

# AC/DC Rectifier/Front End

## 500 Watts CDP500 Series

**XPiQ inc.**

Intelligent Design Quality Product



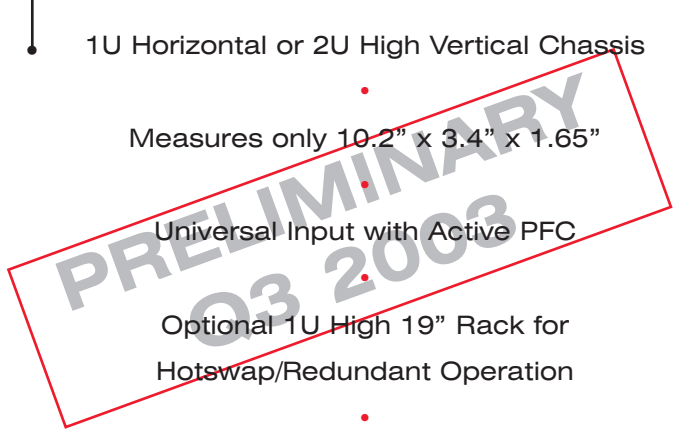
1U Horizontal or 2U High Vertical Chassis

Measures only 10.2" x 3.4" x 1.65"

Universal Input with Active PFC

Optional 1U High 19" Rack for  
Hotswap/Redundant Operation

International Safety Approvals & CE Mark



## Specification

### Input

- Input Voltage • 90-264 VAC
- Input Frequency • 47-63 Hz
- Power Factor • 0.95 A minimum
- Harmonic Current • Meets EN61000-3-2
- Inrush Current • Limited to 20 A peak
- Input Protection • Internal 10 A fuse
- Input Current • 4.9 A at 120 VAC  
2.8 A at 208 VAC

### Output

- Output Voltage • -54 VDC
- Output Power • 500 Watts
- Output Voltage Adj. • -40 to -59 VDC programmable
- Minimum Load • 0 minimum load for all outputs
- Line Regulation •  $\pm 0.1\%$  maximum
- Load Regulation •  $\pm 0.5\%$  maximum
- Ripple & Noise • 300 mV pk-pk maximum
- Transient Response • 3% max deviation, 500  $\mu$ s recovery time for a 25% load change
- Temperature Coefficient • 0.02%/°C
- Hold Up Time • >20ms minimum
- Remote Sense • Up to 0.25 V compensation
- Overvoltage Protection • -59.5 to -60.0 VDC recycle input to reset
- Overcurrent Protection • 120% with auto recovery
- Overtemperature Protection • Logic high signal for overtemp conditions
- Current Sharing • Single wire with  $\pm 10\%$  accuracy
- Remote ON/OFF • Standard

### General

- Efficiency • 87% typical at full load & 230 VAC
- MTBF • 200,000 demonstrated
- Isolation Voltage • 3000 VAC Input to Output  
1500 VAC Input to Ground  
500 VAC Output to Ground
- Signals • PSU enable, AC fail, DC OK, global inhibit, overtemp & output current readout
- LED Indicators • DC Good
- Size • 10.2" x 3.4" x 1.65"
- Weight • 2.9 lbs (1.3 kgs.)

### Environmental

- Operating Temperature • -20 °C to +70 °C, derate linearly from 100% at +55 °C to 50% at +70 °C
- Cooling • Internal ball bearing fans with front to back airflow
- Humidity • 30-95% RH, non-condensing
- Storage Temperature • -40 °C to +85 °C
- Shock & Vibration • IEC68-2-27, 2-64 & Mil-STD-810E, 20G, Telecordia GR-63-CORE, GR-487-CORE
- Altitude • Operation to 7,382 feet (2250m)

### EMC & Safety

- Safety Approvals • UL1950, CSA C22.2 No 950, EN60950 CE Mark LVD
- EMI/EMC • EN61000-3-2, -3, EN55022 and FCC 20780 part 15J Class B conducted
- Immunity and Surge • Meets EN61000-4-2, -3, -4, -5, -6, -11

\* Preliminary datasheet - see website for current specs

**OUTPUT VOLTAGE & CURRENT RATINGS****CDP500**

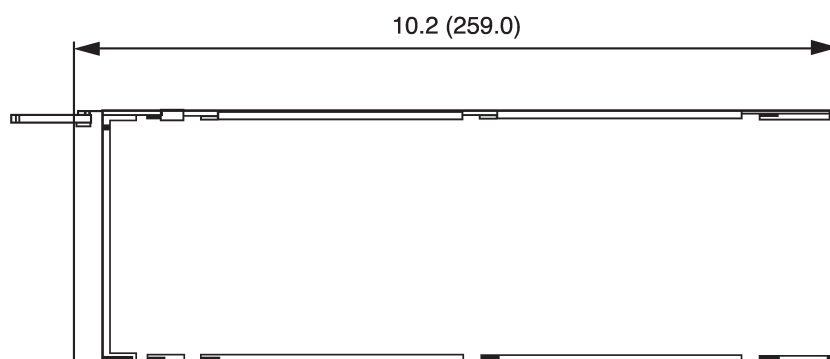
Maximum Power	Output Voltage	Output Current	Trim Range	Model Number
500 W	-54 VDC	9.3 Amps	-40 VDC to -59 VDC	CDP500PS48

**Notes**

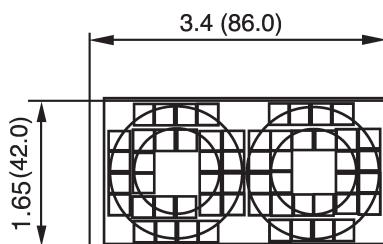
Output power is constant between -42V and -59 VDC, 500 watts typical.

**Mechanical Details**

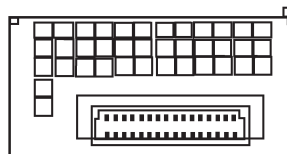
Side View



Top View

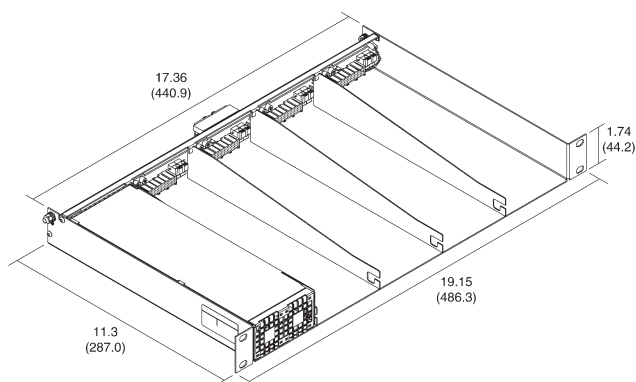


Front View



Back View

Optional Rack for 5 modules



Detailed specification including pin assignments, control & supervisory signals & optional racks will be available Q3 2003.  
See XPiQ website for additional info.

*\* Preliminary datasheet - see website for current specs*