

CX Series High Frequency Power Supplies

Proven Reliability in Plasma Vacuum Systems Worldwide







Performance:

The CX series power supplies start at power ranges from 600 to 3500 Watts with fixed frequencies from 2 to 30 MHz, and frequency agile capability up to 10% bandwidth. The solid-state design provides low cost of ownership with high reliability.

Applications:

The CX 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.

CX High Power Supplies:

The CX series extends to high-power ranges of 5000 and 10,000 Watts.

Features:

- Patented S-Technology provides ultra-stable output. This stabilizing technology optimizes amplifier performance, reducing power-gain changes caused by plasma impedance fluctuations.
- ETL Marked for product safety and SEMI F47 compliant
- Local control via encoder and softkey inputs
- Standard RS-232 and analog/digital control
- Active front panel with full controls and programmable microprocessor
- Control circuitry ensures consistency during high VSWR conditions

Options:

- Wide range of AC input line voltages available
- External frequency control
- Master/Slave operation
- DeviceNet



General Specifications:

• Power control:

0-10 VDC input for 0 to maximum-rated output

Power control linearity:

≤ 2% of setting at power levels above 10% of rated power

• Frequency:

Any fixed frequency from 2 to 30 MHz (optional frequency agility +/- 10% of center frequency)

• Frequency stability:

13.56 MHz +/- 0.005%

Electrical Specifications:

| Model | Power Output | Harmonic Distortion | Input Line Voltage / Line Current | Control I/O Connector | Std. Output Connector |
|----------|-----------------|------------------------|---|--|--------------------------|
| CX 600 | 600W | Less than -30dBc | 190-225VAC; single phase; 50/60 Hz / 6A typical | 25-pin (optional 15) subminiature D type | N or C |
| CX 600/H | 600W | Less than -35dBc | 190-225VAC; single phase; 50/60 Hz / 6A typical | 15-pin subminiature D type | N or C |
| CX 1250 | 1250W | Less than -30dBc | 190-225VAC; three phase; 50/60 Hz / 7A typical | 15-pin subminiature D type | N or C |
| CX 1250A | 1250W | Less than -30dBc | 190-225VAC; single phase; 50/60 Hz / 15A typical | 25-pin subminiature D type | N or C |
| CX 2500 | 2500W | Less than -30dBc | 190-225VAC; three phase; 50/60 Hz / 15A typical | 25-pin subminiature D type | HN or N |
| CX 3500 | 3500W | Less than -30dBc | 190-225VAC; three phase; 50/60 Hz / 20A typical | 25-pin subminiature D type | HN or N |

Mechanical Specifications/Certification:

| Model | Size | Weight | Cooling | Certification |
|----------|--|------------------|--------------------------------|----------------------|
| CX 600 | 5.25"H x 19"W x 16"D (13.3cm x 48.3cm x 40.6cm) | 35 lbs. (16 kg) | Forced air | ETL Marked, Semi F47 |
| CX 600/H | 7"H x 9.5"W x 19"D (17.8cm x 24cm x 48.3cm) | 35 lbs. (16 kg) | Forced air | |
| CX 1250 | 5.25"H x 19"W x 16"D (13.3cm x 48.3cm x 40.6cm) | 75 lbs. (34 kg) | Water: 1 GPM (3.8 liters) | ETL Marked, Semi F47 |
| CX 1250A | 7"H x 19"W x 19"D (17.8cm x 48.3cm x 48.3cm) | 75 lbs. (34 kg) | Forced air | |
| CX 2500 | 7"H x 19"W x 21.5"D (17.8cm x 48.3cm x 54.6cm) | 132 lbs. (60 kg) | Water: 1.5 GPM (5.7 liters) | ETL Marked, Semi F47 |
| CX 3500 | 10.5"H x 19"W x 24"D (26.7cm x 48.3cm x 61cm) | 165 lbs. (75 kg) | Water: 2 GPM (7.6 liters) | |