

EMC Dual ridge horn

EH118 (1 – 18 GHz)



SOLUTION FOR

Radiated emissions testing according to

- ANSI 63.4
- CISPR 11, 12, 13, 16-1-4, 16-1-6, 25, 32
- EN 61000-6-3, EN 61000-6-4
- FCC Part 15, 18, 25, 90
- IEC 60601-1-2
- MIL-STD 461
- RTCA/DO 160

Main features

Technical Performance

- Single linear polarization
- Smooth / balanced gain with frequency
- Low return loss / VSWR
- Ultra wide bandwidth (18:1)

Design

- Unique design preventing the excitation of unwanted high order modes in the aperture
 - Well defined smooth radiation pattern throughout the operational bandwidth
 - Stiff/robust and lightweight mechanical design
 - Precision machined
 - High reliability N coaxial connector
- Warranty: 3 years

Product configuration

Equipment

- Storage box
- Standard axial mounting interface
- Custom mounting interface
- Antenna tripod

Services

- Calibration
- Maintenance
- Customization: SMA connector

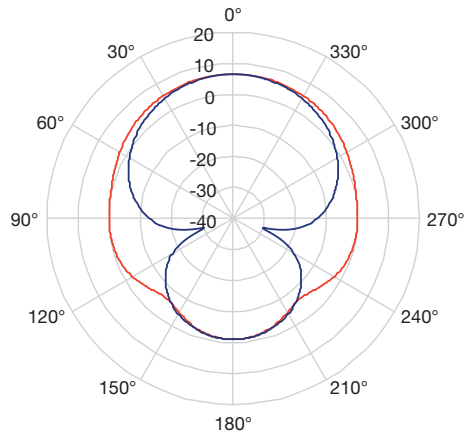
Delivered documents

- Technical Description Document
- Calibration certificate

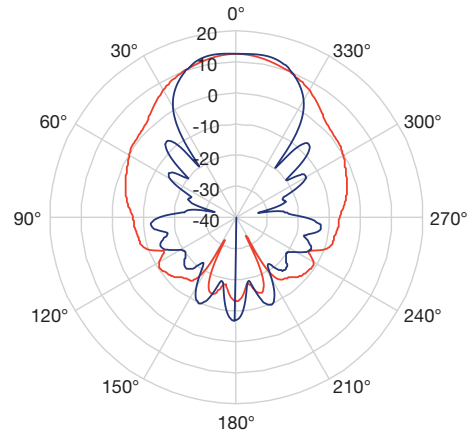
Included Optional

Far Field Radiation Pattern

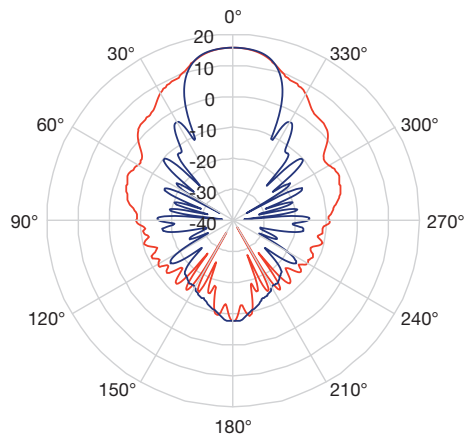
— E-plane — H-plane



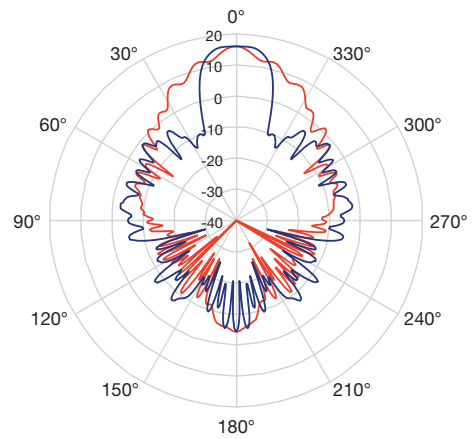
1 GHz



6 GHz

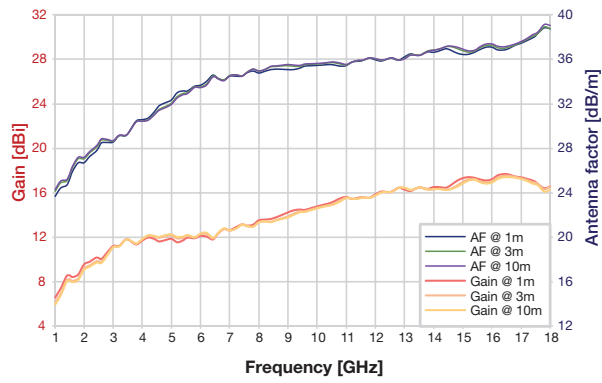


12 GHz

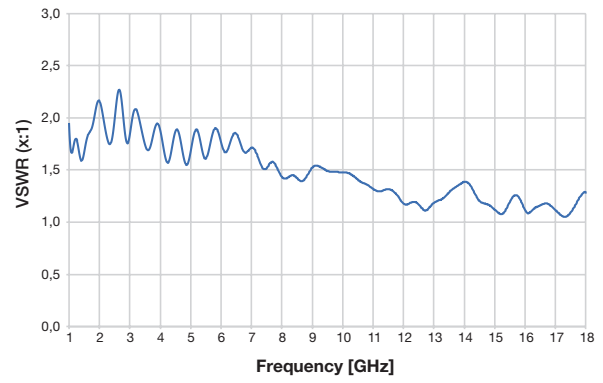


18 GHz

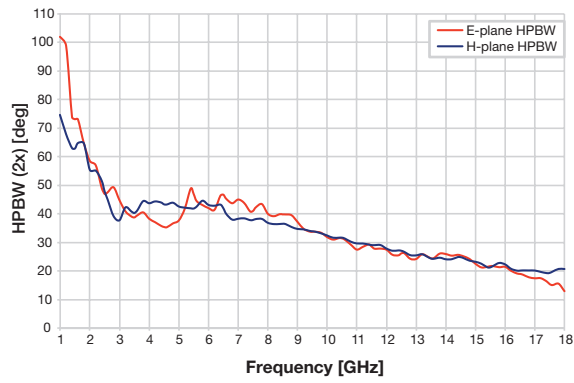
Gain / Antenna Factor



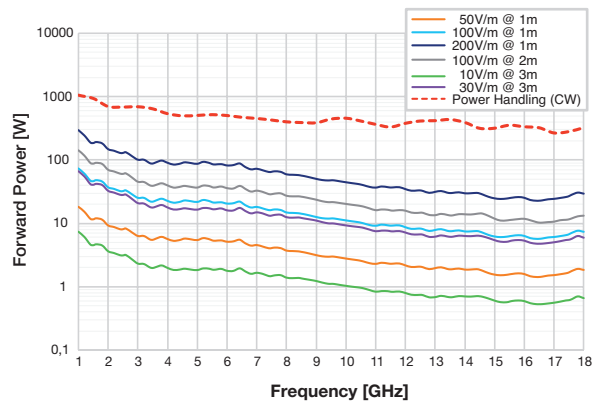
VSWR



-3 dB beamwidth (2x)



Power handling (CW) / Forward power



Electrical characteristics

Type of antenna	Dual ridge Horn
Frequency range	1 – 18 GHz
Realized Gain	5.8 – 17 dBi
Antenna Factor	24 – 39 dB/m
E-plane HPBW (2x)	102 – 13 deg
H-plane HPBW (2x)	75 – 21 deg
VSWR	1.1 to 2.3 (average 1.5) : 1
Polarization	Single linear
Impedance	50 Ohms
Power Handling (CW)	1 kW @ 1 GHz 400 W @ 9 GHz 250 W @ 18 GHz

Mechanical characteristics

Dimensions (H x W x L)	24.3 x 13.4 x 24.3 cm
Weight (approx.)	1.7 Kg
Material	Aluminum
Surface Treatment	Surtec 650®
Coatings	Gray (RAL 7021) Orange (RAL 2009)
RF Connector	N Female – Southwest 312-14SF®

Dimensional Drawing

