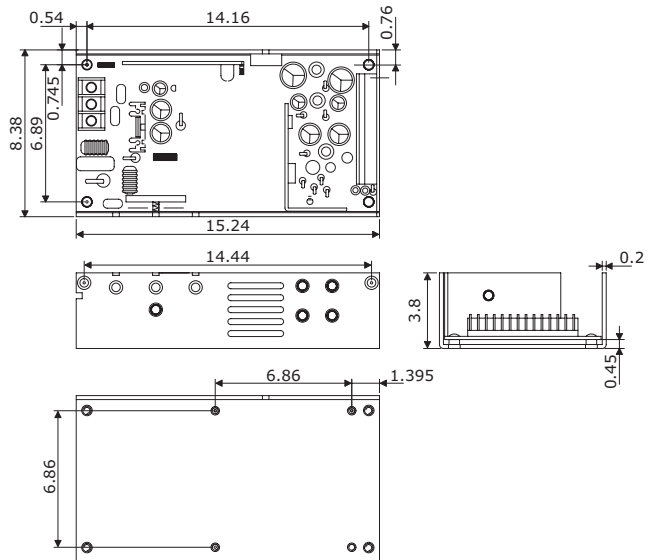


# Industrial Power Supply

## MPD-810H

120W 10~30VDC DC/DC ATX Open Frame Power Supply



### ■ Features

- \***Input Voltage:** The range of input voltage is from 10~30VDC, nominal input voltage is 12 and 24VDC
- \***Input Current:** The maximum is 18A at 10VDC input
- \***Inrush Current:** The inrush current is less than 30A at 10VDC input
- \***Load Range:** At the factory, the +5V output is set between 5.08V to 5.13V and all output at 60% rated load; the other outputs are checked to be within the accuracy range. The maximum total combined output power on the +3.3V and +5V rails is 70W. The max. load cannot exceed 120W
- \***Ripple And Noise:** The peak to peak ripple and noise for +5V, +3.3V output are less than 100mV for +5Vsb is 120mV, for +12V is less than 120mV, for -12V is less than 200mV at ranted load and nominal input, which is measured by a 20MHz bandwidth limited oscilloscope and the each output is connected with a 0.47uF capacitor
- \***Line Regulation:** The line regulation is less than +/-2.5% at rated load with +/-10% change in input voltage
- \***Load Regulation:** The load regulation for +5V is less than +/-2%, for +12V is less than +/-5%, for -12V +/-5%, +3.3V is less than +/-5% while the measuring is done by changing the measured output loading +/-40% from 60% rated load, and keep other output is at 60% rated load
- \***Power On/Off:** The power supply will start-up when the power On/Off pin be connected to secondary GND
- \***Power Good Signal:** The power is turned on, the power good signal will go high between 100ms to 500ms after all output DC voltage are within regulation limits
- \***Power Fail Signal:** The power fail signal will go low at least 1ms before any of the output voltages fall below the regulation limits
- \***Efficiency:** The efficiency is higher than 70% while measuring at nominal line and rated load
- \***Altitude:** Will operate properly at any altitude between 0 to 10000ft
- \***Protection:** The power supply will generate the hiccup mode to protect itself against short circuit or over load condition, and will return to normal after wrong condition is removed
- \***Temperature:** 0~50°C, output power is 120W forced air cooling, 80W convection cooling (operating); -20~+70°C (storage)
- \***Humidity:** 10~90% non-condensing
- \***Connectors:**  
 DC Input: Dinkle DT-35-B01W-03 or equivalent  
 DC Output: Molex 5273-14A or equivalent  
 DC Output: Molex 5045-03A or equivalent  
 Power Good Output: Molex 5045-02A or equivalent  
 Fan Output: Molex 5045-02A or equivalent
- \***Dimensions:** 8.38 x 15.24 x 3.81 cm; tolerance specified is +/-0.4mm

### ■ Safety Standards

- \***Safety:** UL 1950 / CSA 22.2 No.234 / VDE EN60 950
- \***EMI:** FCC Class B / EN55022B
- \***EMS:** Level 3 of IEC-801, 802, 803, 804 / UL 1950 / CSA 22.2 No.234 / VDE EN 60 950

### ■ Connectors

CN2		CN3	
PIN	Output	PIN	Output
1~3	+5V	1	PW On/Off
4~8	GND	2	GND
9~10	+12V	3	5Vsb
11~13	3.3V		
14	-12V		

CN4		CN5 (for Fan)	
PIN	Output	PIN	Output
1	GND	1	GND
2	PW Good	2	+12V

Output Voltage	Min. Load	Rated Load	Max. Load	Voltage Accuracy
+5V	1A	8A	10A	4.95~5.15V
+12V	0A	1.5A	4A	11.25~12.75V
-12V	0A	0.5A	1A	-11.75~-13.1V
+3.3V	0A	5A	8A	3~3.5V
+5Vsb	0.1A	0.75A	----	4.8~5.2V



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