



Broadband Dual Ridged Horn Antenna

OBH-230

OBH-230 Dual-Ridged Horn Antennas operate broadband from 200MHz to 3GHz. It is wider than the usual 200M-2GHz antenna bandwidth range of 35%. The proposed antenna comprises a coaxial to double-ridge waveguide (DRW) transition and a free-space matching section. An exponentially-tapered matching section is employed and optimized to achieve a smooth transition and a good impedance match to the free space. The gain increases with frequency up to approx. 15 dBi, depending on the horn's size and shape. The specially designed coaxial structure can handle up to 1000W of transmission power.

The antenna uses the ultimate weight reduction structure so that the weight of the entire antenna is only 25kg, lighter than 70% than the typical antenna of this frequency. It is easy to use on the antenna tower, tripod, or support. The antenna has a rich bracket mounting structure. It can be suitable for use and installation on various occasions. Several times optimizations of coaxial design allow it to have an excellent VSWR coefficient in the range of ultra-wide Band. The antenna supports Single Linear polarized waveforms.



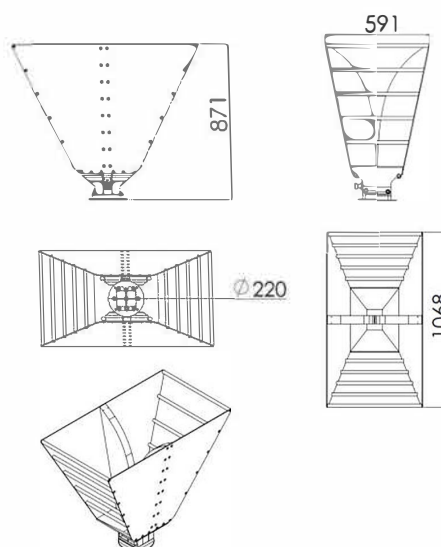
Applications

This antenna can use for calibration systems, and antenna test systems can be applied to reflective antenna feeds and can also support a variety of mobile communications.

It can be used as a soil sensor to improve the efficiency of modern farmers in crop production, can be used to measure the thickness of snow and ice, can be used to determine the structure of concrete.

This antenna can also achieve the purpose of increasing the distance at which wireless data transmission stations can communicate, and can also be applied to the online flow measurement of rivers, and can also be utilized to support radar for archaeological detection to play a more significant role.

PRODUCT DIMENSIONS



Features

Linear polarized with high polarization purity

Frequency from 200 MHz to 3 GHz

Low return loss / VSWR

Wide bandwidth

Uniform Gain

High Power Handling Capability

Radiation pattern contains only one main lobe over the entire frequency range

Each antenna is calibrated individually in line with ANSI C63.5-2006

Electrical Specifications

Part Number	OBH-230
Type of Antenna	Dual-Ridged Horn
Frequency Range	0.2-3.0GHz
Gain	6-15dBi
VSWR	<2.0
Polarization	Single Linear
Cross-Polar Discrimination	>20dB
Impedance	50 Ohms
Dimensions (mm)	1068*591*871
Weight (Kg)	22.249

