

# CLX Series Low Frequency Power Supplies

**Proven Reliability in Plasma Vacuum  
Systems Worldwide**



## Performance:

The CLX series low frequency power supplies are available in power ranges from 600 to 10,000 Watts with fixed frequencies from 20 kHz to 2 MHz, and frequency agile capability up to 10% bandwidth. The solid-state design provides low cost of ownership with high reliability.

## Applications:

The CLX 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:

- **Reliable amplifier design with millions of trouble-free hours driving plasma systems worldwide**
- **Local control via encoder and softkey inputs**
- **Standard RS-232 and analog/digital control**
- **Control circuitry ensures consistency during high VSWR conditions**
- **Unique power monitoring measures delivered power into any impedance load**
- **Active front panel with full controls and programmable microprocessor**

## Options:

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

## General Specifications:

- Power control: 0-10 VDC input for 0 to maximum-rated output
- Power control linearity:  $\leq 2\%$  of setting at power levels above 10% of rated power
- Frequency: Any fixed frequency from 20 kHz to 2 MHz\* (optional frequency agility  $\pm 10\%$  of center frequency)
- Frequency stability: 350 kHz  $\pm 1\%$

\* CLX 600/H frequency: Any fixed frequency from 20kHz to 800 kHz

## Electrical Specifications:

Model	Power Output	Harmonic Distortion	Input Line Voltage / Line Current	Control I/O Connector	Std. Output Connector
CLX 600/H	600W	Less than -35dBc	115/208/220VAC; single phase; 50/60 Hz / 5A typical	15-pin subminiature D type (female)	N or C
CLX 1000	1000W	Less than -40dBc	187-229VAC; three phase; 50/60 Hz / 5A typical or one phase / 9A typical	15-pin subminiature D type (female)	N or C
CLX 2500	2500W	Less than -40dBc	187-229VAC; three phase; 50/60 Hz / 13A typical	15-pin subminiature D type (female)	HN or N
CLX 5000	5000W	Less than -40dBc	187-229VAC; three phase; 50/60 Hz / 25A typical	25-pin subminiature D type (female)	HN, LC or 7/16
CLX 10000	10000W	Less than -40dBc	187-229VAC; three phase; 50/60 Hz / 50A typical	25-pin subminiature D type (male)	LC or 7/16

## Mechanical Specifications/Certification:

Model	Size	Weight	Cooling	Certification
CLX 600/H	7"H x 9.5"W x 19"D (17.8cm x 24cm x 48.3cm)	35 lbs. (16 kg)	Forced air	ETL Marked
CLX 1000	7"H x 19"W x 19"D (17.8cm x 48.3cm x 48.3cm)	40 lbs. (18 kg)	Forced air	ETL Marked, Semi F47
CLX 2500	7"H x 19"W x 19"D (17.8cm x 48.3cm x 48.3cm)	75 lbs. (34 kg)	Water: 1.5 GPM (5.7 liters)	ETL Marked, Semi F47
CLX 5000	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)	
CLX 10000	RF: 5.25"H x 19"W x 24"D (13.3cm x 48.3cm x 61cm) DC: 8.75"H x 19"W x 24"D (22.2cm x 48.3cm x 61cm)	RF: 60 lbs. (27 kg) DC: 360 lbs. (163 kg)	Water: 4 GPM (15.1 liters)	ETL Marked, Semi F47