

1200 Watts APA100 (PFC)

Total Power: 1200 Watts
Input Voltages: 85-265 VAC
No. of Outputs: Single



Special Features

- Unity power factor
- High efficiency - up to 96%
- Universal input voltage and frequency range
- Up to 1200W output power
- Parallelable with current sharing within 3%
- < 10% harmonic distortion conforming to IEC555-2
- 85°C baseplate operating temperature (no derating)
- High reliability - over 1 million hours MTBF
- Power fail warning signal
- PLD feature
- Enable output to control AMPSS® DC-DC converters
- 125Khz fixed Switching frequency

Electrical Specs

Input

Input Voltage	85 to 265 Vac
Input Frequency	50/60 Hz
Efficiency	92% typical (VI = 115 Vac); 94% typical (VI = 230 Vac)
Total Harmonic Distortion	Less than 10%
Power Factor	0.99 typical (IO = 2A); 0.97 typical (IO = 1A)

Control

Power Fail Warning	Direct drive output to opto-isolator
Power Fail Warning Adjust	205 to 355 Vdc adjustable
LD Enable	Direct drive output to opto-isolator
PFC Enable	TTL compatible (low to enable)
Voltage Adjust	240V to 393V
Clock Input (external sync)	3.3 to 5.5Vp-p @ 1MHz ± 5%
Clock Output (int. clock)	4.5Vp-p typical @ 1MHz ± 0.5%
Temperature	
Monitor Output	10 mV/°K (2.73V = 0°C)
Current Monitor Output	0 to 1.28mA (1 mA = 2.5A)

Output

Output Voltage	383 V typical (IO = 2A); 393 V typical (IO = 0A)
Current Share Accuracy	3% typical
Overvoltage Protection	417 V typical
Power Limit	VIN=85Vac; Pmax=750W VIN=180Vac; Pmax= 918W VIN=230Vac; Pmax= 1200W

Environmental

Operating temperature (baseplate):
-20°C to +85°C (no derating)
 Storage temperature: -40°C to +105°C
 Overtemperature protection: 90°C typical
 MTBF: > 1 million hours (50°C baseplate)

Safety

UL	UL 1950	E132002
CSA	CSA22.2-234	LR53 982C
	CSA22.2-950	
EN	60950	20396-3336-1012
VDE	IEC950	
CE	CE Mark (LVD)	

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Ordering Information

Part Number	Description
APA100-101	1200W Low Profile PFC Module
APA100-103	950W Low Profile PFC Module
APA100-102	1200W Low Power PFC Module
APA100-104	1200W Low Profile PFC Module

Notes

For parallel operation the total input current must be <16A rms.
Inrush current limited protection required
Designed for parallel operation where the total input current >16A rms-requires external rail rectifiers

Pin Assignments

Input	Output	Control Pins
31-32. L1	21-22. +ve	1. RSV (Reserved)
33-34. L2	28-29. -ve	2. TEMP MON
		3. C MON
		4. C SHARE
		5. CLK OUT
		6. CLK IN
		7. RSV (Reserved)
		8. RSV (Reserved)
		9. V ADJ
		10. PFW ADJ
		11. S GND
		12. PFW
		13. LD ENABLE
		14. PF ENABLE

