

AG 0627 spec sheet

Class of Operation	Class A/B
Frequency of Operation	27.12 MHz (+/- 5 kHz, freq stability 0.005% or better)
RF Power Output	600 W nominal into 50 Ω
EXT RF Input Drive for AGC	Recommended 0 dBm to +3 dBm for best operation
Input Drive Source EXT RF IN	Signal or function generator, analog input capable of up to 2 Vp-p @ 50 Ω
CEX Input*	3Vp-p to 8Vp-p at 13.56MHz
CEX Output*	3Vp-p to 8Vp-p at 13.56MHz
Internal RF Source	Crystal oscillator at 27.12 MHz
Impedance (Input and Output)	50 Ω
VSWR	2:1 max INPUT VSWR , 3:1 max OUTPUT VSWR
Output VSWR Protection	110 W max reflected power limit User adjustable from Service Screen; Automatically limits within 0.1 ms after exceeding limit
Harmonic Level @ 600W	< -50 dBc
Spurious Output	-50 dBc
RF Output Stability	Unconditionally stable up to 10:1 VSWR, any angle, any load.
Blanking	For functional interlock purposes only. Rear panel port.
Dynamic Power Range	1 to 600 W, settings with 1W resolution, accuracy within +/- 3 W
RF Output Settings & Control	<ol style="list-style-type: none"> 1. Front Panel soft-buttons and rotary encoder for manual control 2. Analog Interface (DB-25 port on rear panel) 3. Host Interface (RS232, RS422, RS485** port or USB port on rear panel)
RF Power Margin	$\text{Margin} = [(\text{Open Loop Max Power} / \text{Rated Power}) - 1] * 100$ +10% (defined by AC/DC power supply settings), +15% (RF section capacity)

2 SPECIFICATIONS

Scale	User selectable 1 - 10 V full power (Front Panel, GUI)
Pulse operation	User settings via GUI and Front Panel: Pulse width: 1 ms — 9995 ms User settings via REM, Analog/Digital Interface Pins 15, 16, and 5: Pulse width: ~2us min to CW, bursting up to 75 kHz via Pin 16
RAMP operation	Ramp speed: 1 W/s — 99 W/s User settings via GUI and Front Panel
Timer	User selectable 1 min...99 min.
Rear Panel Connection Type	RF Input: BNC female Blanking: BNC female CEX In/Out: BNC female* RF Out: N female
AC Input Current (RMS)	230 V ac, +/-10%, 50 - 60 Hz, 9A
AC Power Connection	IEC Standard Power Entry followed by RFI filter. Filter range 0.1 - 30 MHz minimum
AC Circuit Protection	Internally fused on the Main DC power supply, 250V T15A Internally fused on the Auxiliary DC Power Supply: 250V T2A
Cooling	Forced air, temperature controlled. Heatsink temperature monitored for safety at 70°C limit.
Case	Designed to meet EMI and RFI shielding requirements AL chassis. Front Panel: plastic overlay coated steel. Aluminum covers and chassis.
Dimensions	142mm x 210 mm x 442 mm (H 5.6" x W 8.25" x L 17.4")
Weight	8.5 kg, 18 lbs
Mounting	Half Rack, 3U high. Optional: Rack mount kit, adapter kit, coupling screws
Environmental conditions	Temp: 10° to 40°C ambient Humidity: 80%

* - Units with CEX function

** - Optional