

# POWER

## LCC250

250 Watts Convection/Conduction Mounting

### Data Sheet

**Total Power:** 250 W  
**# of Outputs:** Single  
**Outputs:** 12, 24, 48 V

### SPECIAL FEATURES

- 250 W full power at elevated temperatures
- Wide operating temperature range suited for outdoor application
- IP64 rated
- Conduction-cooled or convection
- Differential remote sense
- Output adjust
- Output On/Off (Positive or Negative logic user selectable)

### COMPLIANCE

- EMI Class B
- EN61000 Immunity
- MIL-STD-461E: CE101; CE102; CS101; CS114

### SAFETY

- UL + CSA: 60950-1 2nd Ed. ANSI ES60601-1 3rd Ed
- TUV: 60950-1 2nd Ed. 60601-1 3rd Ed. 61347-1; 2-13
- CB Scheme: IEC 60950-1 2nd Ed IEC 61347-1; 2-13 IEC 60601-1
- China CCC<sup>5</sup>
- CE Mark



### Electrical Specifications

Input	
Input range	90 - 264 Vac (Operating) 115/230 Vac (Nominal)
Frequency	47 - 63 Hz
Input fusing	Internal fuse on both L and N lines
Inrush current	50 A
Power factor	> 0.92 Full load
Harmonics	Meets EN61000-3-2; MIL-STD-461E <sup>(6)</sup> ; CE101; CE102; CS101; CS104
Input current	3.4 A @ 90 Vac full load
Hold up time	16 ms minimum at 115 Vac; 100% load
Efficiency	230 Vac; 100% load 12 V - 89% typical 24 V - 91% typical 48 V - 91.5% typical
Leakage current	< 275 $\mu$ A at 230 Vac

## Electrical Specifications

Output		
Output rating	12 V @ 20.8 A 24 V @ 10.4 A 48 V @ 5.2 A	
Set point	±0.2%	Factory set point
Total regulation range	±2%	Line/Load/Temperature
Rated load	250 W maximum	
Minimum load	0 A Load	No loss of regulation
Capacitive load	0 - 330 µF/Amp	
Output voltage overshoot		No overshoot/undershoot outside the regulation band during on or off cycle
Constant output voltage adjustment range	12 V: +10 / -10% 24 V: +14.6 / -15% 48 V: +15% / -15%	Adjust via VR2
Constant output current adjustment range	+0 / -50%	Adjust via VR1 CC mode supported from Vo nominal down to 80% Vo
Output ripple and noise	1%	0 to 330 µF/Amp
Transient response	±5% Vo max transient; recovery < 500 µs max	50% Load Step @ 1 A/µs Step Load verified at: 50% to 100% Load; 90 - 264 Vac input; Capacitive load from 0 to 330 µF/Amp
Remote sense	Capable of Stable Offset of ±0.5 Vdc at output cable termination	+SENSE (Red Wire); -SENSE (Black Wire)
Output On/Off	Remote On/Off referenced to secondary side. Positive or Negative logic user selectable via CN2. Factory default is Positive logic	On/Off (Orange Wire); On/Off Return (White Wire)
Overcurrent protection (OCP)	≤ 150% Io	Auto-recovery
Overvoltage protection (OVP)	110% to 135% Vo	Latching mode; Requires input AC recycle
Overtemperature Protection (OTP)		Auto-recovery; hiccup mode
Output isolation	4000 Vac Input to Output 1500 Vac Input to Ground 500 Vac Output to Ground	

## Environmental Specifications

<b>Operating temperature</b>	Suffix 4P (Conduction): -40 °C to +85 °C Baseplate Temperature Suffix 7P (Convection): -40 °C to +85 °C Ambient Temperature
<b>Storage temperature</b>	-40 °C to +85 °C
<b>Humidity</b>	10% to 100% (Condensing & Non-Condensing)
<b>Altitude</b>	Operating: 13,000 feet Non-Operating: 50,000 feet
<b>Shock</b>	IEC68-2-27
<b>Vibration</b>	IEC68-2-6 / IEC721-3-2
<b>Ingress Protection</b>	IP64 Rated
<b>MTBF (Calculated)</b>	> 780,000 hours at 100% load; Low line; Telcordia SR-332