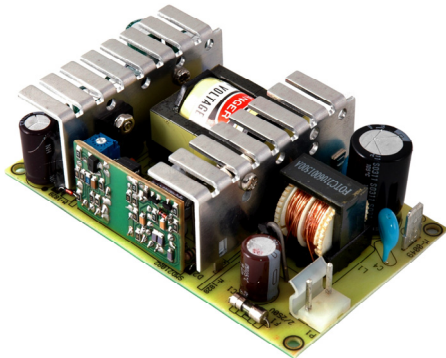


• HiTRON

36-72VDC INPUT RANGE DC-DC PCB OPEN FRAME MULTI-OUTPUT 40-50 WATTS INTERNAL SWITCHING POWER CONVERTERS HDA41 SERIES



FEATURES:

- **PCB OPEN FRAME FORMAT**
- **LOW PROFILE & COMPACT SIZE**
- **36-72VDC NOMINAL 48VDC INPUT**
- **EMI MEET EN 55022 & FCC CLASS B**
- **CE MARKING COMPLIANCE**

SPECIFICATION

INPUT SPECIFICATION

Input Voltage: Typ. 36-72Vdc,
Nominal input 48Vdc.

Input Connector: Molex V-M.

Input Current: 1.4A @ nominal input 48Vdc.

Dielectric Withstand: Meet IEC 60950-1 regulation.

EMI: Meet EN 55022 & FCC Class B.

OUTPUT SPECIFICATION

Output Voltage: See Ratings Chart.

Output Current: See Ratings Chart.

Output Wattage: Typ. 45W continuous.

Output Connector: Molex V-M.

Line Regulation: Typ. 0.1-0.5%.

Load Regulation: Main VO1 typ. $\pm 1.0\%$.
Aux. VO2 typ. $\pm 2.0-3.0\%$ (Stacked)
Aux. VO3 typ. $\pm 1.0-2.0\%$ (P.R.)

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

OVP: Built-in at main VO1.

Adjustability: Available at main VO1.

Overload Protection (OLP):
Fully protected against output overload or short circuit.
Typical 125-130% max. load.
Consult the factory for special OLP setting

GENERAL SPECIFICATION

Efficiency: Typ. 75%.

Switching Frequency: 55K Hz.

Circuit Topology: Fixed Frequency Flyback Circuit.

Transient Response: Typ. 2mS following a 25%
load change.

Safety Standard: IEC 60950-1 Class I.

Power Density: 3.1Watts / Cubic Inch.

Operating Temperature: 0 to +50°C at full load,
derating to half @ +70°C.

Storage Temperature: -40°C to +85°C.

Temperature Coefficient: $\pm 0.04\%/^{\circ}\text{C}$.

Cooling: Convection cooling is adequate. Moving air is
recommended for operating in a confined area.

Construction: PCB open frame format.

Note: Due to requests in market and advances in technology, specifications subject to change without notification.

OUTPUT VOLTAGE / CURRENT RATINGS CHART

DUAL OUTPUT

MODEL NO.	MAIN VO1 @★			AUX. VO2 †			
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Peak
HDA41-48B-D050I	4.0A	+5.0V	5.0A	2.0A	+12V	3.0A	4.0A
HDA41-48B-D033E	5.0A	+3.3V	6.0A	5.0A	+5V	6.0A	6.0A

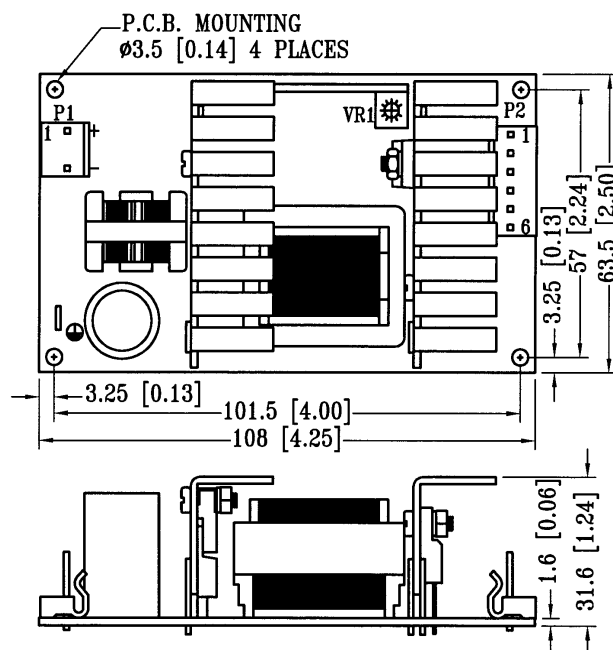
TRIPLE OUTPUT

MODEL NO.	MAIN VO1 @★			AUX. VO2 †				AUX. VO3 •		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Peak	Typ.	Volt.	Max.
HDA41-48B-T050II	4.0A	+5.0V	5.0A	2.0A	+12V	3.0A	4.0A	0.2A	-12V	1.0A
HDA41-48B-T033EI	5.0A	+3.3V	6.0A	5.0A	+5V	6.0A	6.0A	0.2A	-12V	1.0A

Symbol: "★" OVP built-in. "@" Adjustable. "†" Stacked on main output. "•" Installed with Post Regulator (PR).

MECHANICAL DIMENSIONS: MM [INCHES]

WEIGHT: 170.0g (6.00 Oz.)



INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

ASSIGNMENT	DC INPUT			DUAL OUTPUT				TRIPLE OUTPUT			
	+Vin	-Vin	Gnd.	VO1	VO2	NC	DC COM	VO1	VO2	VO3	DC COM
CNTR & PIN #	P1-1	P1-2	GND	P2-2,3	P2-1	P2-6	P2-4,5	P2-2,3	P2-1	P2-6	P2-4,5

Mating connector: Molex 5195 or 5239 series.