

CB Series High Frequency RF Power Supplies

Comdel's Superior Design and Reliability in
a Small, Lightweight Package



Palm Pilot used in photos to give perspective—not included with product purchase

Performance:

RF generators from the CB product family are available in power ranges from 50 to 5000 Watts with standard fixed frequencies from 13.56 to 60 MHz. The solid-state design provides precise and repeatable power control, ultra-stable output and low cost of ownership. The design of the CB series is based on Comdel's proven RF amplifier technology.

Applications:

The CB series is designed to meet the performance demand in RF-driven plasma systems for semiconductor processing. Applications include etch, RIE, parallel plate, ICP, RF sputtering, CVD and PVD, as well as induction and dielectric heating processes in industrial systems.

Features:

- Standard power ranges: 50, 200, 300, 500, 600, 1000, 1250, 3000, 5000 Watts
- Standard fixed frequencies: 13.56 MHz, 27.12 MHz, 40.68 MHz, 60 MHz
- Patented S-Technology provides ultra-stable output. This stabilizing technology optimizes amplifier performance, reducing power-gain changes caused by plasma impedance fluctuations.
- Designed to meet ETL and SEMI F47 directives
- Forward or Delivered power mode regulation

Options:

- 2 MHz & 3.39 MHz options available, added package height required
- High accuracy, low output control: +/- 1% of setpoint from 10-100% rated power
- Internal fixed match
- Master/Slave operation
- Frequency tuning
- DeviceNet

General Specifications:

- Frequency: Any fixed frequency from 13.56 to 60 MHz, standard
- Frequency stability: +/- 0.005%
- Line frequency: 50/60 Hz
- Analog power command: 0-10 VDC for 0 to maximum output
- Power accuracy: ≤ 2 %
- Power linearity: ≤ 2% of setting at power levels above 10% of rated power
- Power repeatability: +/- 1% of setpoint into a 50-Ohm load
- Control I/O connector: Standard: 15-pin subminiature D type (female)
Optional: 25-pin subminiature D type (female)
- Harmonic distortion: Less than -35 dBc
- Reflected power limit: 20% of full scale typical

CB3000 & CB5000



Facilities Specifications:

Model	Power Output	Size	Weight	Line Voltage / Line Current	Cooling	Std. Output Connectors
CB50	50W	4"H x 5"W x 12"D (10.2cm x 12.7cm x 30.5cm)	15 lbs. (6.8 kg)	110/208/230VAC; 1Ø / 0.9A/0.5A/0.4A typical	Water: 0.25 GPM (0.95 liters)	N, C or BNC
CB200	200W	4"H x 5"W x 12"D (10.2cm x 12.7cm x 30.5cm)	15 lbs. (6.8 kg)	110/208/230VAC; 1Ø / 4A/2A/1.5A typical	Water: 0.25 GPM (0.95 liters)	N or C
CB300	300W	4"H x 5"W x 12"D (10.2cm x 12.7cm x 30.5cm)	15 lbs. (6.8 kg)	110/208/230VAC; 1Ø / 5A/3A/2.5A typical	Water: 0.25 GPM (0.95 liters)	N or C
CB500	500W	4"H x 5"W x 12"D (10.2cm x 12.7cm x 30.5cm)	15 lbs. (6.8 kg)	110/208/230VAC; 1Ø / 9A/5A/4A typical	Water: 0.5 GPM (2 liters)	N or C
CB600	600W	4"H x 5"W x 12"D (10.2cm x 12.7cm x 30.5cm)	15 lbs. (6.8 kg)	110/208/230VAC; 1Ø / 11A/6A/5A typical	Water: 0.5 GPM (2 liters)	N or C
CB1000	1000W	5"H x 8"W x 16"D (12.7cm x 20.3cm x 40.6cm)	35 lbs. (16 kg)	185-230VAC; 3Ø / 6A typical	Water: 1 GPM (3.8 liters)	N or C
CB1250	1250W	5"H x 8"W x 16"D (12.7cm x 20.3cm x 40.6cm)	35 lbs. (16 kg)	185-230VAC; 3Ø / 7A typical	Water: 1 GPM (3.8 liters)	N or C
CB3000	3000W	5.25"H x 19"W x 22"D (13.3cm x 48.3cm x 56cm)	95 lbs. (43 kg)	185-230VAC; 3Ø / 17A typical	Water: 3 GPM (11.4 liters)	HN or N
CB5000	5000W	5.25"H x 19"W x 22"D (13.3cm x 48.3cm x 56cm)	95 lbs. (43 kg)	185-230VAC; 3Ø / 28A typical	Water: 3 GPM (11.4 liters)	HN, LC or 7/16