Double-Ridged Waveguide Horn Antenna

TECHNICAL Bulletin



Description:

The BE 3118 Antenna (double ridged guide) is a linearly polarized broadband antenna with excellent gain and good VSWR characteristics. The frequency range is 1 GHz to 18 GHz. The BE 3118 was designed and built especially for EMI measurements and specifications incompliance testing.

The antenna is small, very portable and light weight Precision machined from aluminum with side plates of copper clad gold plate tracking on epoxy fibreglass . The 50Ω precision high frequency type N connector is mounted on the base block of the antenna. This connector can handle considerable power with low losses above 12 GHz. A bracket is provided for the standard tripod mounting in either V or H polarizations.

This antenna is specifically designed for EMI measurements, but can also be used for EW, antenna gain and pattern measurement, surveillance, and other applications.

Features:

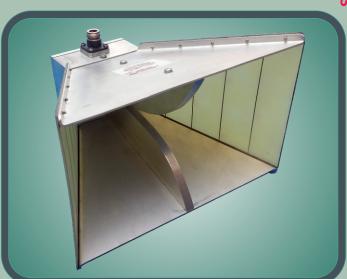
- This horn antenna uses a Type N precision connector and accepts up to 300 watts of continuous input power.
- The antenna's high gain and low VSWR over its operating frequency translates into efficient amplifier use and higher field strengths.
- Ideally suited for ANSI C63.4, CISPR16, and EN 55022 emissions testing, as well as many other common emission and immunity test standards.
- Mounting brackets for all models are adjustable for changing polarization of the antenna, drilled to accept BE or other tripod mount with ¼ in x 20 thread.

Accessaries:

 Optional: Non-metallic tripod made of Bakelite and Polypropylene to minimize unwanted reflections from test environment

Adjustable Height: 94.0cm to 2.0m max

Maximum Load: 11Kg



Model: 3106 1-6 GHz Model: 3112 1-12 GHz Model: 3118 1-18 GHz

Technical Specifications:

Frequency Range:	1-18GHz
Gain (dBi):	12 Typ
Polarization:	Linear
VSWR:	1.6:1 Typ.
Cross Pol. Isolation:	22dB Typ.
3dB Beamwidth:	Ep 110°; Hp 80°
Connector:	N Type Female
Impedance:	50 Ω
Power Handling:	300W CW
Material:	AI 6061
Dimensions:	244 x 159 x 289 mm
Net Weight:	1.8Kg

