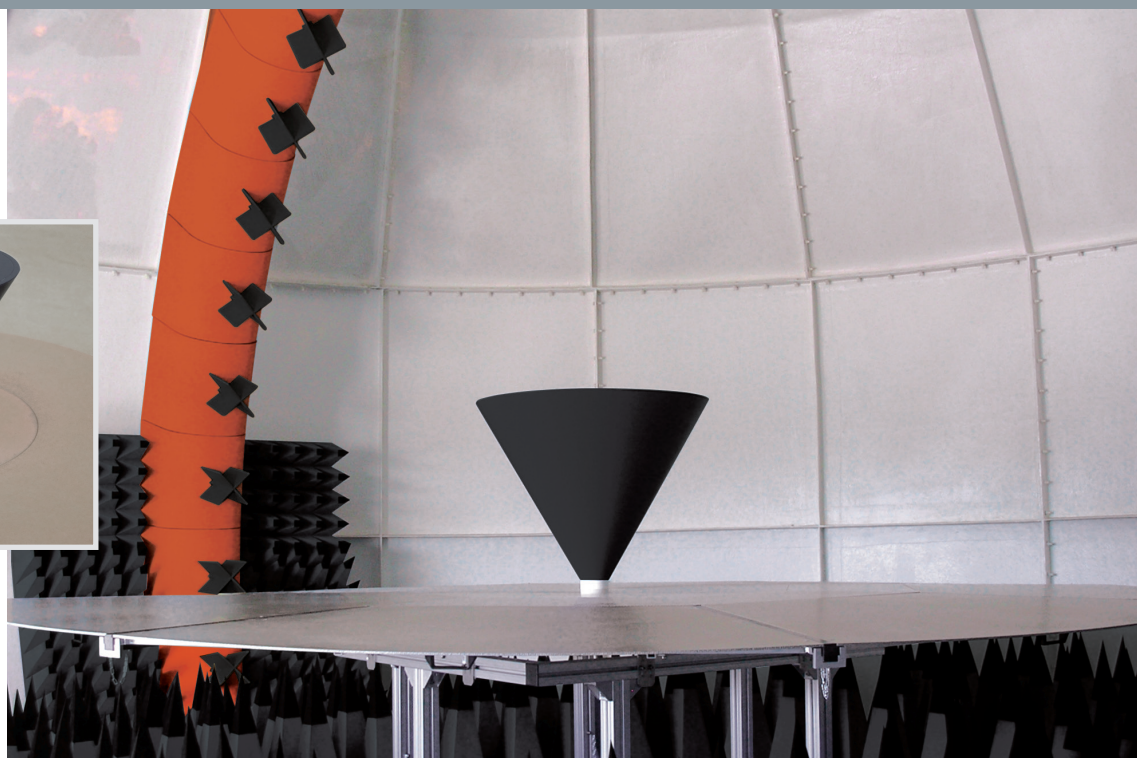
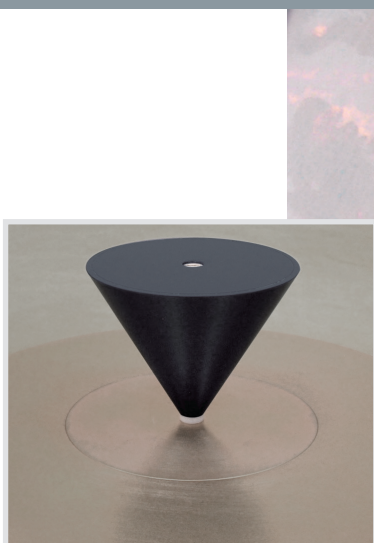


Monocones



SOLUTION FOR

- Wideband gain reference
- Particularly suitable for automotive test ranges

Main features

Technical performance

- Low loss and high efficiency
- Azimuth pattern symmetry
- Wide bandwidth

Design

- Precision circular flange to mate with MVG ground planes
- Axially symmetrical design

Surface treatment

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

Repeatability

- Stiff and robust mechanical design
- Minimum use of dielectric material
- Precision machined
- High-reliability connector

Delivered documents

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

Product configuration

Equipment

- ☐ High precision circular ground plane

Related services

- ☐ Calibration and maintenance
- ☐ Customization

■ Included □ Optional

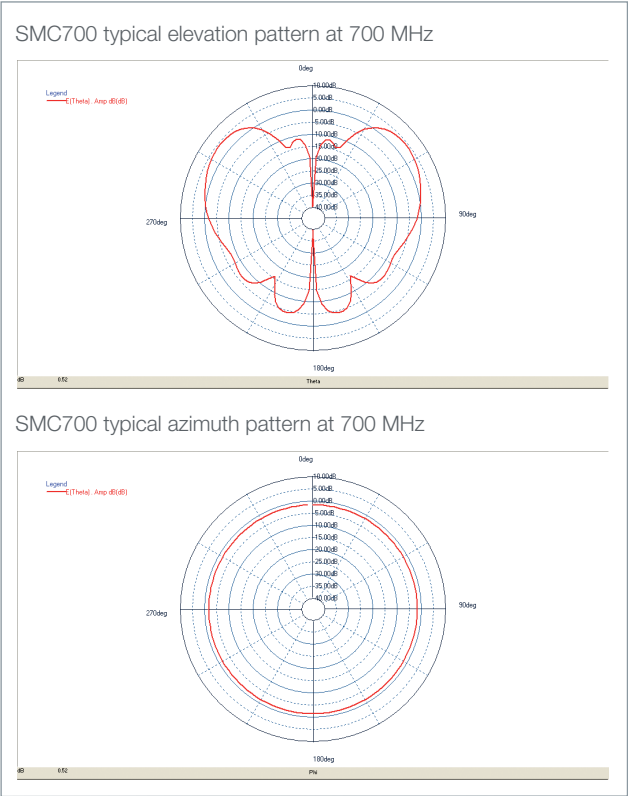
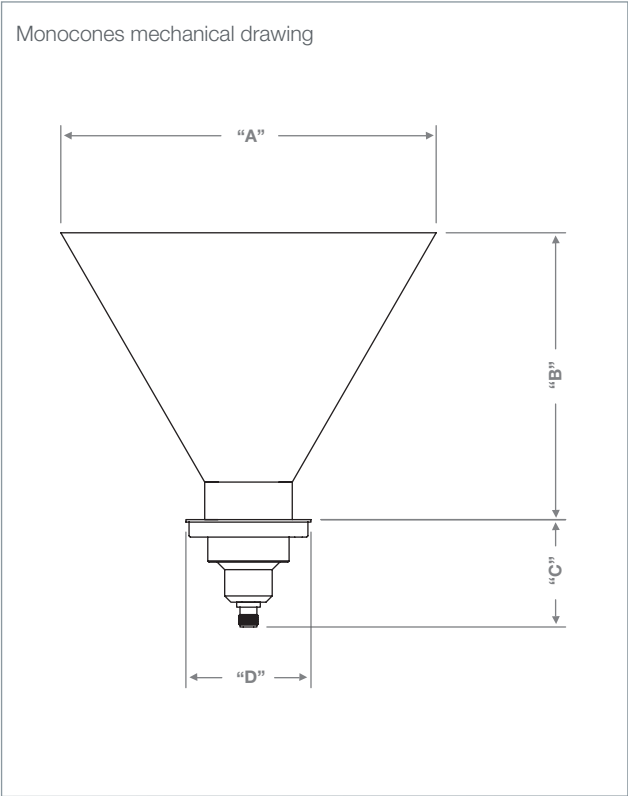
Electrical characteristics

Part number	SMC70	SMC220	SMC700	SMC2200	SMC6000
Type of antenna	Monocone	Monocone	Monocone	Monocone	Monocone
Frequency range	70 – 220 MHz	220 – 700 MHz	700 – 2200 MHz	2200 – 6000 MHz	6000 – 18000 MHz
Gain variation over azimuth	<± 0.1 dB	<± 0.1 dB	<± 0.1 dB	<± 0.1 dB	<± 0.1 dB
Efficiency	> 80%	> 80%	> 80%	> 80%	> 80%
VSWR	< 1.9	< 1.9	< 1.9	< 1.9	< 1.9
Return loss	< -10 dB	< -10 dB	< -10 dB	< -10 dB	< -10 dB
Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms

Mechanical characteristics

Part number	Frequency range	Dimensions [mm]				Weight (approx.) [Kg]	RF connector	Recommended ground plane
		A	B	C	D			
SMC70	70 – 220 MHz	795	638	106	100	9	N-type Female ⁽¹⁾	GP400
SMC220	220 – 700 MHz	300	229	86	100	2.5	N-type Female ⁽¹⁾	GP400 [220 – 400 MHz] GP100 [400 – 700 MHz]
SMC700	700 – 2200 MHz	79.5	64	34	100	0.3	N-type Female ⁽¹⁾	GP100
SMC2200	2200 – 6000 MHz	30	23	34	100	0.25	N-type Female ⁽¹⁾	GP100
SMC6000	6000 – 18000 MHz	6	10	30	100	0.25	3.5mm Female ⁽²⁾	GP40, GP60, GP100

(1) Southwest 312-04SF
(2) Huber+Suhner type 23 PC35-50-0-51/199UE



/ Ground planes

Main Features

- High surface flatness
- Well-defined electrical continuity between coupled parts
- Precise mechanical alignments
- Easy mounting procedure

Equipment

GP100

- Lightweight aluminum sandwich panel
- Tripod with adjustable height (1.5 m – 2.1 m wrt ground)

GP400

- Lightweight aluminum sandwich panel
- Stowable/deployable for fast installation and compact storage
- Integrated wheeled support structure

Mechanical characteristics

Part number	GP40	GP60	GP100	GP400
Weight (approx)	100 g	200 g	2.5 Kg	220 Kg
Diameter	40 cm	60 cm	1 m	4 m
Material	Aluminum	Aluminum	Aluminum	Aluminum
Treatment	Surtec 650 ⁽¹⁾	Surtec 650 ⁽¹⁾	Surtec 650 ⁽¹⁾	Surtec 650 ⁽¹⁾

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

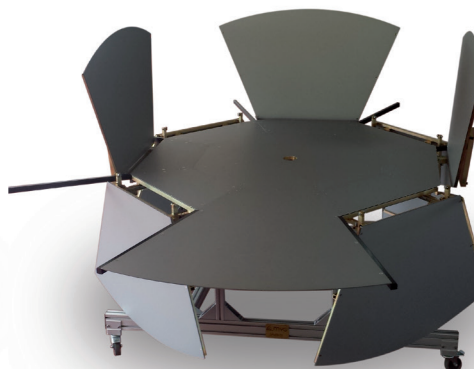
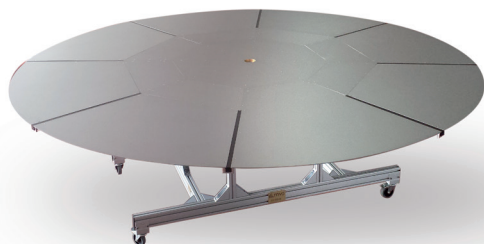
GP100



GP100 on tripod



GP400 deployed and stowed positions





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