

Astec Integrated Power

# 240 Watts AM80A

**Total Power:** 240 Watts  
**Input Voltages:** 24V, 48V, 150V, 300V, or 320V  
**No. of Outputs:** Single



## Electrical Specs

### Input

**Input Range** 18 - 36V or 36 - 72 VDC  
 or 90 - 200 VDC or 180 - 400 VDC  
**Efficiency** 84% typical (5V @ 40A)  
 87% typical (12V @ 18A)

### Output

**Load Regulation** 0.1% typical down to no load  
**Line Regulation** 0.02% typical  
**Noise/Ripple** 50 mV typical (output below 5V)  
 1% typical (output 5V and over)  
 Up to 0.5V  
**Remote sense** Up to 0.5V  
**Output Voltage** Up to 0.5V  
**Adjust Range** ±20% of nominal  
**Transient Response** 3% typical deviation with 300µs recovery  
 (25-75% full load)  
**Current Share Accuracy** 3% typical  
**Overvoltage Protection** 115% Vo (nominal)  
**Current Limit** 110% Io maximum

### Control

**Voltage Adjust** 80 to 120% Vo linear programming  
**Enable** TTL compatible (low to enable)  
**Current Limit Adjust** 20 to 100% Io linear programming  
**Clock Input** (external sync) 3.3 to 5.5Vp-p @ 1MHz ± 10%  
**Clock Output** (internal clock) 4.5Vp-p typical @ 1MHz ± 0.5%  
**Power Good** High (Vo) = power good  
**Identification** High (Vo) = power good  
**Temperature** High (Vo) = power good  
**Monitor Output** 10 mV/°K (2.73V = 0°C)  
**Current Monitor Output** 0 to 1mA (1 mA = 100% Io rated)  
**Over Voltage** High (Vo) = power good  
**Protection Adjust** 110 to 150% Vo linear programming by voltage or resistor

### Notes

Nominal values apply with sense pins connected and other control pins unconnected.

Specifications subject to change without notice.

## Special Features

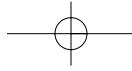
- 1MHz Fixed frequency
- 100°C Baseplate operating temperature (no derating)
- Low output ripple and noise
- Excellent transient response
- Safety isolated low voltage interface with ALP™ linear control
- High reliability - over 1 million hours MTBF
- Wide input voltage range
- Paralleable with accurate current sharing
- Current and temperature monitoring outputs

## Environmental

**Operating temperature (baseplate):** -20°C to +100°C  
**Storage temperature:** -40°C to +105°C  
**Overtemperature protection:** 110°C typical  
**MTBF:** > 1 million hours (50°C baseplate)

## Environmental

<b>UL</b>	UL 1950	E132002
<b>CSA</b>	CSA22.2-234	LR53982C
	CSA22.2-950	
<b>VDE</b>	IED950	20396-3336-1005 & 1006
<b>EN</b>	60950	
<b>CE</b>	CEMark (LVD)	



**AMERICAS**

5810 Van Allen Way  
 Carlsbad, CA 92008  
 Telephone: 760-930-4600  
 Facsimile: 760-930-0698

**EUROPE**

Astec House, Waterfront Business Park  
 Merry Hill, Dudley  
 West Midlands, DY5 1LX, UK  
 Telephone: 44 (1384) 842-211  
 Facsimile: 44 (1384) 843-355

**ASIA**

Units 2111-2116, Level 21  
 Tower1, Metroplaza  
 223, Hing Fong Road  
 Fwai Fong, New Territories  
 Hong Kong  
 Telephone: 852-2437-9662  
 Facsimile: 852-2402-4426



AM80A

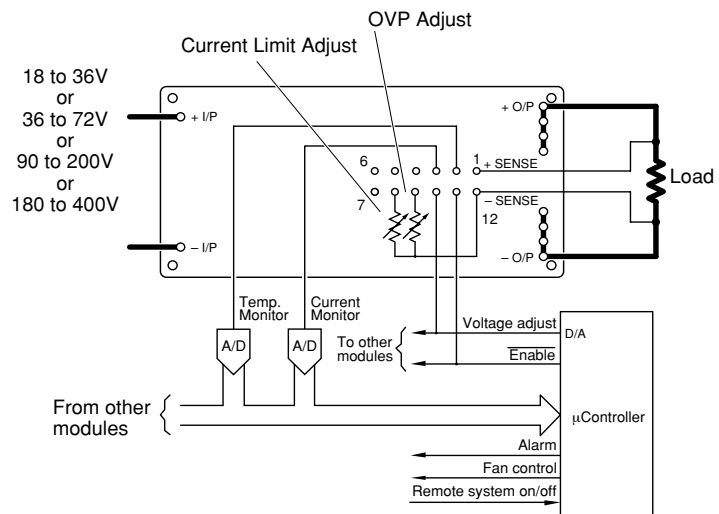
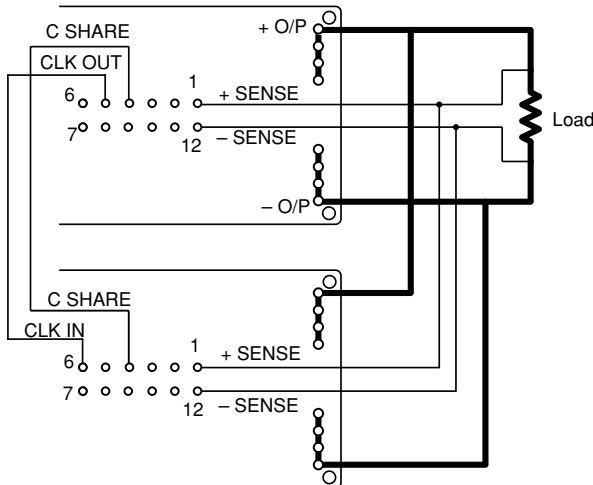
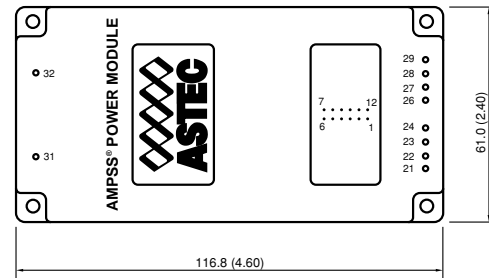
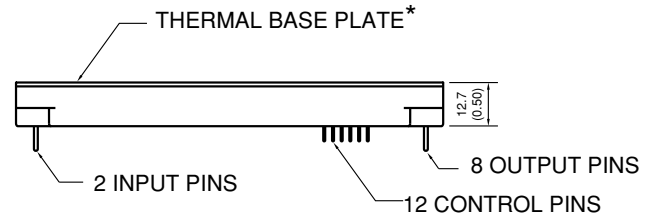
**Ordering Information**

Input Voltage	Output Voltage	Output Current	Model Number	Input Voltage	Output Voltage	Output Current	Model Number
300V	2.2V	60A	AM80A-300L-022F60	150V	6.5V	33A	AM80A-150L-065F33
300V	3.3V	50A	AM80A-300L-033F50	48V	1.2V	60A	AM80A-048L-012F60
300V	5V	40A	AM80A-300L-050F40	48V	2.2V	60A	AM80A-048L-022F60
300V	6.5V	33A	AM80A-300L-065F33	48V	3.3V	50A	AM80A-048L-033F50
300V	12V	18A	AM80A-300L-120F18	48V	5V	40A	AM80A-048L-050F40
300V	15V	16A	AM80A-300L-150F16	48V	12V	18A	AM80A-048L-120F18
300V	24V	10A	AM80A-300L-240F10	48V	15V	16A	AM80A-048L-150F16
300V	28V	9A	AM80A-300L-280F09	48V	24V	10A	AM80A-048L-240F10
320V	28V	9A	AM80A-320L-280F09* *	24V	6.5V	27A	AM80A-024L-065F27

Please contact Astec for information on other output voltages, power ranges and configurations.

**Pin Assignments**

Input	Output	Control Pins
31. +ve	21.	1. +SENSE
32. -ve	22.	2. TEMP MON
	23.	3. C MON
	24.	4. C SHARE
	26.	5. CLK OUT
	27.	6. CLK IN
	28.	7. PG/ID
	29.	8. CLIM ADJ
		9. OVP ADJ
		10. V ADJ
		11. ENABLE
		12. -SENSE



Astec Integrated Power