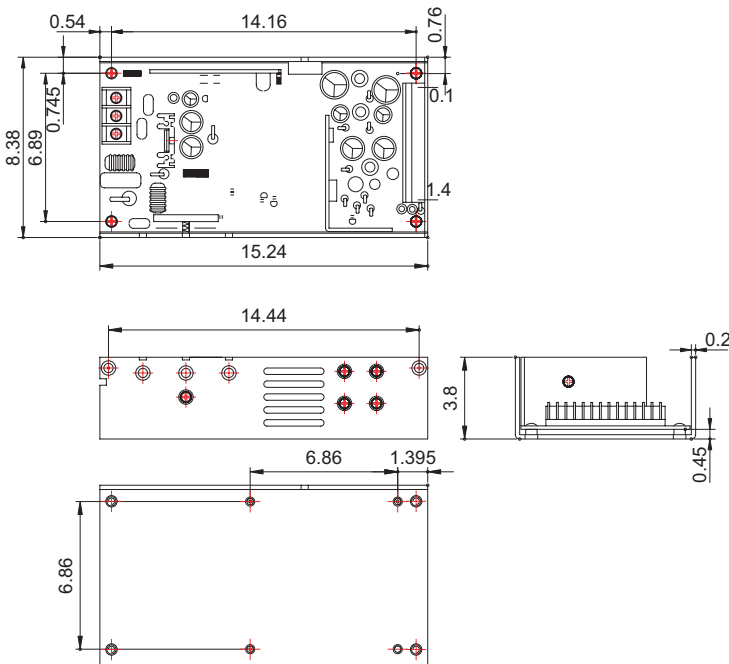


# Power Supply

## MPD-810H

### 120W ATX Power Supply



### ★ Specifications

- \* **Input Voltage:** The range of input voltage is from 10~30VDC, nominal input voltage is 12 and 24VDC
- \* **Input Current:** The maximum input current 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 rated 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 worst 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

CN2		CN3		CN4		CN5 (for Fan)	
Pin	Output	Pin	Output	Pin	Output	Pin	Output
1~3	+5V	1	PW On/Off	1	GND	1	GND
4~8	GND	2	GND	2	PW Good	2	+12V
9~10	+12V	3	5Vsb				
11~13	3.3V						
14	-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

### Safety Standards

- \* **Safety:** UL 60950, CSA 22.2 No.234, EN 60950
- \* **EMI:** FCC docket 20780 curve "B", EN 55022 "B"
- \* **FCC:** IEC-801-2 Level 3.8KV air discharge, IEC-801-3 Level 3 3V/M, IEC-801-4 Level 3 2KV

The Industrial PC Authority



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