

CDX Series Dual Frequency Power Supplies

**Simplify Operations and Reduce Costs
Without Sacrificing Performance**



Performance:

The CDX dual frequency power supply comes in a 1000 or 2000 Watt design. The high frequency (HF) section of the CDX provides 600 or 1000 Watts of power, with optional frequencies from 2 to 60 MHz. The low frequency (LF) section can deliver 600 or 1000 Watts, with optional fixed or variable frequencies ranging from 20 kHz to 2 MHz.

Applications:

This solid-state generator is ideal for plasma applications including bias, etch, deposition and ashing.

Features:

- **Compact packaging reduces space, service (electrical and plumbing), and spare inventory requirements**
- **Complies to CE-Mark standards and is ETL Marked and SEMI F47 compliant**
- **Protection circuits safeguard the amplifiers from over-voltage, over-current and over-power operating conditions**
- **Gain-control circuitry stabilizes output power against line and load variations, and limits power during high VSWR conditions**
- **Unique power monitoring in the low-frequency section measures delivered power into any impedance load**
- **Optional phase locked output in the low-frequency section eliminates the need for a matching network in many applications**

Specifications:

• AC input voltage:	187-229 VAC; three phase; 50/60 Hz
• Line current protection:	20A
• Analog setpoint and readback levels:	0-10VDC for 0-100% rated power
• Over-temperature fault:	Output disabled when heatsink temp exceeds 60 degrees C
• Control signals' input impedance:	100k Ohms, minimum
• Control signals' input isolation:	100VAC minimum to AC supply line
• Output power control linearity:	2% or better
• Forward/Delivered power regulation:	+/- 2% of setpoint for load var. within VSWR foldback limits
• Load mismatch:	Output limited to 200 Watts under high VSWR conditions
• Line regulation:	+/- 1% output change over 187-229VAC line voltage
• Control I/O connector:	15-pin subminiature D type
• Standard available output connector:	N or C
• Cooling:	CDX 1000: 1 GPM (3.8 liters) CDX 2000: 1.5 GPM (5.7 liters)
• Size:	7"H x 19"W x 19"D (17.8cm x 48.3cm x 48.3cm)
• Weight:	97 lbs. (44 kg)

HF Section:

• Output power:	CDX 1000: 600 Watts max. continuous into 50-Ohm load CDX 2000: 1000 Watts max. continuous into 50-Ohm load
• Frequency:	Any fixed frequency from 2 to 60 MHz
• Frequency stability:	+/- 0.005%
• Harmonic distortion:	All harmonics minimum -30dB with respect to fundamental from 10-100% output power

LF Section:

• Output power:	CDX 1000: 600 Watts max. continuous into 50-Ohm load CDX 2000: 1000 Watts max. continuous into 50-Ohm load
• Frequency:	Any fixed frequency from 20 kHz to 2 MHz or 25% variable
• Frequency stability:	+/- 1%
• Harmonic distortion:	All harmonics minimum -40dB with respect to fundamental from 10-100% output power