

# HiTRON

## 36-72VDC INPUT RANGE DC-DC OPEN FRAME TRIPLE OUTPUT 45-50 WATTS INTERNAL SWITCHING POWER CONVERTERS HDC46 SERIES



### FEATURES:

- 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:** Terminal block.  
**Power On Switch:** Installed.  
**Input Current:** 1.2A @ nominal input 48Vdc.  
**Dielectric Withstand:** Meet IEC950 regulation.  
**EMI:** Meet EN55022 / FCC Class B.  
**Overload Protection (OLP):** Fully protected against output overload or short circuit.  
Typical 120-150% max. load.  
Consult the factory for special OLP setting.

#### OUTPUT SPECIFICATION

**Output Voltage:** See Ratings Chart.  
**Output Current:** See Ratings Chart.  
**Output Wattage:** Typ. 46Watts continuous.  
**Output Connector:** Output cable.  
**Line Regulation:** Typ. 0.1-0.5%.  
**Load Regulation:** Main VO1 typ.  $\pm 1.0-2.0\%$ .  
Aux. VO2 typ.  $\pm 2.0-3.0\%$ .(PR)  
Aux. VO3 typ.  $\pm 2.0-3.0\%$ .(PR)  
**Noise & Ripple:** Typ. 1% peak to peak.  
**OVP:** Built-in at main VO1.  
**Adjustability:** Available at main VO1.

#### GENERAL SPECIFICATION

**Efficiency:** Typ. 78%.  
**Switching Frequency:** 40K Hz.  
**Circuit Topology:** Fixed Frequency Flyback Circuit.  
**Transient Response:** Typ. 2 mS following a 25% load change.  
**Safety Standard:** UL1950 / Class I.  
**Power Density:** 2.06Watts / 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:** Metal box format.

## OUTPUT VOLTAGE/CURRENT RATINGS CHART

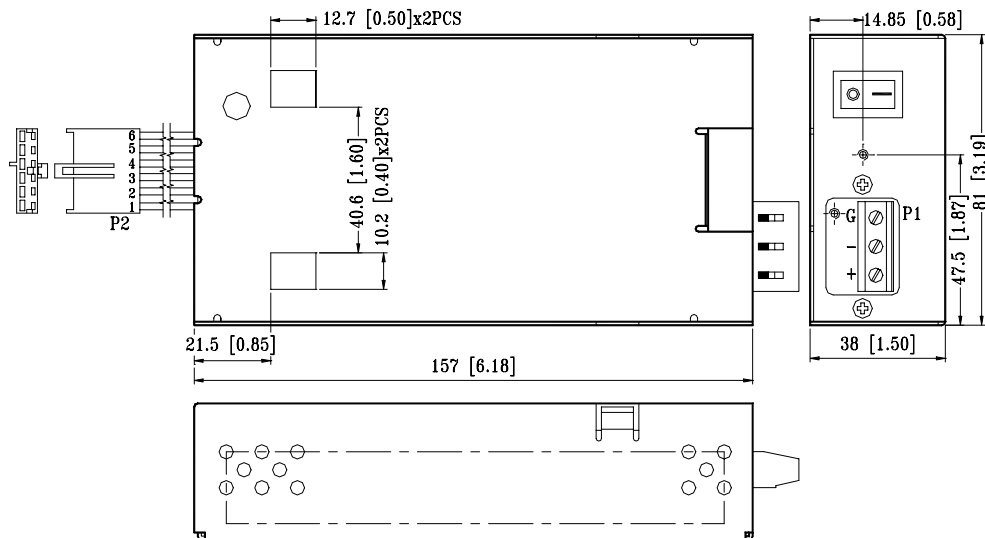
### TRIPLE OUTPUT

MODEL NO.	MAIN VO1 @★			AUX. VO2●■			AUX. VO3 ●		
	Typ.	Volt.	Max.	Typ.	Volt.	Max.	Typ.	Volt.	Max.
HDC46-48B-T050II	5.0A	+5.0V	7.0A	1.2A	+12V	1.5A	0.5A	-12V	0.6A
HDC46-48B-T033EI	5.0A	+3.3V	6.0A	3.0A	+5V	3.5A	0.5A	-12V	0.6A

Symbol: "★" OVP built-in. "@" Adjustable. "■" Coupled common choke. "●" Installed with Post Regulator (PR).

**MECHANICAL DIMENSIONS: MM [INCHES]**

**WEIGHT: 607.0g (21.40 Oz.)**



### INPUT & OUTPUT CONNECTORS PIN ASSIGNMENT

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