

AG 1048 spec sheet

Class of Operation	Class AB
Frequency of Operation	20 kHz to 3.0 MHz
RF Power Output	4000W: 20 kHz to 1MHz; 3000W: 1MHz to 2MHz; 2500W: 2MHz to 2.5MHz; 1000W: 2.5MHz to 3 MHz; 50 Ω load, 20°C, pulsing & low duty cycles Up to 90% of rated power continuous operation any load
Gain	66 dB @ 4000W, 0.5 MHz ± 1.5 dB 20 kHz to 1 MHz
RF Input Drive for AGC	Recommended -5 dBm to 0 dBm for ± 0.5 dB gain flatness
Input Drive Source	Signal or function generator, analog input capable of up to 0.9 Vp-p @ 50 Ω Input range: -30 to 0 dBm typical, +3 dBm maximum
Internal RF Source	DDS oscillator: 20 kHz to 3 MHz, 0.010 kHz resolution
Input and Output Impedance	50 Ω 2:1 max INPUT VSWR , 3:1 max OUTPUT VSWR
Output VSWR Protection	600 W max reflected power limit
Spurious Output	-26 dBc
RF Output Settings & Control	<ol style="list-style-type: none"> 1. Front Panel soft-buttons and rotary encoder for manual control 2. RS232 port for GUI or other digital communication (rear panel) 3. SubD 25 Analog and Digital I/O (rear panel)
Scale	10V = 4000W (factory set scale) User selectable 1V, 2V, 3V, 10 V = full power (GUI, Front Panel)
SWEEP operation	Frequency: 20 kHz to 3 MHz Time: 0.5 s - 99.9 s Settings and activation from GUI and Front Panel. Single or continuous.
Pulse operation	Pulse width: 1 ms - 9999 ms User settings via GUI and Front Panel. (Period time is the totaling of Pulse1 & Pulse2) Discrete (1...99) or continuous.
Harmonics	See table on p. 14

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BURST - external	DC to > 100 kHz. User defined BURST scheme via SubD-25. See analog port description (p. 29) for more details.
Output Blanking	For functional interlock purposes only. Rear panel port.
Rear Panel Connection Type	RF Input: BNC Female; RF Output: HN Female
AC Power Connection	5 wires, 12 AWG (brown, black, gray, blue, green/yellow) Intern'l 3 Phase, 5 Wire connector provided for proper power line connection
AC Input Current (RMS)	RF OUT MAX: 4000W: < 20A @ 220V
Cooling	Forced air, temperature controlled. Heatsink temperature monitored via Front Panel, RS232, and GUI interface.
Acoustic level	76dBa @ max fan speed.
Case	Designed to meet EMI and RFI shielding requirements Chassis: conductive finish Front Panel: off-white Cover: black
Dimensions	927mm x 533 mm x 520 mm (H 36.5" x W 21" x L 20.5")
Weight	136 kg, 300 lbs
Mounting	Stand alone unit
Environmental conditions	Temp: 10° to 35°C ambient Humidity: 80%

Freq Range	Harmonics	
	h3	other
20 kHz - 0.5 MHz	-22	-27
0.5 MHz - 1.0 MHz	-17	-28
1.0 MHz - 2.0 MHz	-14	-35
2.0 - 2.5 MHz	-26	-33
2.5 - 3.0 MHz	-42	-29

