

CPS Series High Frequency Power Supplies

**Solid, Reliable Engineering that Improves
Process Results**

Performance:

With millions of hours in the field, Comdel's CPS series generators have proven their ability to withstand erratic loads. Patented S-Technology provides optimized amplifier performance for ultra-stable output by reducing power gain changes due to plasma impedance fluctuations. S-Technology helps eliminate headaches from transmission line length, mismatch conditions and process reliability issues.

Applications:

The CPS 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:

- **Solid state for long life and low maintenance**
- **Class "C" linear design assures stability**
- **ETL Marked and SEMI F47 compliant**
- **Control circuitry ensures consistency during high VSWR conditions**
- **Output transistors are beta-matched to assure reliability**
- **Broadband, low "Q" circuits inhibit "squeeging" and self-resonant oscillations**

Options:

- **Wide range of AC input line voltages available**
- **Series, parallel or IBM interlock configurations**
- **External frequency control: input frequency can be varied +/- 10% of the center frequency from a TTL level, 50-Ohm source**
- **Custom configured interface**



Specifications:

- Frequency: Single frequency between 2 and 80 MHz
- Bandwidth on external frequency option: +/- 10%
- Forward power monitoring: 0-10 VDC for 0 to maximum-rated output
- Reflected power monitoring: 1-10 VDC for 0 to 20% of maximum-rated output
- Reflected power limits: Factory set at 20% of maximum output
- Spurious radiation: Exceeds FCC Part 18 requirements
- Power control linearity: Better than 3% of setting at power levels above 10% of rated power
- Standard available output connector: Type N or C

CPS 500:

- Output power: 500W
- Control I/O connector: 15-pin subminiature D type (female)
- Input line voltage: 115/200/208/220VAC; single phase; 50/60 Hz; 1KVA max.
- Cooling: Forced air
- Size: 5.25"H x 19"W x 16"D (13.3cm x 48.3cm x 40.6cm)
- Weight: 36 lbs. (16.3 kg)

CPS 1001:

- Output power: 1000W
- Control I/O connector: 15-pin subminiature D type (female)
- Input line voltage: 208VAC; three phase; 50/60 Hz; 6A max.
- Cooling: Water: 1.5 GPM (5.7 liters), 35° C max.
- Water connections: 1/4" NPT female, inlet & outlet
- Size: 5.25"H x 19"W x 16"D (13.3cm x 48.3cm x 40.6cm)
- Weight: 75 lbs. (34 kg)