

120W 30~120VDC DC-DC ATX Open Frame Power Supply MPD-810H-V



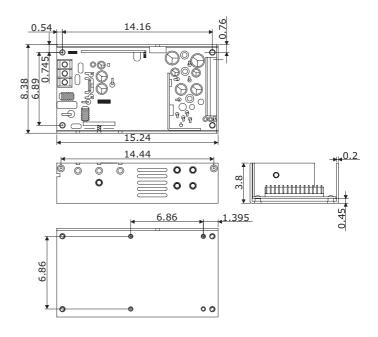
CN2	
PIN	Output
1~3	+5V
4~8	GND
9~10	+12V
11~13	3.3V
14	-12V

Output	
PW On/Off	
GND	
5Vsb	

CN4	
PIN	Output
1	GND
2	PW Good

CN5 (for Fan)		
PIN	Output	
1	GND	
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



Specifications

Input Voltage

The range of input voltage is from 30~120VDC, nominal input voltage is 48 and 90VDC

Input Current

The maximum is 7A at 30VDC input

Inrush Current

The inrush current is less than 70A at 30VDC input

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 connot 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 $\pm -2.5\%$ at rated load with $\pm -10\%$ 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

0~10,000ft

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

0~+50°C, outpur power is 120W forced air cooling, 85W 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

Safety UL 60950 / CSA 22.2 No.234 / EN60950

FCC docket 20780 curve B / EN55022B

FMS

IEC-801-2 Level 3 / IEC-801-3 Level 3 / IEC-801-4 Level 4 **Dimensions**

 $8.38 \times 15.24 \times 3.81$ cm; tolerance specified is +/-0.4mm