

EMC Dual-Ridge horn

EH1840 (18 – 40 GHz)



SOLUTION FOR

Radiated emissions testing according to

- FCC
- MIL-STD-461
- SAE ARP 958

Main features

Technical performance

- Single linear polarization
- Smooth / balanced gain with frequency
- Low return loss / VSWR

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 k coaxial connector
- Warranty: 3 years

Product configuration

Equipment

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

Services

- Calibration
- Maintenance

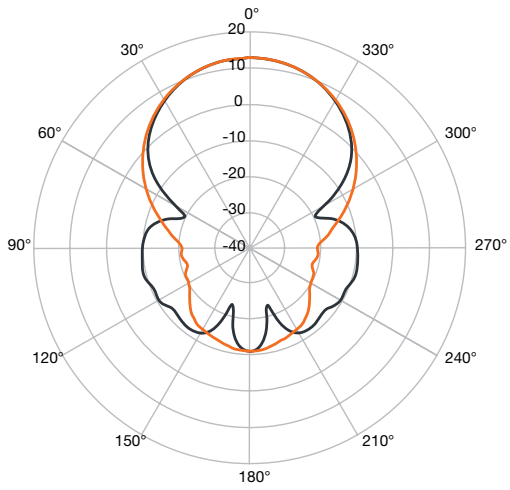
Delivered documents

- Technical description document
- Calibration certificate

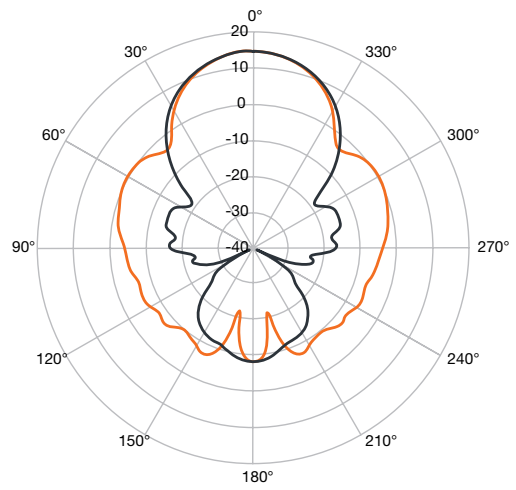
Included Optional

Far-field radiation pattern

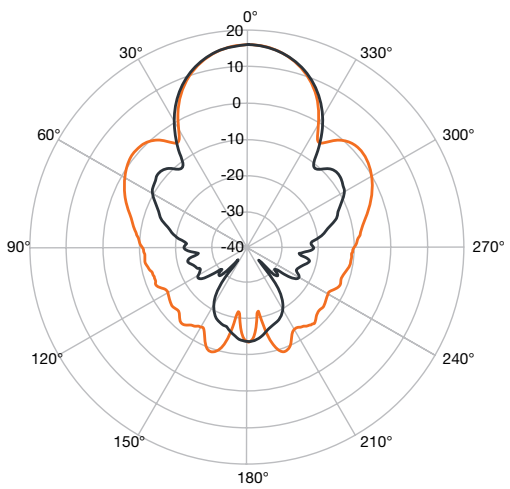
— E-plane — H-plane



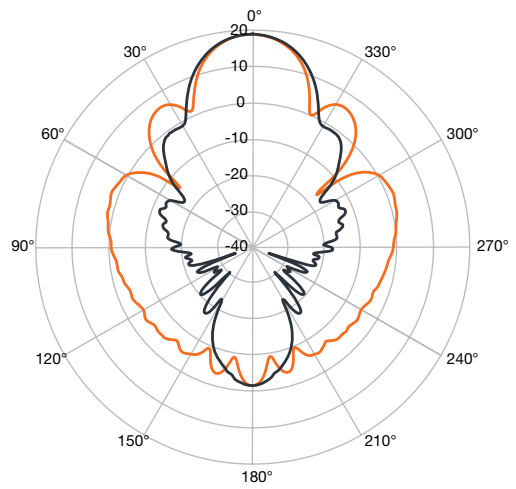
18 GHz



24 GHz

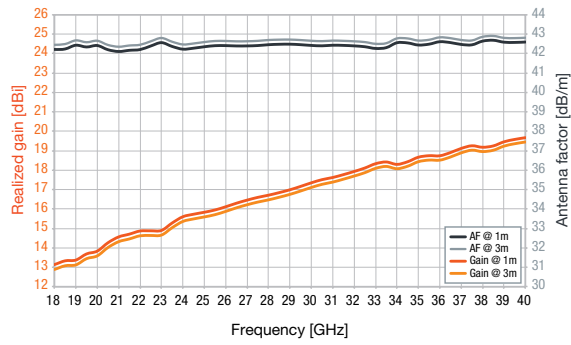


30 GHz

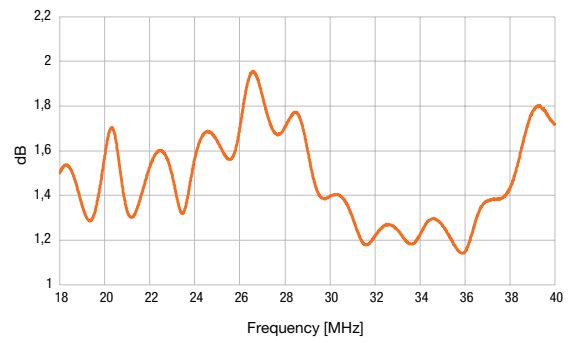


40 GHz

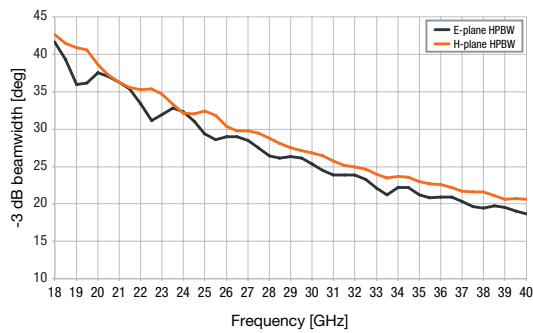
Gain / Antenna factor



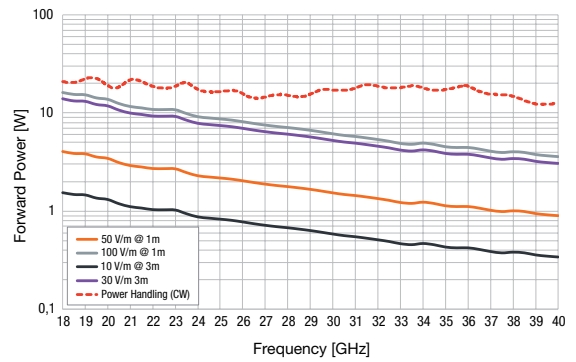
VSWR



-3 dB beamwidth



Power handling (CW) / Forward power



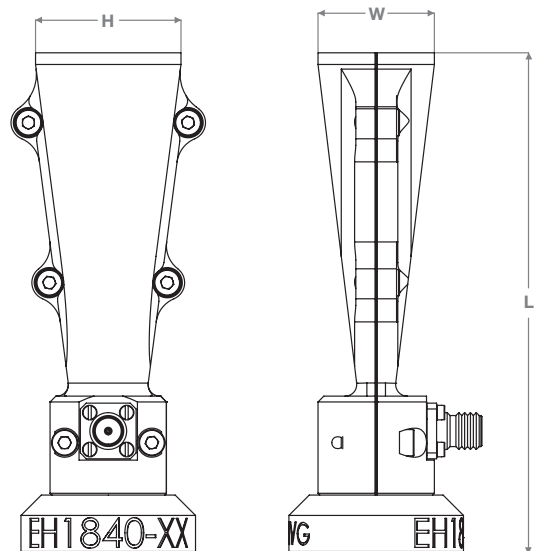
Electrical characteristics

Type of antenna	Dual-Ridge horn
Frequency range	18 – 40 GHz
Realized gain	13 – 19 dBi
Antenna factor	42 – 43 dB/m
E-plane HPBW (2x)	18 – 42 deg
H-plane HPBW (2x)	20 – 41 deg
VSWR	1.1 to 1.9 (average 1.4) : 1
Polarization	Single linear
Impedance	50 Ohms
Power handling (CW)	15 W average

Mechanical characteristics

Dimensions (H x W x L)	7 x 6.5 x 15 cm
Weight (approx.)	0.5 Kg
Material	Aluminum
Surface treatment	Surtec 650®
Coatings	Gray (RAL 7021) Orange (RAL 2009)
RF connector	k Female

Dimensional drawing



A global presence

Microwave Vision exports more than 90% of its production outside of France. The Group spans Europe, Asia and America through 20 locations in 10 countries.

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