

# APS

## Advanced Power Solutions

### UNIVERSAL INPUT AC TO DC PCB OPEN FRAME QUAD OUTPUT 14 WATTS INTERNAL SWITCHING POWER SUPPLIES APS14VI SERIES



#### FEATURES:

- ACCOMMODATE UNIVERSAL AC SOURCES
- COMPACT PCB FORMAT
- MEETS UNIVERSAL SAFETY STANDARDS
- EMI MEETS CISPR PUB. 22 & FCC CLASS B
- CE MARKING COMPLIANCE

#### SPECIFICATION

##### INPUT SPECIFICATION

**Input Voltage:** Range typ. 90-264Vac  
Rating 100 to 240Vac

**Input Connector:** Molex # 5273

**Input Frequency:** 47-63Hz

**Inrush Current:** Typ. 20A @230Vac

**Input Current:** Typ. 0.30A @115Vac/ 0.15A@230Vac

**Dielectric Withstand:** Meet IEC950

**EMI:** Meet CISPR PUB.22/ FCC Class B

**Hold-up Time:** 14mS @115Vac/ 50mS @230Vac

**Earth Leakage:** Typ. 0.6mA @230Vac

**Overload Protection (OLP):** Fully protected against output overload and short circuit  
Consult the factory for OLP setting

##### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart

**Output Current:** See Ratings Chart

**Output Wattage:** Typ. 14 watts

**Output Connector:** Molex # 5267

**Line Regulation:** Typ. 0.1%

**Load Regulation:** Main VO1 typ.  $\pm 3.0\%$   
Aux. VO2,3,4 typ.  $\pm 5\%$  (P.R.)

**Noise & Ripple:** Typ. 1% peak to peak

**OVP:** Built-in at VO1 (Zener diode)

**Adjustability:** Available at main VO1

**DC OK:** Available at main VO1

##### GENERAL SPECIFICATION

**Efficiency:** Typ. 70%

**Switching Frequency:** 40KHz

**Circuit Topology:** Fixed frequency flyback Circuit

**Transient Response:** Output voltage returns in less than 3mS following a 25% load change

**Safety standard:** IEC950/UL1950 Class II

**Operating Temperature:** 0 to +50°C

**Storage Temperature:** -20 to +85°C

**Temperature Coefficient:** Typ. 0.04% /°C

**Cooling:** Free air convection

**Construction:** PCB open frame format

**Power Density:** 1.36 Watts / Cubic Inch



## OUTPUT VOLTAGE/CURRENT RATINGS CHART

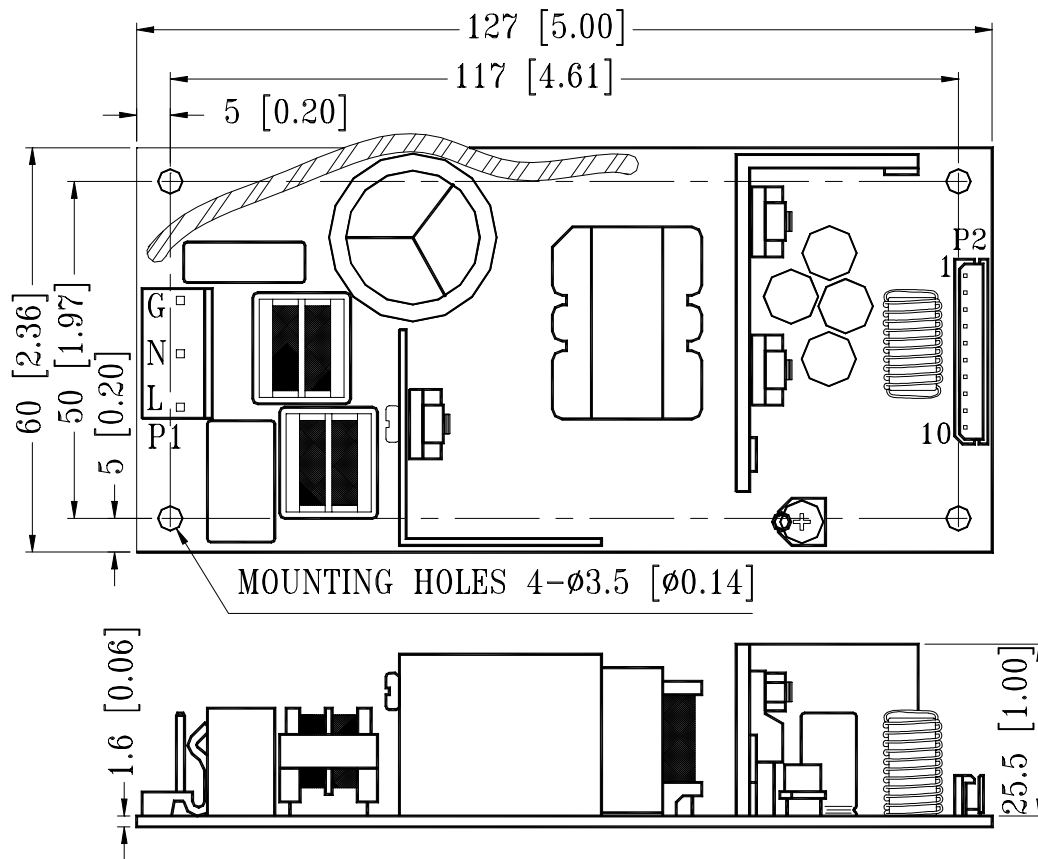
### QUAD OUTPUT

MODEL NO.	MAIN VO1 @•		AUX. VO2 •		AUX. VO3 •		AUX. VO4 •	
	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.	Typ.	Volt.
APS14VIQ-033EKK	2.5A	+3.3V	0.3A	+5.0V	0.06A	+15V	0.06A	-15V
APS14VIQ-033EII	2.5A	+3.3V	0.3A	+5.0V	0.08A	+12V	0.08A	-12V
APS14VIQ-033EIE	2.5A	+3.3V	0.3A	+5.0V	0.08A	+12V	0.20A	-5V
APS14VIQ-050DKK	2.0A	+5.0V	0.5A	+3.3V	0.06A	+15V	0.06A	-15V
APS14VIQ-050DII	2.0A	+5.0V	0.5A	+3.3V	0.08A	+12V	0.08A	-12V
APS14VIQ-050DIE	2.0A	+5.0V	0.5A	+3.3V	0.08A	+12V	0.20A	-5V

Symbol: "•" OVP built-in. "@" Adjustable. "•" Installed with Post Regulator (P.R.).

**MECHANICAL DIMENSIONS: MM [INCHES]**

**WEIGHT: 151.0g (5.32 Oz.)**



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	AC INPUT		QUAD OUTPUT						
	AC-L	AC-N	VO1	VO2	VO3	VO4	DC COM	P. GOOD	NC
CONNECTOR & PIN #	P1-L	P1-N	P2-1,2	P2-5	P2-6	P2-7	P2-3,4,8	P2-9	P2-10

Mating connector: P1 Molex 5195

P2 Molex 5264