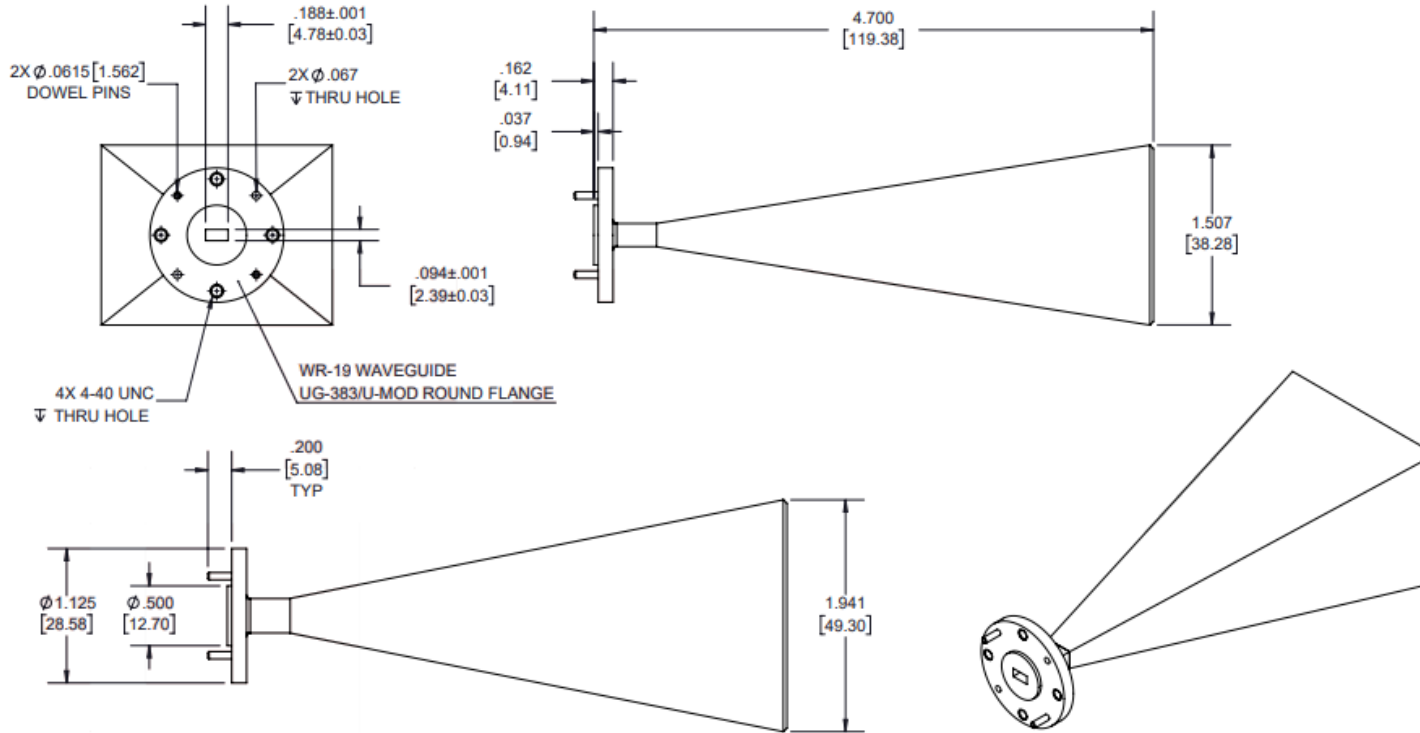
Description	
Waveguide Size	WR-19
Flange Type	Round Cover
Flange Designation	UG-383/ U-Mod
Body Material and Plating	Brass, Gold

## TYPICAL PERFORMANCE



## MECHANICAL OUTLINE

Unless otherwise specified, all dimensions are in inches [millimeters].



### NOTE:

- All data presented is simulated by a full EM simulator. Halil Paşalıoğlu recommends using simulated data over measured for standard gain horn antenna for accuracy. See Blog here for further information.
- The antenna electrical performance is guaranteed through accurate mechanical tolerance control. Each antenna is examined by CMM (coordinate Measuring Machine) inspection and measurement process.
- A calibration certificate can be issued with a fee under part number **HP-HA-19SG-U4060-R25**.
- Halil Paşalıoğlu reserves the right to change the information presented without notice.

### CAUTION:

Any foreign objects in the antenna will cause performance degradation and possible device damage.

