

# 300 Watts

## CE-300 Series

### Features

- Universal 85-264 VAC Input
- Harmonic Current Per EN 61000-3-2
- Compact 4.9" x 8.5" x 1.95" Size
- Internal Fan
- One to Five Outputs
- Optional Remote On/Off
- Remote Sense Outputs 1 & 2
- Class B Emissions Per EN 55022
- EMC Compliant To EN 61000-4-2, 3, 4, 5
- Optional Power Fail Signal
- 2 Year Warranty
- EN 60950 ITE Certification



### Safety Specifications

General	Protection Class:	I
	Overvoltage Category:	II
	Pollution Degree:	2
Underwriters Laboratories File E137708	UL 1950, Third Edition	
UL Recognition Mark for Canada File E137708	CAN/CSA-C22.2 No. 950-M95	
TUV License B 99 12 30824 011	EN 60950/AI:1997 VDE 0805	
	Low Voltage Directive	

### Model Listing

MODEL	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	OUTPUT 5
CE-300-5001	+5V/40A	+24V/4A	+12V/6A	-5V/1A	-12V/2A
CE-300-5002	+5V/40A	+12V/8A	-12V/6A	-5V/1A	+24V/2A
CE-300-5003	+5V/40A	+12V/8A	+24V/3A	-15V/1A	+15V/2A
CE-300-5004	+5V/40A	+24V/4A	24V/3A	-12V/1A	+12V/2A
CE-300-5005	+24V/8A	+12V/8A	+5V/6A	-15V/1A	+15V/2A
CE-300-5006	+24V/8A	24V/4A	+5V/6A	-15V/1A	+15V/2A
CE-300-4001	+5V/40A	+12V/8A	-5V/5A		-12V/2A
CE-300-4002	+5V/40A	+24V/4A	+12V/6A		-12V/2A
CE-300-4003	+5V/40A	+24V/4A	+15V/4A		-15V/2A
CE-300-4004	+24V/8A	+12V/8A	+5V/6A		-12V/2A
CE-300-4005	+5V/40A	-5.2V/12A	+12V/6A		-12V/2A
CE-300-4006	+24V/8A	+12V/8A		-12V/1.5A	5V/2A
CE-300-4009	+24V/8A	+12V/8A	+5V/10A		-12V/2A
CE-300-4011	+5V/40A	+3.3V/12A		+12V/2A	-12V/2A
CE-300-3001	+5V/40A	+12V/8A	-12V/6A		
CE-300-3002	+5V/40A	+12V/8A	+24V/3A		
CE-300-3003	+5V/40A	+15V/6A	-15V/4A		
CE-300-3004	+12V/16A	-12V/8A	+5V/6A		
CE-300-3006	+5V/40A	+3.3V/12A		+12V/2A	
CE-300-2001	+5V/40A	+24V/4A			
CE-300-2002	+12V/16A	-12V/8A			
CE-300-2003	+15V/13A	-15V/6A			
CE-300-2004	+24V/8A	-24V/4A			
CE-300-1001	5V/60A				
CE-300-1002	12V/25A				
CE-300-1003	15V/20A				
CE-300-1004	24V/12A				

All specifications are maximum at 25°C unless otherwise stated and are subject to change without notice.

### Output Specifications

Total Output Power	300W	
Output Voltage Centering	Output 1-5: ±0.5%	(All outputs at 50% rated load)
Source Regulation	Outputs 1-5: 0.5%	
Load Regulation	Outputs 1-5: 1% (10-100%)	
Cross Regulation	Output 2-5: 0.5%	(Output 1 load varied 50-100%)
Output Voltage Adjust Span Resolution	Outputs 1, 2 & 3: 95% To 105%	1%
Output Noise Source Freq. Switching Freq. Total (20 MHz)	Outputs 1-5: 0.5%	(Output under test at 100% rated load)
	Outputs 1-5: 1%	
Turn On Overshoot	None	
Transient Response Voltage Deviation Recovery Time Load Change	Outputs 1-5: 5% 2mS 50% To 100%	
Output Overvoltage Protection (Optional)	Output 1: 120% to 150% shuts down all outputs. Cycle input to restart.	
Output Overpower Protection	340 Watts Min., outputs cycle on/off, auto recovery	
Output Overcurrent Protection	110% Min., Outputs 2,3,4 & 5	
Hold Up Time	20mS Min, 300W Output 120V Input	
Start Up Time	3 Seconds	

### Input Specifications

Source Voltage	85 - 264 Volts Continuous
Frequency Range	47-63 Hz
Source Current True RMS Peak Inrush Peak Repetitive Harmonic Distortion	5.8A At 85V Input 20A 8.2A At 85V Input 0.05
Efficiency	.68-.80 (Varies by model)
Power Factor	0.90 (300 Watts, 230V)

### Environmental Specifications

Ambient Operating Temperature Range	0° C to +50° C
Ambient Storage Temperature Range	-40° C to +85° C
Temperature Coefficient	Outputs 1-5: 0.02%/°C
Shock	Transit Drop per MIL-STD-810E Method 516.4 Procedure IV
Vibration	MIL-STD-810E, Method 514.4, Category 1

### General Specifications

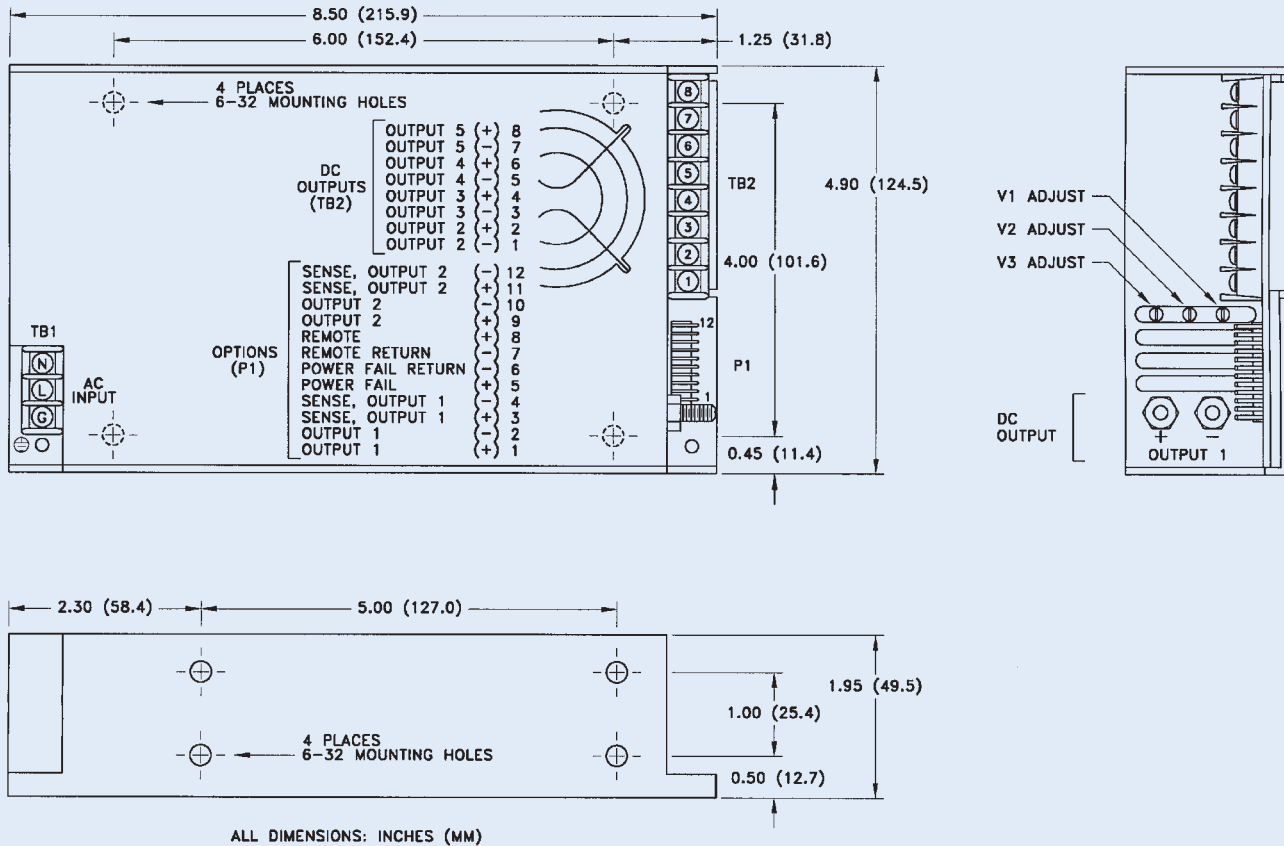
Dielectric Strength	4250 VDC, Primary to Secondary, 1 Sec. 2150 VDC, Primary to Ground, 1Sec. 500 VDC, Secondary to Ground, 1 Sec.
Remote On/Off (Optional)	Contact closure shuts off all outputs.
Power Fail Signal	Logic low with input power failure 2mS minimum prior to output one dropping 1%
Remote Sense (Outputs 1 & 2)	250 mV compensation of output cable losses
Weight	3.3 Lbs.

### Electromagnetic Compatibility Specifications

Electrostatic Discharge	IEC 801-2 8kV Air Discharge
Radiated Electromagnetic Field	IEC 801-3 3V/M, 26-1000MHz.
EFT	IEC 801-4 2 kV
Surges	IEC 801-5 1kV Differential Mode 2kV Common Mode
Radiated Emissions	EN 55022, Class B
Conducted Emissions	EN 55022, Class B
Harmonic Current Emissions	EN 61000-3-2

- NOTES:
1. Consult factory for alternate output configurations.
  2. Consult factory for positive, negative or floating outputs.
  3. Specify optional overvoltage protection, power fail signal, remote on/off or perforated cover when ordering.

## CE-300 Series Mechanical Specifications



### AC Input Connector TB1:

- Terminal block with 6-32 screws on 0.325 inch centers mates with #6, 0.26 inch wide spade terminals.

### DC Output Connector TB2:

- Terminal block with 6-32 inch screws on 0.325 inch centers mates with #6, 0.26 inch wide spade terminals.

### DC Output Studs + and -:

- 10-32 threaded studs mate with #10 ring tongue terminals.

### Option/Sense Connector P1:

- .100 inch friction lock header mates with Molex 22-01-2127 or equivalent crimp terminal housing with Molex type 6459 or equivalent crimp terminal.

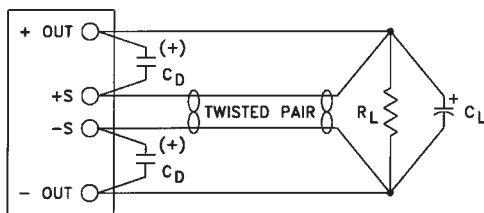


Figure 1- Output sense connections

### Applications Information

- This product is intended for use as a professionally installed component within information technology equipment.
- Remote sense terminals (Figure 1) may be used to compensate for cable losses up to 250mV. The use of a twisted pair is recommended as well as a decoupling capacitor  $C_D$  (0.1 - 10 $\mu$ F) and a capacitor  $C_L$  of 100 $\mu$ F/Amp connected across the load side.
- Each output can deliver its full rated current but total output power must not exceed 300 watts.
- A minimum load of 10% is required on output one to insure proper regulation of remaining outputs.
- Forced air cooling requires an air speed of 500 LFM flowing past a point one inch above top of perforated cover in any direction.
- Peak current on output 2 is available for 10 seconds maximum with a 20% duty cycle.
- Peak to peak output ripple and noise is measured directly at the output terminals of the power supply, without the use of the probe ground lead or retractable tip, 20 MHz bandwidth.
- The power supply has been safety approved and final tested using a DC dielectric strength test. Please consult factory before performing an AC dielectric strength test.
- Maximum screw penetration into chassis mounting holes is .188 inches.



Optional perforated cover shown.