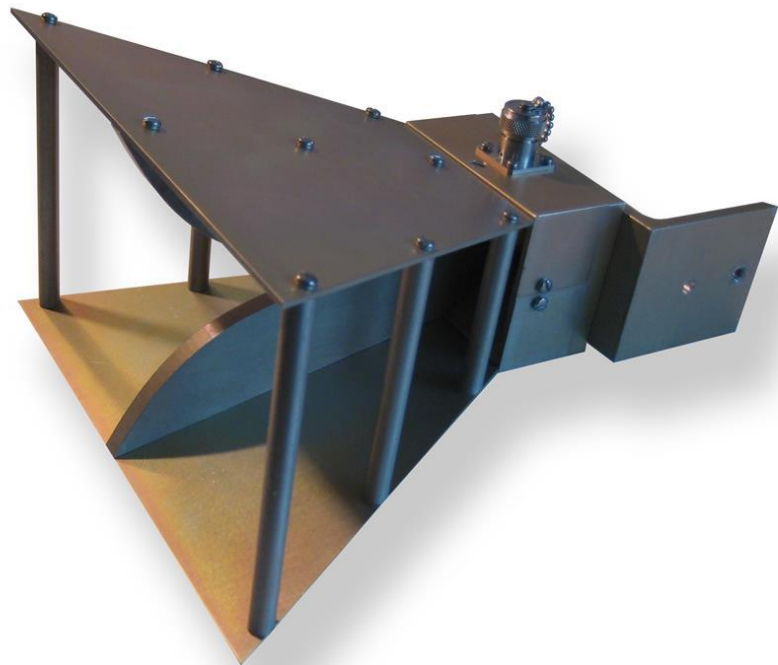
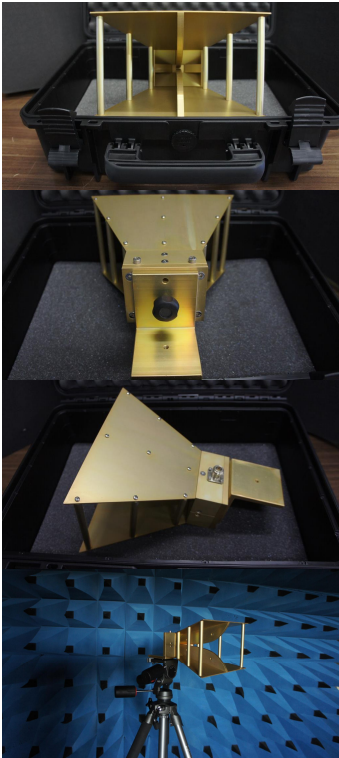


EMC-RH-118 - Microwave Double Ridge Guide Horn Antenna 1-18 GHz



Product Description

The advent of higher frequency testing has brought the development of a new double-ridge guide horn design. The **RH-118 Double-Ridged Guide Antenna** is a **50 Ohm** linearly polarized broadband small and portable antenna which is ideal for many applications. It can be used for receiving and transmitting. A Type N precision connector accepts up to **500 watts of continuous input power**. The back structure mounting section allows easy adjustment for vertical, horizontal and 45 deg polarizations. It provides **low VSWR** and **high power handling capability**. It is constructed of **Aluminium** and **yellow chromating treated** that provides years of trouble-free indoor and outdoor service. Equipped with mounting brackets for vertical or horizontal polarization measurements. This antenna includes its **original box** for safe transportations without damages.

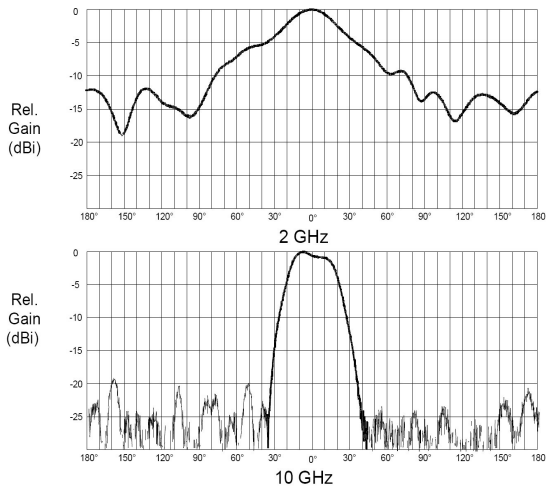
Key Features

- Uniform Gain
- Low VSWR
- Power Handling Capability 500 W
- Covers the entire test frequency range 1-18 GHz
- Vertical, horizontal and 45 deg polarization measurements
- Excellent quality – Military standard

Applications

- Linearly polarized antenna ideally suited for broadband applications
- Immunity testing (MIL-STD 461/462 and IEC 1000-4-3)
- Emission testing (ANSIC63-4 and EN55022)
- Shielding effectiveness testing (MIL-STD 285 IEEE-299)

Radiation Patterns



Frequency (GHz)	Output Connector	Power CW	VSWR	3dB Beam Width	Size (cm)
1,0 – 18,0	N – F	400 W	1,5:1 (AVG)	35°-20°	13Hx23Wx18D
Typical Antenna Factor and Gain			Power Requirement (Watts) at 1 Meter Spacing to Obtain Field Strength		
Frequency (GHz)	AFE (dB m-1)	Gain (dBi)	E 10V/m	E 20V/m	E 100V/m
1,00	22,93	7,30	0,62	2,48	62,00
2,00	30,15	6,10	0,82	3,27	81,80
3,00	30,67	9,10	0,41	1,64	40,90
4,00	29,97	12,30	0,20	0,78	19,60
5,00	32,81	11,40	0,24	0,97	24,10
6,00	32,99	12,80	0,17	0,70	17,40
7,00	35,33	11,80	0,22	0,88	22,00
8,00	36,79	11,50	0,24	0,94	23,50
9,00	36,21	13,10	0,16	0,65	16,30
10,00	38,03	12,20	0,20	0,80	20,00
12,00	37,81	14,00	0,13	0,53	13,20
14,00	42,35	10,80	0,28	1,11	27,70
16,00	38,51	15,80	0,09	0,35	8,70
18,00	42,54	12,80	0,18	0,70	17,50

Technical Specifications

Frequency Range	1 GHz to 18 GHz
Typical gain	5 to 15 dBi
VSWR	2:1 in average
Polarization	Linear
Maximum Power Handling	500W
Feed-point Impedance	50 Ω
Cross polarization	20 dB minimum
Connector	N type female
Size (L x H x W in cm)	approx. 28 x 24 x 14 (cm)
Weight	approx. 1.6 kg
Construction	Aluminum + chromate conductive surface