GS50
POWER AMPLIFIER

50 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

GS50 Specifications*	
Class of Operation:	Class D
Frequency Coverage:	20 kHz – 1.5 MHz
Rated Power:	50 Watts into 50 Ω
Power Gain:	47 dB nominal
Gain Flatness:	+/- 1 dB into 50 Ω
Input Power for Rated Output Power:	0 dBm (1 mW)
Input Impedance / VSWR:	50 Ω / 1.5:1 maximum
Output Load Impedance:	50 Ω nominal
Harmonic Level:	< -25 dBc at 50W Pout
Third Order Intercept	60 dB typical
Mismatch Tolerance:	∞:1 VSWR, can handle full reflection of rated power
Stability:	Unconditional into any passive or reactive load
Protection:	Overcurrent protection and overdrive protection: +30 dBm input signal without damage
AC Input:	100 – 240 VAC +/-10%
Operating Temperature Range:	0° – 40° C
Cooling:	Forced Air (internal fans)
Dimensions (H x W x D):	3.5 x 9.3 x 10.9 inches 90 x 235 x 275 mm
Weight:	8.0 lbs. (3.6Kg)
Connectors:	BNC
Rack Mounting:	Optional
RF Input Signal:	CW, AM, FM, SSB, Pulsed

3 YEAR WARRANTY

RoHS CE

Rev B (January 2025)

*Subject to change without notice

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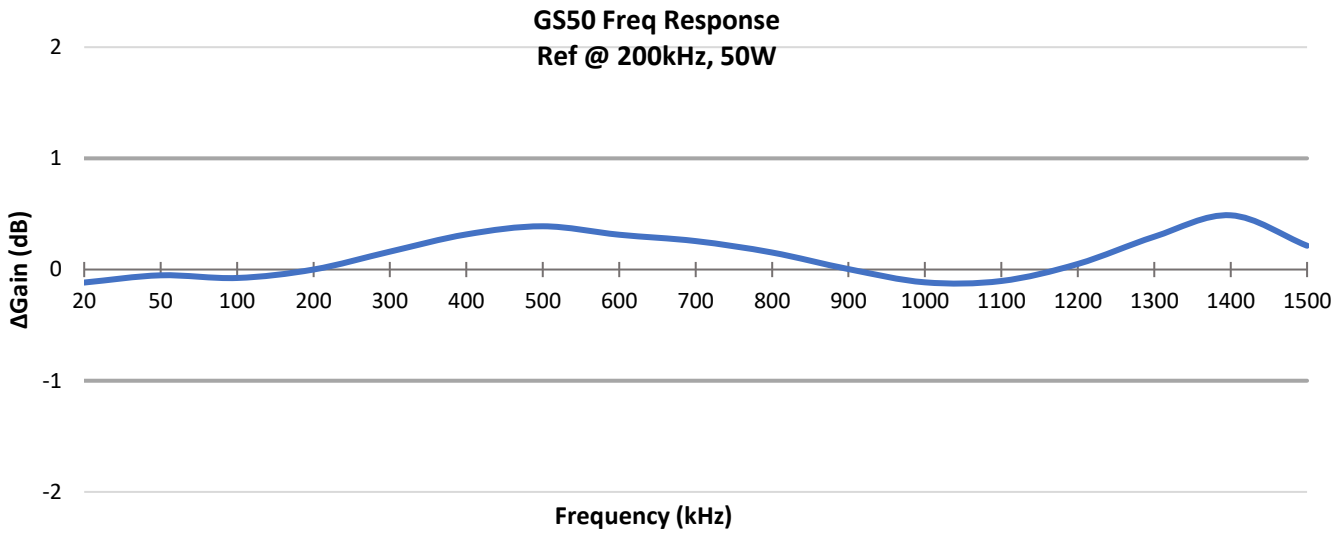

Sample Port	Scaling on Oscilloscope
Voltage	1Vrms = 50Vrms actual
Current	1Arms = 1Arms actual

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**	**dB**	**Watts**	**Vpp**
0.1	-10.01	47	5.00	44.70
0.5	-3.02	47	25.00	100.00
1	-0.01	47	50.00	141.42
1.2	0.78	47	60.00	154.92

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