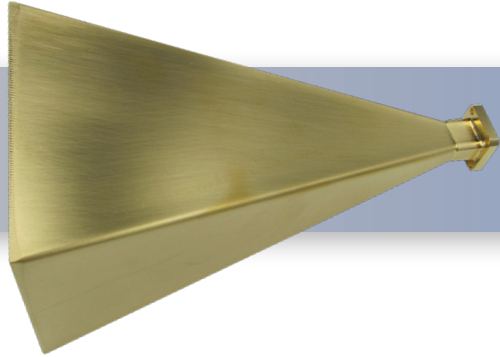


Part No:

# HWSGH42-23-ES



## *WR-42 Rectangular Standard Gain Horn Antenna 23 dBi Typical Gain, K Band – 18 to 26.5 GHz*

**HWSGH42-23-ES** is an K-band WR-42 waveguide standard rectangular gain horn antenna that operates from 18 GHz to 26.5 GHz. The antenna offers 23 dBi typical gain, precisely electroformed over a mandrel and gold plated. These horns have a pyramidal shape with a rectangular aperture. The standard gain horn antenna supports linear polarized waveforms. The input of this antenna is a WR-42 waveguide with UG-599/U flange. The standard gain horn antenna is used for antenna range calibration and general-purpose system set ups.

Horns with different gain values can be special ordered. Rectangular Horns are available in sizes WR3 to WR42.

### Applications

- Low F/D Antennas
- Surveillance Systems
- Offset Feed Antenna

HASCO's Standard Rectangular Gain Horns are used in a wide variety of applications, such as antenna testing and RF radiation pattern measurement. HASCO gain horns function as a calibration standard or as reference for antenna gain measurement. They are also used as feed horns for lens and reflector antennas or stand-alone antennas in subsystems.

### Electrical

• Impedence	50 Ohms
• Frequency Range	18-26.5 GHz
• VSWR	1.10:1 Max
• Input	WR-42 Waveguide
• Flange	UG-599/U
• Series	Directional
• Polarity	Vertical
• Temperature Range	-55°C - 85°C

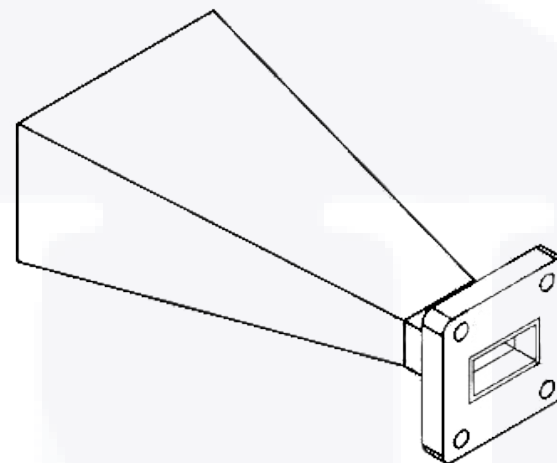
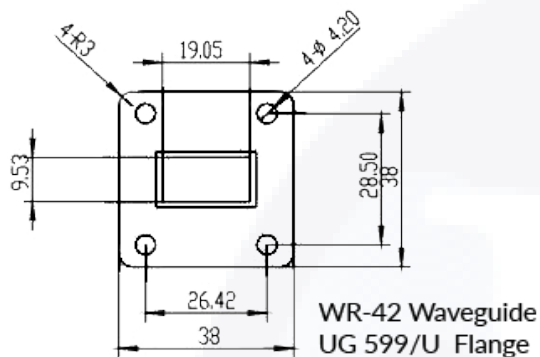
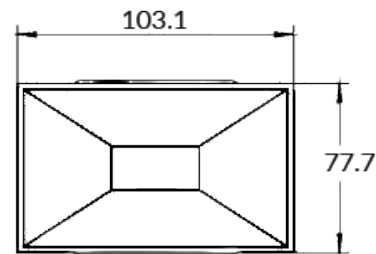
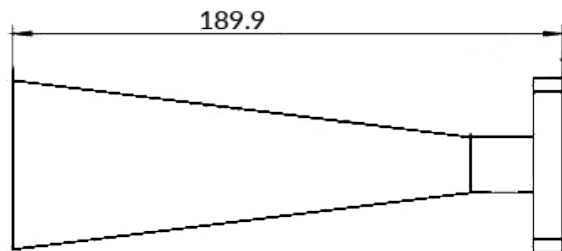
### Mechanical

• Body Material	Gold Plated Electroformed Copper
• WG A DIM	0.4200 inch
• WG B DIM	0.1700 inch

Note: All plating thickness values are in micro-inches.

**WR-42 Rectangular Standard Gain Horn Antenna, 23 dBi Typical Gain, K Band | 18-26.5 GHz | Outline Drawing**

Measurement (inches)	
Length	7.480
Width	4.068
Height	3.064
Flange	0.875 Square



LTR	DESCRIPTION	DATE	APPR.	DRAWN BY: NS	CHECKED BY: JMS
-	RELEASE	07/22	TAC	APPROVED BY: TAC	
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MATERIALS: SEE DATA SHEET	CAGE CODE: 0T8L4	SCALE: N/A	SIZE: A
FINISHES: SEE DATA SHEET	PART NO./DRAWING NO. <b>HWSGH42-23-ES</b>		REV: B