



Advanced Power Solutions

09/20/2001

**UNIVERSAL INPUT HARMONIC CORRECTION AC-DC SINGLE &
TRIPLE OUTPUT 50 WATTS INTERNAL SWITCHING
POWER SUPPLIES APS50VP SERIES**



FEATURES:

- ACCOMMODATES UNIVERSAL AC SOURCES
- MEETS IEC1000-3-2 HARMONIC CORRECTION
- MEETS UNIVERSAL SAFETY STANDARDS
- EMI MEETS CISPR PUB.22 CLASS B
- CE MARKING COMPLIANCE

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 90-264Vac with PFC
Input Connector: Molex V-M connector
Input Frequency: 47-63Hz
Inrush Current: Typ. 27A @230Vac
Input Current: Typ. 0.6A/115Vac, 0.3A/230Vac
Dielectric Withstand: Meet IEC950
EMI: Meet CISPR PUB.22 Class B
Hold-up Time: Typ. 55mS @ 115Vac & 230Vac
Power Factor Correction: Meet Harmonic Correction
per IEC1000-3-2. PF typ. 0.95-0.99
Earth Leakage: Less than 0.7mA at 230Vac

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart
Output Current: See Ratings Chart
Output Connector: Molex V-M connector
Output Wattage: Typ. 50 Watts
Line Regulation: Typ. 0.1-0.5%
Load Regulation: Main VO1 typ. $\pm 1-2.0\%$
Aux. VO2 typ. $\pm 2-3.0\%$ (Common choke)
Aux. VO3 typ. $\pm 2-3.0\%$ (Common choke).
Noise & Ripple: Typ. 1.0% peak to peak
OVP: Installed in main VO1 only
Adjustability: Available at VO1
Overload Protection (OLP): Fully protected against
output overload and short circuit
Consult the factory for OLP setting

GENERAL SPECIFICATION

Efficiency: Typ. 70-76%
Switching Frequency: Fixed freq. at 83KHz
Circuit Topology: PWM Fixed frequency forward circuit
Transient Response: Output voltage returns in
about 0.7mS following a 25% load change
Safety Standard: UL1950/EN60950 Class I

Operating Temperature: 0 to +50°C
Storage Temperature: -20 to +85°C
Temperature Coefficient: Typ. 0.04%/°C
Cooling: Convection air
Construction: PCB open frame format
Power Density: 2.8Watts / Cubic Inch



In application

OUTPUT VOLTAGE/CURRENT RATING CHART

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SINGLE OUTPUT

MODEL NO.	MAIN VO1@ ★	
	Typ.	Volt.
APS50VP-025120	12.0A	2.5V
APS50VP-033120	12.0A	3.3V
APS50VP-050100	10.0A	5.0V
APS50VP-120045	4.5A	12.0V
APS50VP-150038	3.8A	15.0V
APS50VP-240025	2.5A	24.0V
APS50VP-280022	2.2A	28.0V
APS50VP-360016	1.6A	36.0V
APS50VP-480013	1.3A	48.0V

TRIPLE OUTPUT

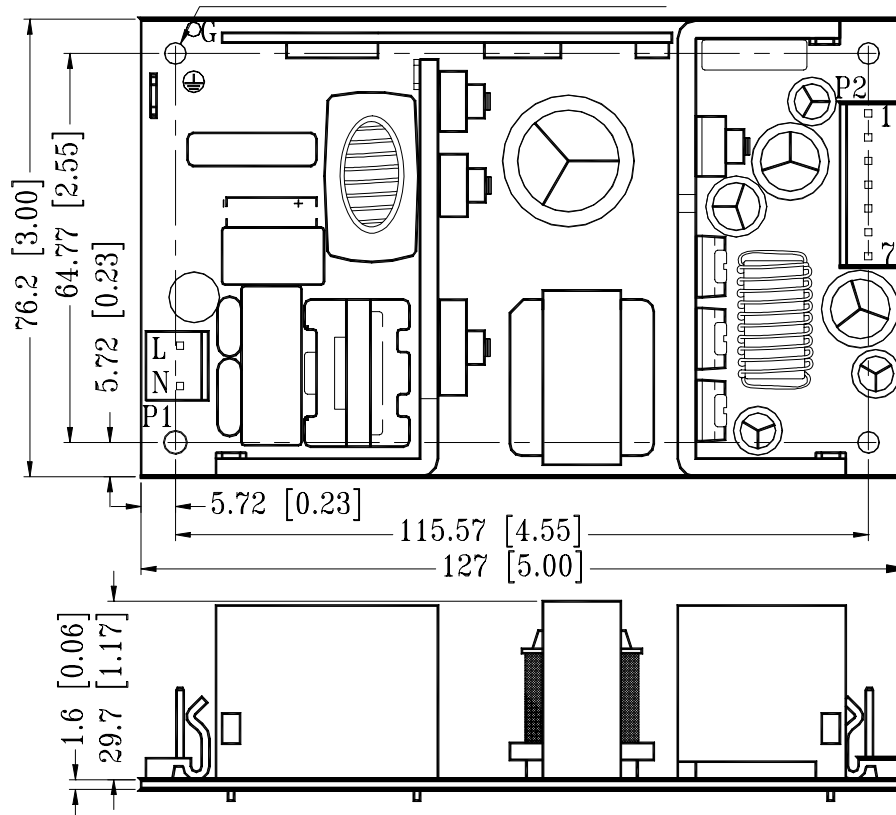
MODEL NO.	MAIN VO1@ ★		AUX. +VO2 ■		AUX. -VO3 ■	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
APS50VPT-050II	4.0A	+5.0V	2.0A	+12V	0.5A	-12V
APS50VPT-050IE	4.0A	+5.0V	2.0A	+12V	1.0A	-5V
APS50VPT-050MI	4.0A	+5.0V	1.0A	+24V	0.5A	-12V
APS50VPT-050KK	4.0A	+5.0V	1.6A	+15V	0.5A	-15V
APS50VPT-033II	6.0A	+3.3V	2.0A	+12V	0.5A	-12V
APS50VPT-033KK	6.0A	+3.3V	1.6A	+15V	0.5A	-15V

Symbol: "★" OVP built-in. "@ " Adjustable. "■" Common Choke.

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 358.0 g (12.6 Oz.)

MOUNTING HOLES 4- ϕ 3.5 [ϕ 0.14]



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT CONNECTOR & PIN #	AC INPUT			SINGLE/DUAL OUTPUT			
	AC-LINE	AC-NEUTRAL	AC-GROUND	VO1	VO2	VO3	DC COM
	P1-L	P1-N	G	P2-2,3	P2-1	P2-7	P2-4,5,6

Mating connector: Molex 5196 or equivalent.