



# MPD-810H

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

Industrial Power Supply

DC-DC



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

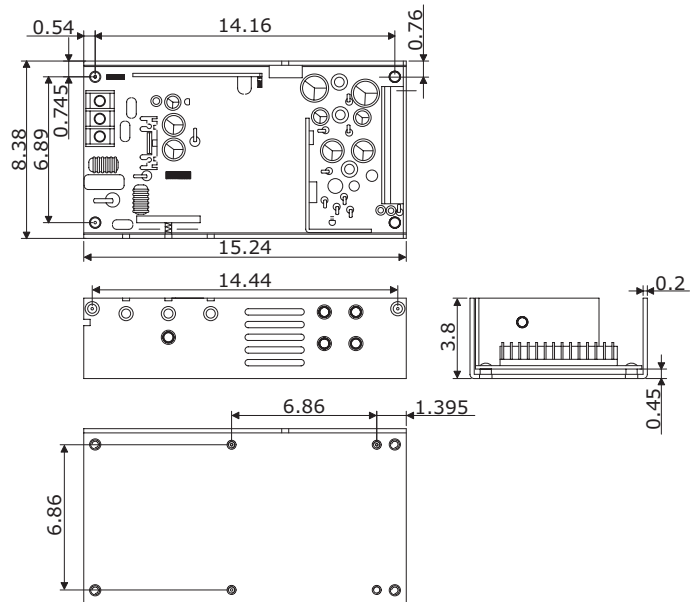
CN3		
PIN	Output	
1	PW On/Off	
2	GND	
3	5Vsb	

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 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 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

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

### 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

### 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

### Dimensions

8.38 x 15.24 x 3.81 cm; tolerance specified is +/-0.4mm