

# 1200 Watts APA100 (PFC)

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



## 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

## 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

## 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

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

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## Ordering Information

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

## 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

