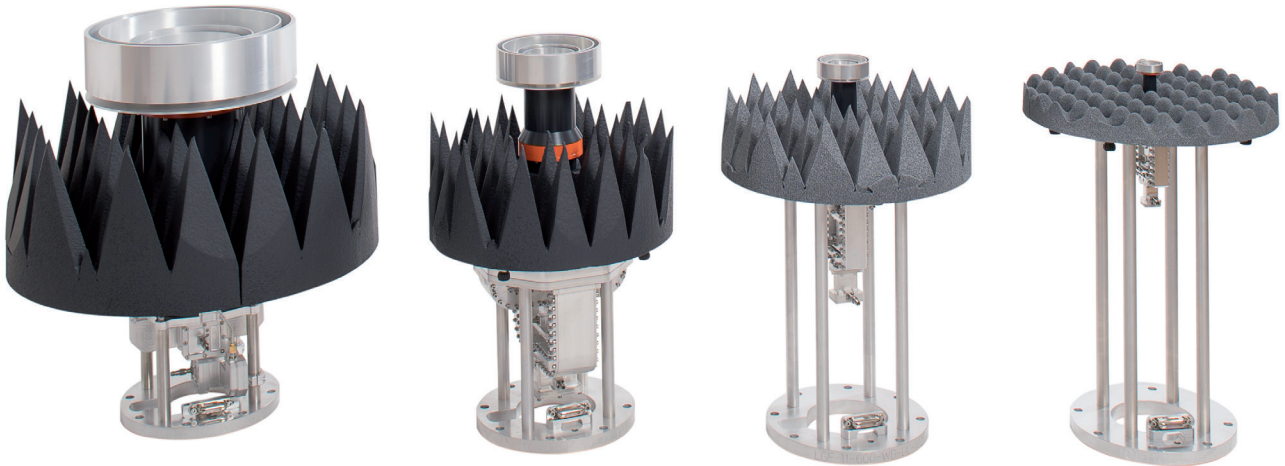


Compact Range Feed Horns



SOLUTION FOR

- Illumination of CATR systems
- Direct range illumination
- Illumination of reflector antennas

Main features

Technical performance

- Rotationally symmetric radiation pattern
- Low cross polarization
- Stable amplitude taper with frequency
- Optimized reflector edge and chamber wall illumination

Design

- Axially corrugated aperture
- High precision mechanical mounting

Surface treatment

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

Repeatability

- Stiff and robust mechanical design
- Standard MVG circular interface for precision centering
- Precision pin for accurate polarization alignment
- Precision machined
- Highly reliable RF components

Delivered documents

- Typical performance data (TYMEDA™)
- Measured return loss data

Product configuration

Equipment

- RF absorbers panel (available only on specified models)
- Integrated polarization switch (available only on dual linear polarized models)

Related services

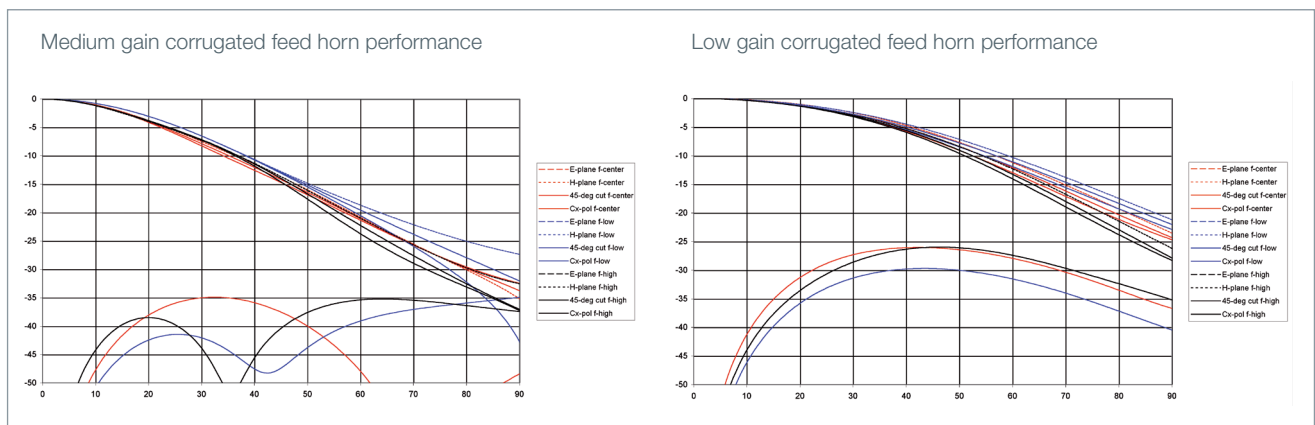
- Calibration and maintenance
- Customization

Included Optional

Electrical characteristics

Part number	Frequency range [GHz]	Waveguide Band	Polarization	Directivity [dBi]	VSWR	Taper +/- 8° [dB]	Cross-polar discrimination +/- 8° [dB]	Nominal 3 dB Beamwidth [deg]
LOW GAIN FEED, 11 dBi DIRECTIVITY, WIDEBAND, DUAL LINEAR (FULL OCTAVE)								
LGF-11-069-WB-DL	0.69 – 1.50	WR1150 ⁽¹⁾ , WR975, WR770	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-100-WB-DL	1.00 – 2.00	WR770 ⁽¹⁾ , WR650, WR510 ⁽¹⁾	Dual linear	11	2.5 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-150-WB-DL	1.50 – 3.00	WR510 ⁽¹⁾ , WR430, WR340 ⁽¹⁾	Dual linear	11	2.5 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-200-WB-DL	2.00 – 4.00	WR340, WR284	Dual linear	11	2.5 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-300-WB-DL	3.00 – 6.00	WR229, WR187	Dual linear	11	2.5 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-400-WB-DL	4.00 – 8.20	WR187 ⁽¹⁾ , WR159, WR137	Dual linear	11	2.5 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-600-WB-DL	6.00 – 12.4	WR137 ⁽¹⁾ , WR112, WR90	Dual linear	11	2.5 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-820-WB-DL	8.20 – 18.0	WR90, WR75, WR62	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-1240-WB-DL	12.4 – 26.5	WR62, WR51, WR42	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	50 – 60
LGF-11-1800-WB-DL	18.0 – 40.0	WR42, WR34, WR28	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	50 – 60
LOW GAIN FEED, 11 dBi DIRECTIVITY, DUAL LINEAR (HALF OCTAVE)								
LGF-11-2400-DL	24.0 – 43.5	WR34 ⁽¹⁾ , WR28 ⁽¹⁾	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	55 – 66
LGF-11-3300-DL	33.0 – 53.0	WR22	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	55 – 66
LGF-11-4000-DL	40.0 – 67.0	WR19, WR15 ⁽¹⁾	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	55 – 66
LGF-11-5000-DL	50.0 – 75.0	WR15	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	55 – 66
LGF-11-6000-DL	60.0 – 90.0	WR12	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	55 – 66
LGF-11-7500-DL	75.0 – 110.0	WR10	Dual linear	11	3.0 wcs, 2.0 avg	0.5	37	55 – 66
LOW GAIN FEED, 11 dBi DIRECTIVITY, SINGLE LINEAR (HALF OCTAVE)								
LGF-11-3300-SL	33.0 – 50.0	WR22	Single linear	11	1.4	0.3	37	55 – 66
LGF-11-5000-SL	50.0 – 75.0	WR15	Single linear	11	1.4	0.3	37	55 – 66
LGF-11-7500-SL	75.0 – 110.0	WR10	Single linear	11	1.4	0.3	37	55 – 66
MEDIUM GAIN FEED, 14 dBi DIRECTIVITY, SINGLE LINEAR (HALF OCTAVE)								
MGF-14-075-SL	0.75 – 1.12	WR975	Single linear	14	1.6	0.8	35	34 – 40
MGF-14-112-SL	1.12 – 1.70	WR650	Single linear	14	1.6	0.8	35	34 – 40
MGF-14-170-SL	1.70 – 2.60	WR430	Single linear	14	1.6	0.8	37	34 – 40
MGF-14-260-SL	2.60 – 3.95	WR284	Single linear	14	1.6	0.8	37	34 – 40
MGF-14-395-SL	3.95 – 5.85	WR187	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-585-SL	5.85 – 8.20	WR137	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-820-SL	8.20 – 12.4	WR90	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-1000-SL	10.0 – 15.0	WR75	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-1240-SL	12.4 – 18.0	WR62	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-1800-SL	18.0 – 26.5	WR42	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-2650-SL	26.5 – 40.0	WR28	Single linear	14	1.4	0.8	40	34 – 40
MGF-14-3300-SL	33.0 – 50.0	WR22	Single linear	14	1.4	0.8	37	34 – 40
MGF-14-4000-SL	40.0 – 60.0	WR19	Single linear	14	1.4	0.8	35	34 – 40
MGF-14-5000-SL	50.0 – 75.0	WR15	Single linear	14	1.4	0.8	35	34 – 40
MGF-14-6000-SL	60.0 – 90.0	WR12	Single linear	14	1.4	0.8	35	34 – 40
MGF-14-7500-SL	75.0 – 110	WR10	Single linear	14	1.4	0.8	35	34 – 40

(1) WR partially covered



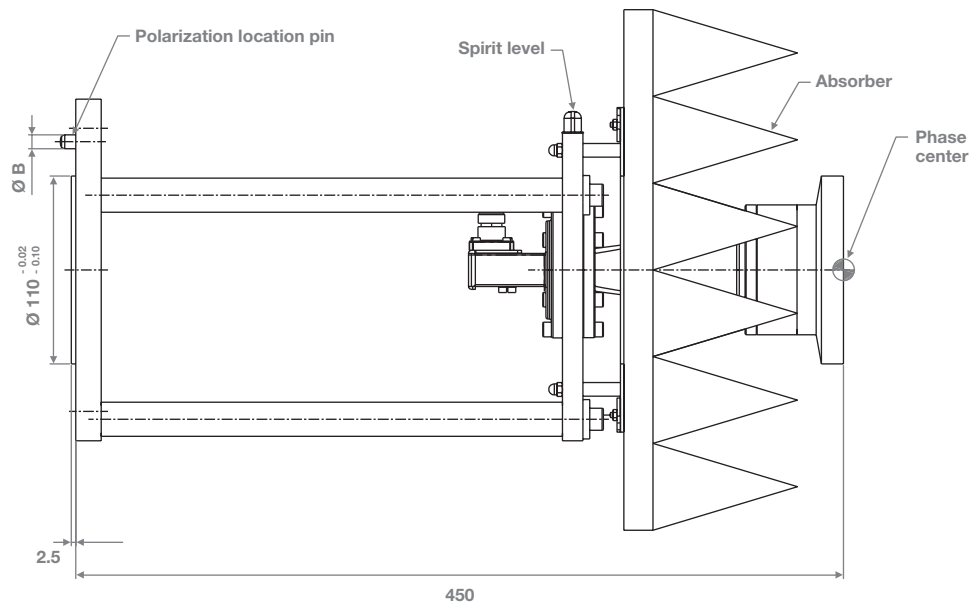
Mechanical characteristics

Part number	Aperture diameter [mm]	RF interface	Absorbers panel	Material	Treatment
LOW GAIN FEED, 11 dBi DIRECTIVITY, WIDEBAND, DUAL LINEAR (FULL OCTAVE)					
LGF-11-069-WB-DL	594	3.5 mm Female	(2)	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-100-WB-DL	394.2	3.5 mm Female	(2)	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-150-WB-DL	264.2	3.5 mm Female	AEP-8	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-200-WB-DL	198.2	3.5 mm Female	AEP-6	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-300-WB-DL	132.6	3.5 mm Female	AEP-6	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-400-WB-DL	99.3	3.5 mm Female	AEP-6	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-600-WB-DL	66.3	3.5 mm Female	AEP-4	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-820-WB-DL	48.5	3.5 mm Female	AEP-3	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-1240-WB-DL	32	3.5 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-1800-WB-DL	23	2.92 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LOW GAIN FEED, 11 dBi DIRECTIVITY, DUAL LINEAR (HALF OCTAVE)					
LGF-11-2400-DL	18.6	2.92 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-3300-DL	19.8	2.4 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-4000-DL	13.7	1.85 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-5000-DL	13	WR15 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-6000-DL	11	WR12 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-7500-DL	9	WR10 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LOW GAIN FEED, 11 dBi DIRECTIVITY, SINGLE LINEAR (HALF OCTAVE)					
LGF-11-3300-SL	19	2.4 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-5000-SL	12.5	WR15 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
LGF-11-7500-SL	8	WR10 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
MEDIUM GAIN FEED, 14 dBi DIRECTIVITY, SINGLE LINEAR (HALF OCTAVE)					
MGF-14-075-SL	877	N-type Female	N/A	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-112-SL	586	SMA Female	N/A	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-170-SL	373	SMA Female	N/A	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-260-SL	252.5	SMA Female	AEP-8	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-395-SL	168	N-type Female	AEP-8	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-585-SL	117	N-type Female	AEP-6	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-820-SL	79.5	SMA Female	AEP-4	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-1000-SL	66	SMA Female	AEP-3	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-1240-SL	54	SMA Female	AEP-3	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-1800-SL	37	2.92 mm Female	AEP-3	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-2650-SL	25	2.92 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-3300-SL	20	2.4 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-4000-SL	15	1.85 mm Female	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-5000-SL	13	WR15 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-6000-SL	11	WR12 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾
MGF-14-7500-SL	9	WR10 Waveguide Flange	AEC-1.5	Aluminum	Surtec 650 ⁽¹⁾

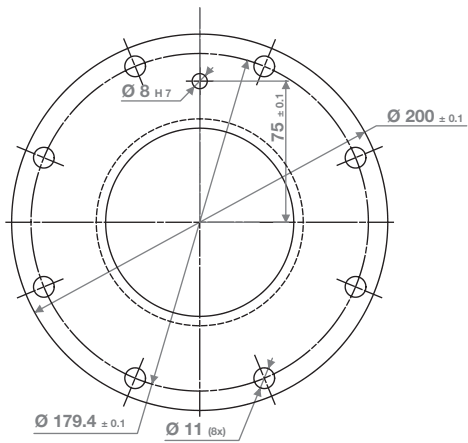
(1) According to MIL-C 5541E class 3

(2) Optional

Dimensional drawing



Interface



Particular of a Low Gain Feed Horn



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

