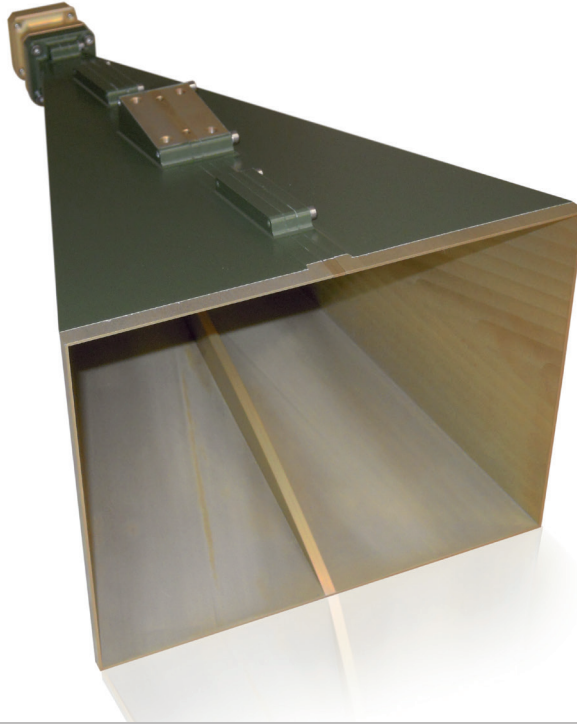


# High Power Medium Gain Wideband Horns



## SOLUTION FOR

- Wideband transmitter
- Direction finding applications

## Main features

### Technical performance

- Stable gain with frequency
- Low return loss
- Wide bandwidth
- High power up to 3 kW

### Design

- Well-defined smooth radiation pattern throughout the operational bandwidth
- Unique high power coax-to-waveguide transition

### Surface treatment

- Alodine 1200 according to MIL-C 5541E class 3
- Polyurethane paint

### Repeatability

- Stiff and robust mechanical design
- Precision machined
- Precision high power coaxial connector

### Delivered documents

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

## Product configuration

### Equipment

- Mounting flange

### Related services

- Calibration and maintenance
- Customization

■ Included  Optional

## Electrical characteristics

Part number	WGH100-HP	WGH100-SE-HP	WGH250-HP	WGH750-HP
Frequency range	1 – 2.5 GHz	1 – 2.5 GHz	2.5 – 7.5 GHz	7.5 – 18 GHz
Polarization	Single linear	Single linear	Single linear	Single linear
Gain	8 – 15 dBi	8 – 15 dBi	8 – 15 dBi	8 – 15 dBi
Half-power beamwidth				
E-plane	60 – 30°	34 – 13°	55 – 18°	> 12°
H-plane	80 – 30°	90 – 64°	55 – 18°	> 12°
VSWR	< 1.9	< 1.9	< 1.5	< 1.12
Return loss	< -10 dB	< -10 dB	< -15 dB	< -25 dB
Power handling (CW)	3 kW <sup>(1)</sup>	3 kW <sup>(1)</sup>	3 kW <sup>(1)</sup>	3 kW <sup>(1)</sup>

(1) 40°C, matched load, sea level

## Mechanical characteristics

Part number	WGH100-HP	WGH100-SE-HP	WGH250-HP	WGH750-HP
Dimensions [mm]				
H	228	205	147	184
W	310	587	114	148
L	721	780	460	352
D	153	210	206	170
Weight (approx.)	6.5 Kg	9 Kg	1.7 Kg	1.2 Kg
Material	Aluminum	Aluminum	Aluminum	Aluminum
Treatment	Alodine 1200 <sup>(1)</sup>	Alodine 1200 <sup>(1)</sup>	Alodine 1200 <sup>(1)</sup>	Alodine 1200 <sup>(1)</sup>
Color	Blue (RAL 5005) Army green (RAL 6003)	Blue (RAL 5005) Army green (RAL 6003)	Blue (RAL 5005) Army green (RAL 6003)	Blue (RAL 5005) Army green (RAL 6003)
Input interface	EIA 1-5/8" Female	EIA 1-5/8" Female	WRD250 waveguide flange	WRD750 waveguide flange (MIL-F-39000/3-080)
Mounting interface	Fixture plate for horizontal or vertical mounting	Fixture plate for horizontal or vertical mounting	Fixture plate for horizontal or vertical mounting	Fixture plate for horizontal or vertical mounting
Vibration and shock resistance	Compliant to MIL-STD-810C (514.2 and 512.6)	Compliant to MIL-STD-810C (514.2 and 512.6)	Compliant to MIL-STD-810C (514.2 and 512.6)	Compliant to MIL-STD-810C (514.2 and 512.6)
Operation temperature	0° C – 45° C	0° C – 45° C	0° C – 45° C	0° C – 45° C
Storage temperature	0° C – 60° C	0° C – 60° C	0° C – 60° C	0° C – 60° C

(1) Equivalent to MIL-C5541 E class 3

