

## **Description**

Mi-Wave's 261 Series standard gain horns are fabricated with very close tolerances to ensure the precision of every horn manufactured by Mi-Wave. Each unit is joined to a short section of rectangular wave-guide and terminated in a standard flange.

Standard gain horns can be used to experimentally determine the gain of other antennas by using the substituion method. The standard

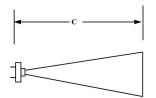
- Nominal Gain of 25 dB
- Available from 12.4 to 500 GHz
- Made with precise dimensional tolerance control
- Gain calibration is accurate to 0.5 dB over full waveguide bandwidth
- Other gain values available upon request (ex: 10, 15, 20, etc.)

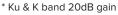
gain horn and the antenna under test are alternately connected to a well-matched detector system in order to compare their relative power levels. The power level difference is then added to the appropriate level of the calibration curve to determine the absolute gain of the antenna under test.

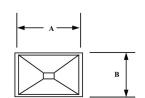
Standard gain horns are also useful as power monitors in radar transmitter tests, known-gain radiators in field propagation studies, and transmitting or receiving antennas in test bench applications. The completed units are gold-plated to protect from corrosion and for minimum RF losses.

## **Additional Information**

- Other common gains 10, 15, 20dB.
- Custom Gain horns (27 dB, etc.) and sectorial horns available from 7 to 27dB can be manufactured per customer request.

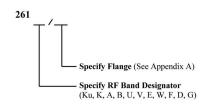








## **Ordering Information**



## **Custom Gain Horns Available**









Horns in WR-4, WR-3, WR-2.2 also available

Specifications Specification										
Model No.	Frequency Band (GHz)	Waveguide Dimension	Waveguide WR-	Flange Types	A		В		С	
					in.	mm	in.	mm	in.	mm
261KU	12.4–18.0	.622 x .311	62	425	5.62	142.8	4.18	106.2	12.50	317.5
261K	18.0–26.5	.420 x .170	42	595	4.12	104.7	3.40	86.4	9.20	233.7
261A	26.5–40.0	.280 x .140	28	599	2.84	72.1	2.35	59.7	6.60	167.6
261B	30.0-50.0	.224 x .112	22	383	2.30	58.4	1.91	48.5	5.10	129.5
261U	40.0-60.0	.188 x .094	19	383	1.81	46.0	1.38	35.1	4.05	102.9
261V	50.0-75.0	.148 x .074	15	385	1.72	43.7	1.43	36.3	3.90	99.1
261E	60.0–90.0	.122 x .061	12	387	1.46	37.1	1.21	30.8	3.20	81.3
261W	75.0–110.0	.100 x .050	10	387	1.21	30.7	1.02	25.9	2.80	71.1
261F	90.0–140.0	.080 x .040	8	387	1.00	25.4	0.84	21.3	2.10	53.3
261D	110.0–170.0	.065 x .0325	6	387	.83	21.1	0.70	17.8	1.73	43.9
261G	140.0–220.0	.051 x .0255	5	387	.54	13.7	0.64	16.3	1.25	31.8