



*ACG Series 13.56 MHz
300 to 1,000 Watts Air
Cooled RF Plasma
Generators*

ACG Series

RF PLASMA GENERATORS

The ACG Series low power generators deliver rated output powers from 300 to 1,000 Watts at 13.56 MHz. The broad range of available power options, superior reliability, and high accuracy over a wide operating regime make the ACG Series power generators an effective solution for most applications.

Features & Benefits

Superior RF Stability

- Frequency stability equals 13.56 MHz $\pm 0.005\%$
- Regulation tolerance of $\pm 1.5\%$ of set point within power range

Excellent Reliability

- Microprocessor-based
- Automatic load mismatch protection
- Unlimited load impedance range

Advanced Control Interface

- TTL Compatible I/O
- Intuitive digital front panel control and display

Easy Integration

- Forced air cooling - no liquid coolant connections
- Standard 19" half rack configuration
- Light weight and compact

Mismatched Power Output

Worst phase forward power referenced to rating

VSWR	ACG-3B	ACG-6B	ACG-10B
1.1:1	300 W	600 W	1000 W
1.5:1	250 W	500 W	1000 W
2.0:1	200 W	400 W	850 W
3.0:1	150 W	300 W	650 W



Specifications and Ordering Information

Model	ACG-3B	ACG-6B	ACG-10B
Rated Power Output (into 50 ohm load)	300 W	600 W	1,000 W
Frequency/Stability	13.56MHz $\pm 0.005\%$		
Dynamic Power Range	10- 300 W Low range: 10 - 30 W	10- 600 W Low range: 10 - 60 W	< 5W - 1,000 W
Load Impedance Range	Unlimited		
RF Stability/Spurious Output	Unconditionally stable for any load within operational limits < -50 dBc		Unconditionally stable for any load within operational limits < -60 dBc
Harmonic Output & Distortion	< -50 dBc		< -55 dBc
Load Mismatch Protection	Automatic; forward power limits typically 0.5 ms after reverse power reaches 50 W or power amplifier current exceeds preset limit.	Automatic; forward power limits typically 0.5 ms after reverse power reaches 100 W or power amplifier current exceeds preset limit.	Automatic; forward power limits typically 0.1 ms after reverse power reaches 200 W or power amplifier current exceeds preset limit.
Regulation Tolerance Load VSWR 1.0:1 - 1.1:1	10 - 300 W; $\pm 1.5\%$ SP ± 1.5 W	10 - 600 W; $\pm 1.5\%$ SP ± 1.5 W	5 - 1,000 W; $\pm 1.5\%$ SP ± 5.0 W
Primary AC Power Source	100-240 VAC, no taps, 50-60Hz	100-240 VAC, no taps, 50-60Hz	190-252 VAC selectable, 4 taps, 50-60 Hz
Cooling System	Forced air; +10°C to +40°C		
Power Readout	Fwd/Rev/Load front panel power display; digital	Fwd/Rev/Load front panel power display; digital	Fwd/Rev/Load front panel power display; digital
Safety Compliance	NRTL Listed: UL3111-1 (1994) CAN/CSA C22.2 No. 1010.1-92 EN61010-1:1993; A2:1995		UL Listed as Miscellaneous Electrical Equipment. Certified to EN60950:1992; A1:1993/A2:1993; DIN VDE 0160:1988; A2:1989; EN 60215: 1989; A1: 1990
EMC Compliance	EN50081-2: 1992 EN50082-2: 1995		Classified as ISM equipment, Group 2, Class A; Complies to EN50111: 1991 as Group 2, Class A Equipment; Complies with EN50081-2: 1993 & EN50082-2: 1995
Weight	20 lbs (9 kg)	28 lbs (13 kg)	95 lbs (43.1 kg)
Dimensions (H x W x D) (excluding handles & connectors)	6.9" x 8.25" x 20.5" nominal (175 x 210 x 520 mm.)		9.9" x 15.5" x 18.5" nominal (251.5 x 393.7 x 469.9 mm.)
Remote Interface Connectors	Subminiature Type-D Standard: 15-pin Digital: 9-pin		Subminiature Type-D Standard: 15-pin Optional: 25-pin (access. connectors supplied) Digital: 9-pin
Standard Interface Inputs	RF Power On: TTL compatible; switch contacts External Control: 0-10 VDC positive pulse input, external potentiometer RF Range: Ground enables HIGH range (0-100%), open for LOW range (0-10%).		RF Power On: TTL compatible; switch contacts External Control: 0-10 VDC positive pulse input, external potentiometer
Standard Interface Outputs	RF On and Maximum RF Power Indicators: TTL Compatible Forward Power Indicator: Factory set to 10 V per 300 W Reverse Power Indicator: Factory set to 0-10 V per 0-50 W	RF On and Maximum RF Power Indicators: TTL Compatible Forward Power Indicator: Factory set to 10 V per 600 W Reverse Power Indicator: Factory set to 0-10 V per 0-100 W	RF On and Maximum RF Power Indicators: TTL Compatible Forward & Reverse Power Indicators: Factory set to 1.00 V per kW; direct reading on digital voltmeter.
RF Output Connector	Type N		

Ordering Options

- Leveling Types
 - Forward Power
 - Load Power

Contact your local account representative for pricing, availability, and applications guidance.



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