

Horn Lens Antennas

FEATURES:

- ❖ Low Sidelobes
- ❖ Wide Bandwidths
- ❖ No Aperture Blockage
- ❖ Symmetrical E and H Plane Beamwidths
- ❖ Available From 12.4 to 140 GHz

APPLICATIONS:

- ❖ Radioastronomy
- ❖ Surveillance Equipment
- ❖ Communication Systems



DESCRIPTION:

CHA Series

Cernexwave's CHA series horn lens antenna consists of a circular scalar feed horn illuminating a plano-convex lens. Housed in either aluminum or plastic, these horn lens antennas provide a high efficiency beam with equal E and H plane amplitude patterns. The CHA series antennas are available from 12.4 to 140 GHz in standard sizes of 3, 5, 6, 9, and 12-inch lens apertures. Other custom sizes and configurations are available; please consult Cernex for further information.

SPECIFICATIONS:

Waveguide Band	Ku	K	Ka	Q	U	V	E	W	G
Waveguide Size	WR-62	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-8
Frequency Range (GHz)	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
Sizes (inch)	-----3, 6, 9, 12 -----								
Sidelobes	----- 25 dB (typical) -----								
VSWR	----- 1.2:1 (typical) -----								
Cross Polarization	----- 25 dB (typical) -----								

NOTE: Final dimensions are subject to variations from the tabulated data due to tuning, and mechanical tolerances.

HOW TO ORDER:

Specify Model Number

CHA- LF HF GN SZ - XX

LF: Low End Frequency
HF: High End Frequency
GN: Gain

SZ: Size
XX: To be specified by the factory

Example: To order WR-15 Horn Lens Antenna with a size of 3 inches, and a sidelobe of 25db, specify CHA50752503-XX.

CERNEXWAVE RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE