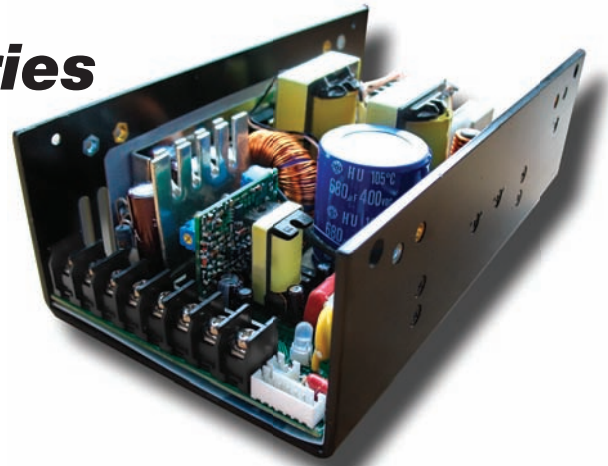


MPU-800U Series

Single Output 800W Power Factor Corrected AC/DC Power Supplies



Key Features:

- Compact 800W Supply
- PFC to EN61000-3-2 "D"
- EN 60950 Approved (UL)
- CE Certified
- FCC Class B Emissions
- 12 - 60 V Output Voltages
- Universal AC Input
- Current Share Option



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Electrical Specifications

Specifications typical @ +25°C, nominal input voltage & rated output current, unless otherwise noted. Specifications subject to change without notice.

Input						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Input Voltage Range	Universal	90		264	VAC	
Input Frequency		47		63	Hz	
Input Current, Full Load	90 VAC		5		A	
Inrush Current, Cold Start	110 VAC			35	A	
	220 VAC			70	A	
Leakage Current	240 VAC		3.5		mA	
Power Factor Correction	Meets EN61000-3-2 Class D					
Input Protection	T12A/250V Fuse					
Input Undervoltage Protection	Under 80VAC ±5 VAC Unit Shuts Down; Unit Recovers Over 86 VAC					
Output						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Output Voltage Adjustment	By Trim Pot		±5.0		%	
Output Regulation, See Note 1			±1.0		%	
Hold Time	120 VAC, 80% Load	20			mSec	
Ripple & Noise (20 MHz), See Note 2	See Model Selection Guide					
Overload Protection	Foldback Circuit, Autorecovery	110		140	%	
Over Voltage Protection	>130% of Rated Output Voltage. Recycle AC Input.					
Over Temperature Protection	Autorecovery		+85		°C	
Temperature Coefficient			±0.04		%/°C	
Transient Recovery Time, See Note 4			2.5		mS	
Transient Response Deviation	50% Load Change		5		%	
Overshoot/Undershoot	At Turn On/Off			±5.0	%	
Turn On Delay	120 VAC			1.5	S	
Output Short Circuit	Continuous With Autorecovery					
General						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Isolation Voltage, See Note 5	Input - Output	3,000			VAC	
	Input - FG (Frame Ground)	1,500			VAC	
	Primary - Core	1,500			VAC	
Switching Frequency	Fixed		24		kHz	
Interface Signals						
LED Power Supply On	Bi-color LED Is Green For Power On; Orange When Protection Enabled					
Fan Fail	An open collector output rated for 28V/5 mA sink current maximum.					
Current Monitor	Goes high if a fan failure is detected					
Current Share	A 0.5 to 3.0V Output That Represents 0% to 100% Output Current					
Remote Sense	Optional For Sharing Up To Four Units. Contact The Factory For Details					
Power Good Signal	Compensates For Up To A 0.5V Line Drop					
Remote On/Off	Goes TTL high 100 to 500 mS after regulation. Goes low at least 1 mS before the loss of regulation. Will sink 100 mA.					
	A TTL low signal inhibits the output. Hiccup mode.					
Environmental						
Parameter	Conditions	Min.	Typ.	Max.	Units	
Operating Temperature Range	Ambient	0	+25	+70	°C	
Output Derating			2.5%/°C from +50 °C to +70 °C			
Storage Temperature Range		-20		+85	°C	
Cooling	See Model Selection Guide					
Operating Humidity	RH, Non-condensing			90	%	
Reliability Specifications						
Parameter	Conditions	Min.	Typ.	Max.	Units	
MTBF	MIL HDBK 217F, 30°C, Gnd Benign	150			kHours	
Safety Standards	UL 60950, EN 60950					
EEMI Compliance	Compliance to EN55022 (CISPR22) Class B; EN61000-3-2,3					
EMS Immunity Compliance	EN6100-4-2,3,4,5,6,8,11; EN55024,; CE Marked (LVD)					
Vibration	5~50 Hz, Acceleration 7.35 ms ³ on X, Y & Z Axis					

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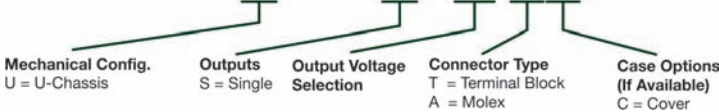
Model Number	Output Voltage (VDC)		Output Current With 30 CFM (Max A)	Max. Output Power (W)	Ripple & Noise (% p-p)	Efficiency (%)
	PreSet	Range				
MPU-800S-12YZ	12 VDC	12.0 - 14.0	62.50	750	±1%	80%
MPU-800S-15YZ	15 VDC	15.0 - 19.0	50.00	750	±1%	80%
MPU-800S-24YZ	24 VDC	20.0 - 26.0	40.00	800	±1%	83%
MPU-800S-36YZ	36 VDC	27.0 - 36.0	29.63	800	±1%	83%
MPU-800S-40YZ	40 VDC	37.0 - 47.0	21.62	800	±1%	83%
MPU-800S-48YZ	48 VDC	48.0 - 60.0	16.67	800	±1%	83%

Notes:

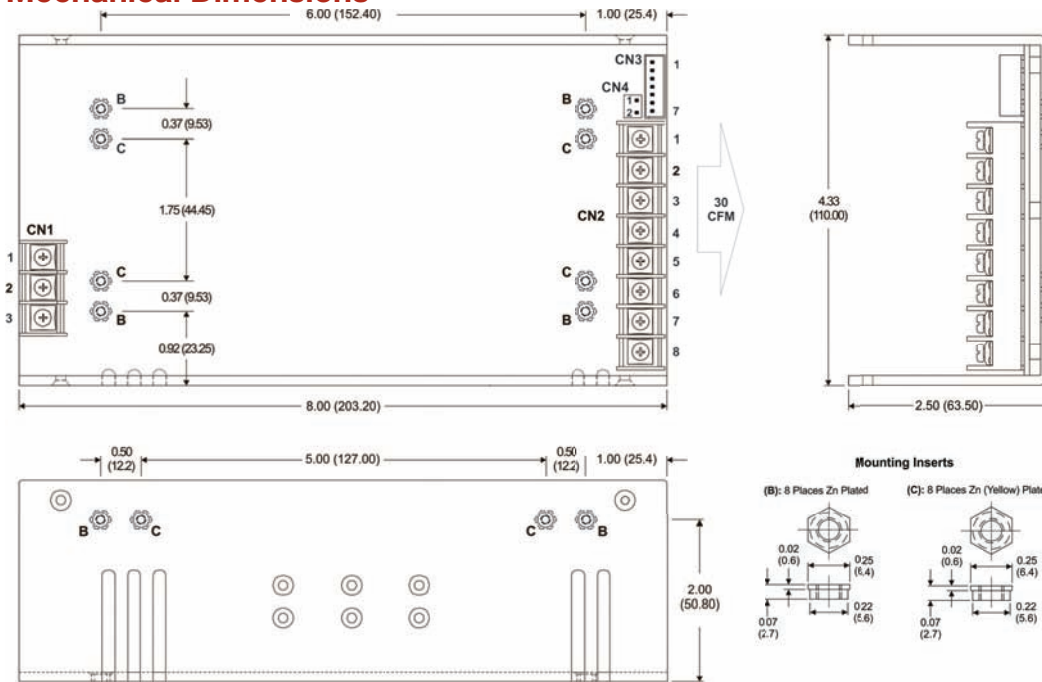
- Output regulation includes line & load.
- Ripple & noise is measured from 10 Hz to 20 MHz. Connection to the unit is made with a 0.1 µF ceramic capacitor & a 22 µF electrolytic capacitor connected in parallel.
- A 1% minimum load is required to maintain regulation & ripple specifications.
- Transient recovery is measured to within a 1% error band for a load step change of 50% to 100%.
- Isolation specifications are production HI-Pot tested for 3 seconds.
- The full output range (see table) is covered in the safety agency certification. Standard models are factory set to the Preset voltage, but may be set to other levels within the range without affecting the agency certification. For more information, contact the factory.
- Output power is given for the factory preset voltage. With the exception of the "12" & "15" models, the maximum continuous output power level is 800W with 25 CFM airflow. All models provide a peak power level of 900W for a maximum duration of 500 µS. For more information, contact the factory.
- Each unit includes an input fuse (250V/12A). Since this fuse is not field replaceable, it is recommended that an external fuse of the same size be used on the input of the power supply for protection.

Model Number

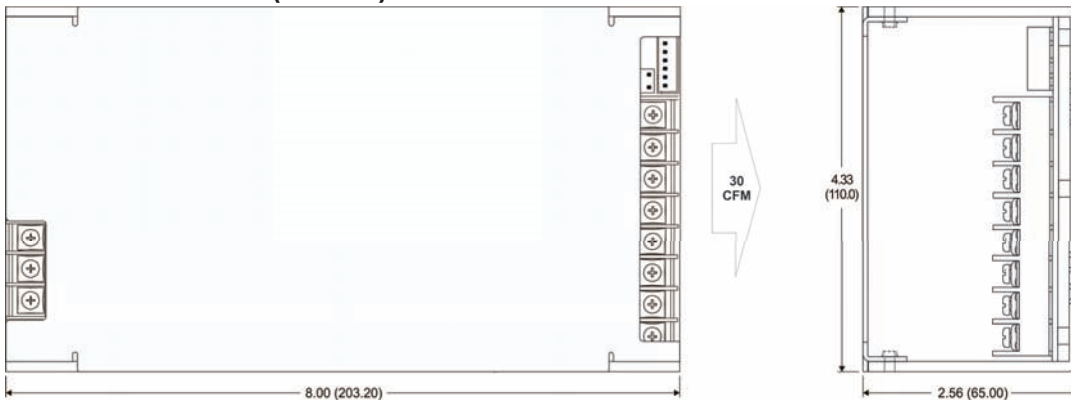
MPU-800S-XXYZ



Mechanical Dimensions



U-Chassis Cover (C Suffix)



Connections

Input Connector (CN1):

- Terminal Block: Howder HD-121-3P: M3.5 Screws 3 pins, 9.5 mm Centers
- Molex Mating Part No: Molex 09-91-7000 or equivalent (two pins removed)

Pin	Function
1	AC-Line
2	AC-Neutral
3	Field Ground

Output Connector (CN2):

- Terminal Block: Howder HD-121-8P: M3.5 Screws 8 pins, 9.5 mm Centers
- Molex Mating Part No: Molex 09-91-2000 or equivalent

Howder		Molex	
Pin	Function	Pin	Function
1-4	+VOUT	1-10	+VOUT
5-8	-VOUT	10-20	-VOUT

Logic Signal Connector (CN3):

- Mating Part No: JST XHP-7 or equivalent (CHYAO SHIUNN JS-2001-07)

Pin	Function
1	+ Remote Sense
2	- Remote Sense
3	Remote On/Off
4	Power Good
5	Common
6	Current Share
7	Current Monitor

Fan Driver Connector (CN4):

- Mating Part No: JST XHP-2 or equivalent (CHYAO SHIUNN JS-2001-2)

Pin	Function
1	Minus
2	Plus

Notes:

- All dimensions are typical in inches (mm)
- Tolerance x.xx = ±0.02 (±0.50)