

## 100 Watts Class D RF Power for:

- Driving Ultrasonic Transducers
- Testing
- Laboratory Applications



## Featuring:

- GaN Switch-Mode Technology
- Instantaneous Bandwidth
- V/I Sample Ports
- Compact Design
- Higher Power Density
- Solid State Reliability



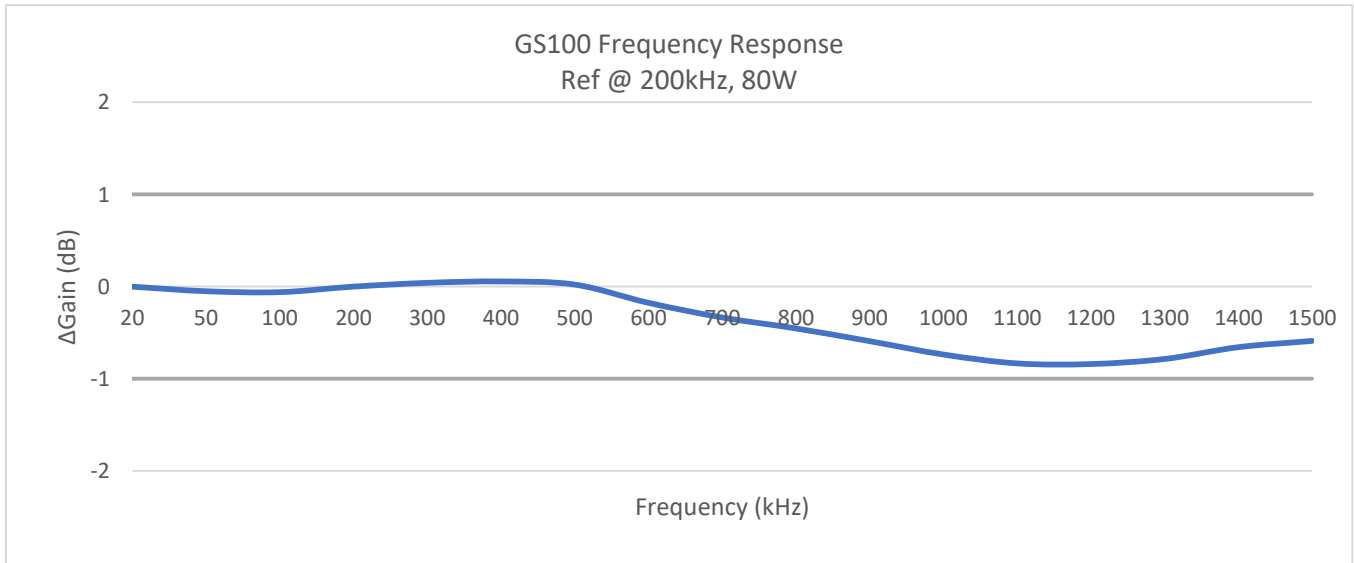
# GS100 POWER AMPLIFIER

## GS100 Specifications\*

<b>Class of Operation:</b>	Class D
<b>Frequency Coverage:</b>	20 kHz – 1.5 MHz
<b>Rated Power:</b>	100 Watts into 50 Ω
<b>Power Gain:</b>	50 dB nominal
<b>Gain Flatness:</b>	+/- 1 dB into 50 Ω
<b>Input Power for Rated Output Power:</b>	0 dBm (1 mW)
<b>Input Impedance / VSWR:</b>	50 Ω / 1.5:1 maximum
<b>Output Load Impedance:</b>	50 Ω nominal
<b>Harmonic Level:</b>	< -25 dBc at 100W Pout
<b>Third Order Intercept</b>	60 dB typical
<b>Mismatch Tolerance:</b>	∞:1 VSWR, can handle full reflection of rated power
<b>Stability:</b>	Unconditional into any passive or reactive load
<b>Protection:</b>	Overcurrent protection and overdrive protection: +30 dBm input signal without damage
<b>AC Input:</b>	100 – 240 VAC +/-10%, 4A max.
<b>Operating Temperature Range:</b>	0° – 40° C
<b>Cooling:</b>	Forced Air (internal fans)
<b>Dimensions (H x W x D):</b>	3.5 x 9.3 x 10.9 inches 90 x 235 x 275 mm
<b>Weight:</b>	8.0 lbs. (3.6Kg)
<b>Connectors:</b>	BNC
<b>Rack Mounting:</b>	Optional
<b>RF Input Signal:</b>	CW, AM, FM, SSB, Pulsed



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Sample Port	Scaling on Oscilloscope
Voltage	1Vrms = 50Vrms actual
Current	1Vrms = 1Arms actual

### Sample Port Notes:

- Phase integrity is maintained between the voltage and current sample ports.
- Phase integrity is also maintained between the sample ports and amplifier output.
- Oscilloscope ports must be terminated to 50Ω for accurate sample port measurements.

Performance into 50Ω				
Input Level		Amplifier Gain	Output Power	
mW	dBm		Watts	Vpp
0.5	-3.01	50	50	141.42
0.8	-0.97	50	80	178.88
1	0.00	50	100	200.00
1.2	0.79	50	120	219.09



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