# CE-300 SERIES AC-DC

## **FEATURES:**

- RoHS Compliant
- Universal 85-264 VAC Input
- 2 Year Warranty
- One to Five Tightly Regulated
- EN 60950-1 ITE Certification
- Class B Emissions per EN 55022
- Compact 4.9" x 8.5" x 1.95 Size Harmonic Current per EN 61000-3-2
  - EMC to EN 61000-6-2 and EN 60601-1-2



#### SAFETY SPECIFICATIONS

Protection Class: Overvoltage Category: General Ш Pollution Degree: 2

CTU US File E137708/E140259

**Underwriters Laboratories** UL 60950-1:2007, 2<sup>nd</sup> Edition CAN/CSA-C22.2 No. 60950-1-07,  $2^{\text{nd}}\,\text{Edition}$ 



CB Reports/Certificates (including all National and Group Deviations)

IEC 62368-1:2014, 2nd Edition



TUV SUD America

EN 62368-1:2014, 2nd Edition



Low Voltage Directive RoHS Directive (Recast) (2014/35/EU of February 2014) (2011/65/EU of June 2011)



Electrical Equipment (Safety) Regulations 2016 SI No. 1101

Restriction of the Use of Certain Hazardous Substances in EEE Regulations 2012 SI No. 3032 + 2019 SI No.492

2012 3	1 INO. 3032 + 2						
MODEL LISTING							
MODEL NO.	OUTPUT 1	<b>OUTPUT 2</b>	OUTPUT 3	<b>OUTPUT 4</b>	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-300-5012	+5V/40A	+28V/3A	+12V/6A	-5V/2A	-12V/2A		
CE-300-5013	+5V/40A	+3.3V/6A	+24V/4A	-5V/1A	12V/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-300-4007	+24V/8A	+15V/6A	+5V/6A		-15V/2A		
CE-300-4009	+24V/8A	+12V/8A	+5V/10A		-12V/2A		
CE-300-4011	+5V/40A	+3.3/12A		+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	+3.3/12A		+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						
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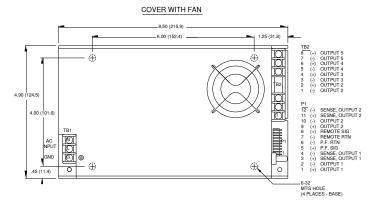
	<b>CE-3</b>	00		
OUT	PUT SPECIF			
Total Output Power	300W			
Output Voltage Centering	Outputs 1 – 5:	± 0.5% (All outputs at 50% load)		
Output Voltage Adjust Range Load Regulation	Outputs 1 – 3: Outputs 1 – 5:	95 - 105% 1.0% (10-100% load change)		
Source Regulation	Outputs 1 – 5:	0.5%		
Cross Regulation	Outputs 2 – 5:	0.5% (Output 1 load varied 50-100%)		
Output Noise	Outputs 1 - 5:	1.0%		
Turn on Overshoot	None			
Transient Response	Outputs 1 – 5			
Voltage Deviation	5.0%			
Recovery Time	2mS			
Load Change Output Overvoltage Protection	50% to 100% Output 1:	120% to 150% Shuts down all		
(Optional) Output Overpower Protection	340 W Min.,	outputs. Cycle input to restart.		
Output Overpower Protection	,	n/off, auto recovery		
Output Overcurrent Protection				
Hold Up Time	Outputs 2,3,4 & 5, 110% Min 20 mS min., 300W Output, 120V Input			
Start Up Time	3 Seconds	orr output, .zorput		
	UT SPECIFIC	CATIONS		
Source Voltage	85 – 264 Volts			
Frequency Range	47 – 63 Hz			
Source Current				
True RMS	5.8A at 85V Inp	ut		
Peak Inrush	The second secon			
Peak Repetitve	8.2A at 85V Inp	ut		
Harmonic Distortion	0.05			
Efficiency	.6880(Varies b			
Power Factor	0.90 (300 W, 23			
ENVIRONMEN Ambient Operating	0° C to + 50° C			
Temperature Range		Power Rating Chart		
Ambient Storage Temp. Range	- 40° C to + 85°			
Temperature Coefficient	Outputs 1 – 5:	0.02%/°C		
	RAL SPECI			
Dielectric Strength <sub>(8)</sub>	INAL OF LOI	ICATIONS		
Reinforced Insulation	4242 VDC. Prin	nary to Secondary, 1 Sec.		
Basic Insulation	2121 VDC, Primary to Ground, 1 Sec.			
Operational Insulation	500 VDC, Secondary to Ground, 1 Sec.			
Power Fail Signal	Logic low with input power failure 2 mS			
ŭ		o Output 1 dropping 1%		
Remote On/Off (optional)	Contact closure	Contact closure shuts off all outputs		
Remote Sense(outputs 1 & 2)	250mV comper	sation of output cable losses		
Weight	3.30 Lbs.			
		BILITY SPECIFICATIONS		
Electrostatic Discharge	EN 61000-4-2	+/- 8kV Contact Discharge		
		+/- 8kV Air Discharge		
Radiated Electromagnetic Field	EN 61000-4-3	80MHz-2.5GHz, 10/m, 80% AM		
EFT/Bursts	EN 61000-4-4	+/- 2 kV		
Surges	EN 61000-4-5	+/- 1 kV Differential Mode +/- 2 kV Common Mode		
Conducted Immunity	EN 61000-4-6	.15 to 80MHz, 3V, 80% AM		
Voltage Dips and Interruptions	EN 61000-4-11	30% Reduction, 500ms 95% Reduction, 10ms 60% Reduction, 1s (Criteria B) 95% Reductions, 5000ms		
Radiated Emissions	EN 55022	Class B		
Conducted Emissions	EN 55022	Class B		
Harmonic Current Emissions	EN 61000-3-2			
	EDING INEC	DMATION		

## ORDERING INFORMATION

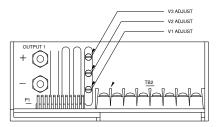
Please specify the following optional features when ordering:

OVP - Overvoltage protection RE - Remote Inhibit

#### **CE-300 SERIES MECHANICAL SPECIFICATIONS**



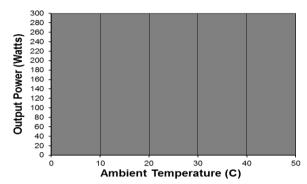




#### APPLICATIONS INFORMATION

- Semiconductor case temperatures must not exceed 110°C.
- Each output can deliver its rated current but total output power must not exceed 300
  watts
- Internal fan provides airflow to cool internal components. Area around fan and vent openings must be kept clear to allow unrestricted airflow in and out of these openings.
- This product is intended for use as a professionally installed component within information technology.
- A minimum load of 10% is required on output one to ensure proper regulation of remaining outputs.
- 6. Remote sense terminals 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  $(0.1 10 \mu F)$  and a capacitor of  $100 \mu F$ /amp connected across the load side.
- 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.
- 8. This product was type tested and safety certified using the dielectric strength test voltages listed in Table 5B of UL 60950-1. In consideration of Clause 5.2.2, care must be taken to insure that the voltage applied to a reinforced insulation does not overstress basic insulation. Secondary to ground capacitors may need to be removed prior to performing a dielectric strength type test on the end product. It is highly recommended that the DC equivalent test voltages be used when performing a production-line dielectric strength test of the assembled end product. Please consult factory before performing an AC dielectric strength test.
- This 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.
- 10. Maximum screw penetration into chassis mounting holes is .188 inches.

### MAXIMUM OUTPUT POWER VS. AMBIENT TEMPERATURE



CONNECTOR SPECIFICATIONS				
TB1	AC Input	Terminal block with 6-32 screws on 0.325 centers mates		
		with #6, 0.26 inch wide spade terminals. (10 in-lb max)		
TB2	DC Output	Terminal block with 6-32 screws on 0.325 centers mates		
		with #6, 0.26 inch wide spade terminals. (10 in-lb max)		
+/-	DC Output	10-32 threaded studs mate with #10 ring tongue terminals.		
P1	Option/Sense	.100 breakaway header mates with Molex 22-01-2127 or		
		equivalent crimp terminal housing with Molex 6459 or		
		equivalent crimp terminal.		

#### **NOTES**

Consult factory for alternate output configurations.

Consult factory for positive, negative or floating outputs.

Refer to Applications Information for complete output power ratings.

All specifications are maximum at 25° C, 300W unless otherwise stated, may vary by model and are subject to change without notice.