

## Standard Gain Horns and Wideband Double Ridge Horns

### FEATURES:

- ❖ Nominal Gain of 25 dBi
- ❖ Available from 1 to 220 GHz & Broadband Double Ridge
- ❖ Made with Precise Dimensional Tolerance Control
- ❖ Gain Calibration is Accurate to 0.5
- ❖ Other Gain Values available upon request, ex: 10, 15, 20, etc.



**CRA Series**

### DESCRIPTION:

**Cernex CRA** series standard gain horns are fabricated with very close tolerances to ensure the precision of every horn manufactured by Cernexwave. 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 substitution method. The standard 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 test, known-gain radiators in field propagation studies, and transmitting or receiving antennas in test bench applications. **Please Note:** 15 dB models available in all bands.

### SPECIFICATIONS:

Waveguide Band	X	Ku	K	Ka	Q	U	V	E	W	F	D	G	J
Waveguide Size	WR-90	WR-62	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR--8	WR--6	WR--5	WR--3
Frequency Range (GHz)	8.2 to 12.4	12.4 to 18	18 to 26.5	26.5 to 40	33 to 50	40 to 60	50 to 75	60 to 90	75 to 110	90 to 140	110 to 170	140 to 220	220 to 325
Waveguide Dimension	.900 by .400	.622 by .311	.420 by .170	.280 by .140	.224 by .112	.188 by .094	.148 by .074	.122 by .061	.100 by .050	.080 by .040	.065 by .0325	.051 by .0255	.030 by 0.015
Flange Types (UG)	39	425	595	599	383	385	385	387	387	387	387	387	387

### HOW TO ORDER:

Specify Model Number    **CRA – WG LF HF GN – XX**

WG:    Waveguide

GN:    Gain

LF:    Low End Frequency

XX:    To be specified by the factory

HF:    High End Frequency

**Example:** To order a standard gain horn with waveguide size of 15 with 20dbi gain, specify CRA-15507520-XX.

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE