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# Low Frequency Generators

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## Versatile and Reliable... Comdel's CLX Series Low Frequency Generators (Power Supplies)



### Power Amplifiers Built to Last

The cornerstone of the CLX series are their dependable power amplifier designs - the same designs that have proven themselves with millions of trouble-free hours in plasma systems all over the world. To further enhance reliability, the components are operated at about half of their rated outputs for long life and no maintenance.

### Versatility in Operation

In addition to offering superior performance in the field, the CLX series gives you both, an analog and digital input/output interface. The programmable digital interface is accessible through the front panel or remotely through an RS-232 interface. The CLX series power sources operate at any [single fixed frequency](#) from 20 KHz to 2 MHz, and [optional frequency agility of +/- 10% of center frequency](#). All performance and interface characteristics remain unchanged.

Ideal for Use in OEM Applications	
Plasma Etching	CVD
RF Sputtering	Diathermy
Communications	Dielectric Heating
Plasma Enhanced Chemical Vapor Deposition	

Key Benefits	
All solid-state for long life and low maintenance	
Compact size	<a href="#">Standard RS-232 interface</a>
Reliable amplifier design with millions of trouble-free hours in plasma systems worldwide	
<a href="#">Digital/Analog operation with added flexibility of local/remote digital operation</a>	
Precise Control circuitry ensures consistency during high VSWR conditions	
<a href="#">Protective circuitry prevents over-voltage and over-current failures</a>	

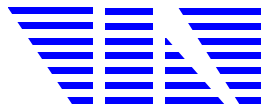
Options	
<b>External Freq. Control</b> (Input/output frequency can be varied +/- 10% of the center frequency from a TTL clock input)	
Master/Slave operation	DeviceNet
Overtemperature warning output before shutdown	

### List of Models Available

Model	Power Output	Cooling	Control I/O Connector	Size (Weight)	Input Power	Photograph
CLX 600/H *	600 W	Forced Air	15-pin D-type	7"H x 9.5"W x 19"D (35 lbs)	115/208/220 VAC; 1-Ph 50/60Hz / 5A typ	
CLX 1000	1000 W	Forced Air	15-pin D-type	7"H x 19"W x 19"D (40 lbs)	190-225VAC; 3-Ph 50/60Hz / 5A typ (220V/1-Ph available)	
CLX 2500	2500 W	Water (1.5gpm)	15-pin D-type	7"H x 19"W x 19"D (75 lbs)	190-225VAC; 3-Ph 50/60Hz / 13A typ (440V/3-Ph available)	
CLX 5000	5000 W	Water (2gpm)	25-pin D-type	10.5"H x 19"W x 24"D (165 lbs)	190-225VAC; 3-Ph 50/60Hz / 25A typ (440V/3-Ph available)	

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

GENERAL SPECIFICATIONS	
Frequency	Single frequency between 20KHz and 2MHz
Power control	0-10VDC input for 0 to full rated output
Power Control Linearity	Better than 2% of setting at power levels above 10% of rated power
Spurious Radiation	Well below FCC part 18 requirements
Harmonic Distortion	< 40dBc
Forward/Reflected Power Monitoring	0-10 VDC for 0 to full rated output
Frequency Stability	350 KHz +/- 1%
Output Connector	N type (600-1000W output) HN type (2500-5000W output)



VIN KAROLA INSTRUMENTS

P.O. Box 922273  
Norcross, GA 30010-2273  
Tel: 770/409-1499  
Fax: 770/447-8045  
e-mail: info@vinkarola.com