AG 1213W

RF Generator & Amplifier

▲ Rear panel

▲ Front panel

Product Description

This is a **1200 W, 13.56 MHz** RF power source, ideal for Industrial/Scientific/ Medical applications.

Features

- Works with any tuner, but operation is uniquely optimized with T&C's AIT-600 tuner series
- Complete control of generator and AIT-600 tuner via front panel or PC (GUI software)
- Interfaces: Analog / Digital, RS-232, RS-422
- Digital display: Forward / Reflected / Load Power, Internal Temperature, Tuner Cap Positions
- Data acquisition: Power measurement and status monitoring at analog interface
- Operation: AGC Power Leveling, Low Harmonic Level, Pulse Operation, Ramping Profiles
- 5.25" H x 8.75" W x 18.10" L (Half Rack mount, or Stand-alone)

Ordering Options

- AG 1213W (generator with front panel controls)
- 1213W (generator module with blank front panel)
- AG 1213W & AIT-600 Tuner (complete RF system)
- [Rear panel] RF Input / Blanking ports
  OR CEX In / Out ports

FOR MORE INFO or QUOTE:
www.tcpowerconversion.com
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AG 1213W Spec Sheet

Class Of Operation
Class C

Frequency Of Operation
13.56 MHz

Frequency Stability
0.005% or better

RF Power Output
1200 Watts nominal into 50 Ohms

EXT RF Input Drive for AGC
+0 to +3 dBm for best operation

Input Drive Source for External RF Input
Signal or function generator, analog computer input capable of up to
2 Vp-p @ 50 Ohm

CEX Input
3Vp-p to 8Vp-p at 13.56 MHz

CEX Output
3Vp-p to 8Vp-p at 13.56 MHz
(CEX available upon request)

Internal RF Source
Crystal oscillator at 13.56 MHz

Input and Output Impedance
50 Ohm

IN / OUT VSWR
1.2:1 max - input
3:1 max - output

Output VSWR Protection
250 Watts max reflected power limit
(Automatic limit within 0.1 ms)

Harmonic Level @ 100 W
≥ - 50 dBc

Spurious Output
50 dBc

RF Output Stability
Unconditionally stable up to 10:1 VSWR, any angle, any load.

Dynamic Power Range
1 to 1200 W, settings within +/- 2W

Scale
1 - 10V , user selectable

Pulse Operation
Pulse width: 1 ms – 9995 ms
Controlled via front panel and GUI

Ramp Operation
Ramp speed: 1 W/s – 99 W/s
Controlled via front panel and GUI

Controls & Communications
Analog ports: SUBD-25 (rear panel)
Digital ports: RS-232, RS-422, USB 2.0 (rear panel)

RF Power Margin
(Open Loop Max Power/Rated Power)-1) x 100

+10 % - defined by AC/DC power supply settings,
+50 % - RF section capacity

RF Connectors
INPUT BNC Female
OUTPUT N Female
BLANKING BNC Female
Rear Panel

AC Power Connection
IEC Standard Power Entry followed by RFI filter.
Filter range 0.1 to 30 MHz min

AC Circuit Protection
Internally fused on the main DC Power Supply

AC Input Current (RMS)
200-240 V ac, 50-60 Hz, 12.0 A

Cooling
- Forced air
- Water at 20C-25C with flow > 1GPM (4LPM) , 70C limit.

Case
- Front Panel: Plastic Overlay Coated Steel
- Aluminum Covers and Chassis
- Chassis designed to meet EMI RFI shielding requirements

Full Dimensions
L 18.1" x W 8.25" x H 5.6"
(L 460 mm x W 210 mm x H 142 mm)

Weight
9.0 kg, 20 lbs.

Mounting
Half Rack, 3U high
(*Optional: Rack Mount Kit, Adapter Kit, Coupling Screws*)

Environmental conditions
Temp.: 0° to 40° C ambient
Humidity: 80%

CE