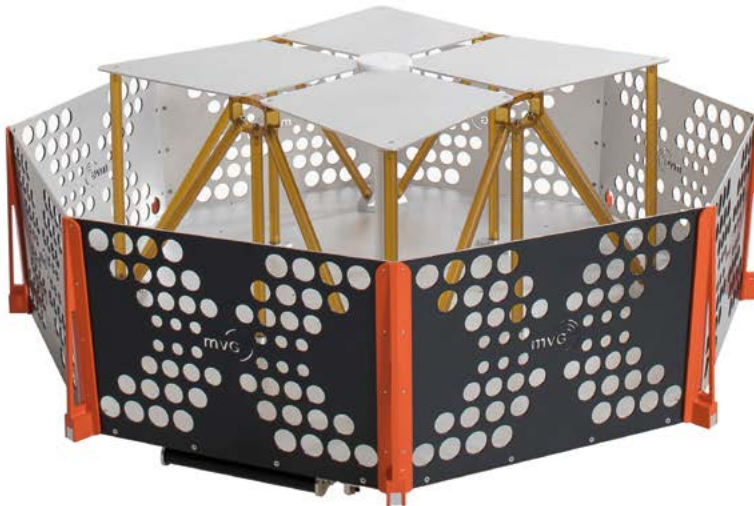
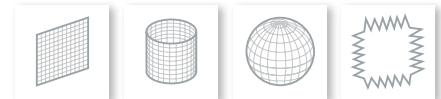
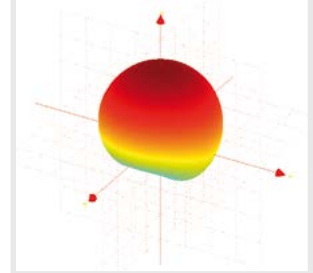


Low Frequency Probes



Typical 3D radiation pattern



SOLUTION FOR

- Planar and spherical near-field low frequency measurements
- Illumination of CATR systems

Main features

Technical performance

- Equalized beamwidth
- Polarization purity
- Port-to-port isolation
- Low dispersion

Design

- Balanced feeding with external wideband feeding network
- Compact, low profile
- Stable radiation pattern over more than one octave bandwidth

Surface treatment

- Surtec 650 according to MIL-C 5541E class 3
- Polyurethane paint

Repeatability

- Stiff and robust mechanical design
- Standard MVG circular interface for precision centering
- Precision machined
- High reliability RF connectors

Delivered documents

- Typical performance data (TYMEDA™)
- Measured return loss data and port-to-port coupling

Product configuration

Equipment

- Mounting flange
- Integrated polarization switch

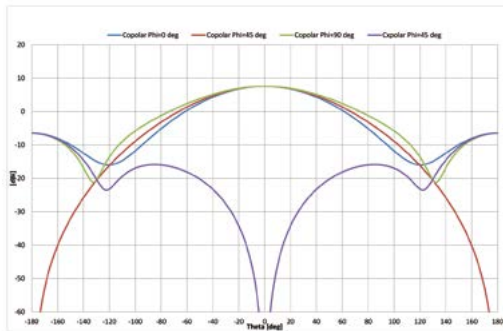
Related services

- Calibration and maintenance
- Customization

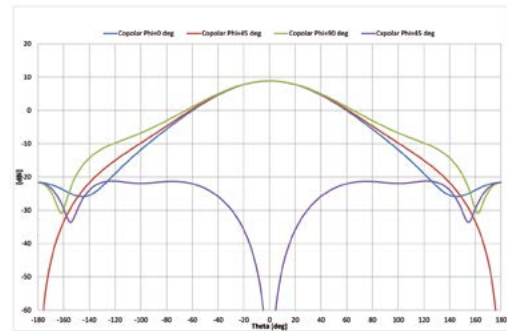
Electrical characteristics

Part number	LFP100	LFP200
Type of antenna	Cavity backed crossed dipoles	Cavity backed crossed dipoles
Frequency range	100 – 250 MHz	200 – 450 MHz
Polarization	Dual linear	Dual linear
Gain	5.5 – 8.5 dB	5 – 8.5 dB
Half-Power Beamwidth		
E-plane	80 – 50°	80 – 55°
H-plane	90 – 45°	90 – 45°
Front to back ratio	> 12 dB	> 14 dB
VSWR	1.9	1.9
Return loss	< -10 dB	< -10 dB
Port to port isolation	> 45 dB	> 45 dB

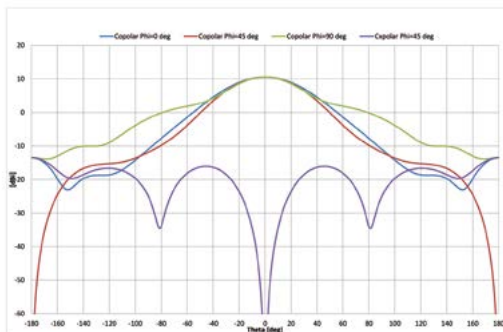
LFP200 radiation pattern @ 200 MHz



LFP200 radiation pattern @ 320 MHz



LFP200 radiation pattern @ 440 MHz



Mechanical characteristics

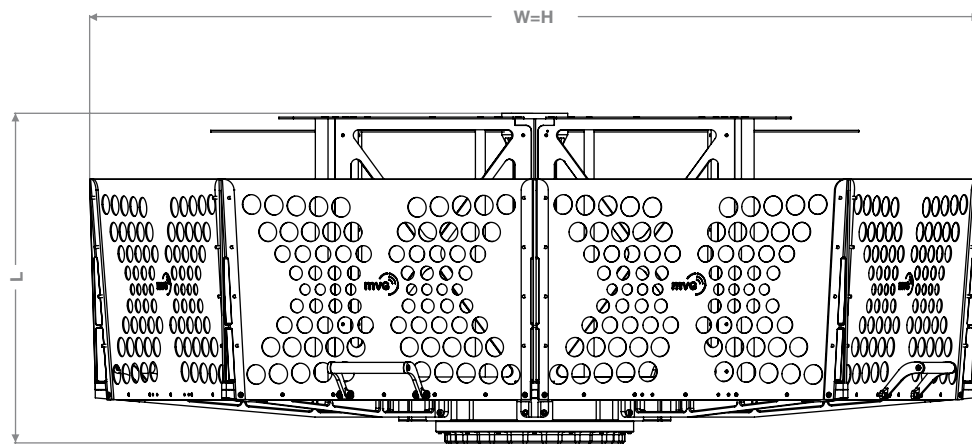
Part number	LFP100	LFP200
Dimensions [mm]		
H = W	1620.5	800
L	600	365
Weight (approx.)	68 Kg	17 Kg
Materials	Aluminum, PVC, FEP	Aluminum, Ultem™, FEP
Treatment	Surtec 650 ⁽¹⁾	Surtec 650 ⁽¹⁾
Interface	Fixture plate with recessed female pilot	Circular Ø 110 mm
RF Connectors	N-type Female ⁽³⁾	3.5 mm Female ⁽²⁾

(1) According to MIL-C 5541E class 3

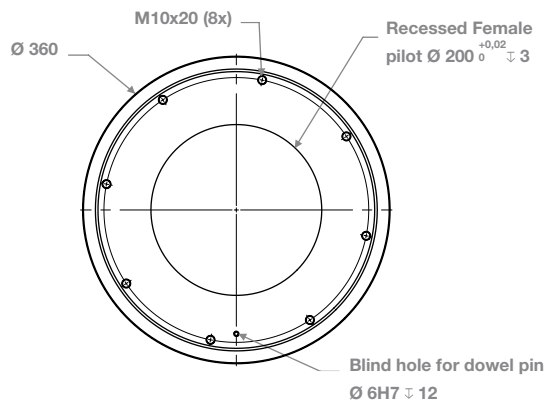
(2) SGM 115-37-37-000

(3) Coaxicom 3081-9

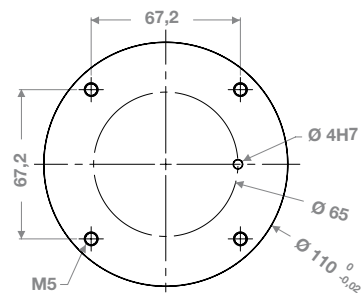
Mechanical drawing



Interface drawing LFP100



Interface drawing LFP200



Contact your local sales representative for more information
www.mvg-world.com/antennas
salesteam@mvg-world.com