

# **LPS360-M Series**

360 Watt AC-DC Power Supply

**Total Power:** 200 - 360 W **Input Voltage:** 90 - 264 Vac

120 - 300 Vdc

Outputs: Single

#### **SPECIAL FEATURES**

- Medical and ITE safeties
- Active power factor correction
- 3" x 5" footprint
- Less than 1U high
- EN61000-3-2 compliant
- Remote sense
- Power fail
- Adjustable main output
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection
- Isolated 12 V fan output
- LPX200 enclosure kit available
- 5 V Standby output
- Remote Inhibit
- PMBus commands
- Digital I2C interface
- Class I and Class II approved
- Dual AC fuses

#### **SAFETY**

TUV 60950, 60601-1
UL 60950, 60601-1
cULus 60950, 60601-1

CB Certificate & report

CE Mark (LVD)CCC Approval



Electrical Specifications					
Input					
Input range:	90 - 264 Vac; 120 - 300 Vdc				
Frequency:	47-63 Hz				
Inrush current:	50 A max., cold start @ 25 °C				
Efficiency:	Up to 92% at full load				
EMI/RFI:	FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted				
Power factor:	0.99 typical				
Safety ground leakage current:	175 uA at 132VAC, 60 Hz for class I, 100 ua @ 264VAC, 60 Hz for class II				
Output	Output				
Maximum power:	200-240 W (see de-rating) for convection, 360 W with 400 LFM of forced air				
Adjustment range:	12 V and 24 V models, -0%,+15%, 15 V and 48 V models, -5%,+10%				
Standby output:	5V@1A convection, 2A with forced air				
Fan output:	12 V @ 0.5A convection , 1 A forced air				
Hold-up time:	32 ms @ 200 watts, 14ms @ 360 watts, 120 Vac input				
Overload protection:	Short circuit protection on all outputs. Case overload protected @ 110-160% above rating				
Overvoltage protection:	15-50% above nominal output				
Logical Control					
Power failure:	Open collector logic signal goes high 100-500 msec after main output; it goes low at least 6 msec before loss of regulation				
Remote sense:	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.				



Environmental Specifications				
Operating temperature:	0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C20 °C start up			
Storage temperature:	-40 °C to +85 °C			
Electromagnetic susceptibility:	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3			
Humidity:	Operating; non-condensing 10% to 95% RH			
Vibration:	IEC68-2-6 to the levels of IEC721-3-2			
MTBF calculated:	1 million hours at full load and 25 °C ambient conditions. 230 Vac input, Bellcore			

Ordering Information							
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with Forced Air	Peak Load	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPS363-M	12 V	0 A	20 A	30 A	39 A	±2%	120 mV
LPS364-M	15 V	0 A	16 A	24 A	31 A	±2%	150 mV
LPS365-M	24 V	0 A	10 A	15 A	19.5 A	±2%	240 mV
LPS368-M	48 V	0 A	5 A	7.5 A	9.75 A	±2%	480 mV

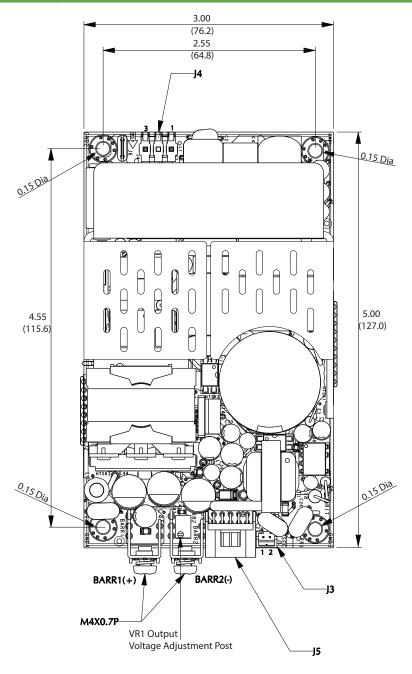
- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 mHz bandwidth and 10 µF (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

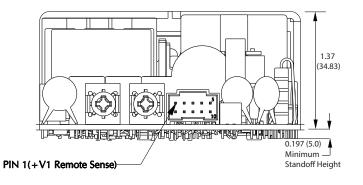
Pin Assignments				
Connector	LPS360-M			
J4	Pin 1	Neutral		
	Pin 3	Line		
Barr	Barr-1	Main output +		
	Barr-2	Main output common		
J5	Pin 1	+V1 Remote sense		
	Pin 2	-V1 Remote sense		
	Pin 3	+5V standby		
	Pin 4	5 V Standby return		
	Pin 5	+Power fail		
	Pin 6	Forced air operation		
	Pin 7	Inhibit		
	Pin8	GND		
	Pin 9	SDA		
	Pin 10	SCL		
J3	Pin1	+12 V Fan		
	Pin 2	12 V fan Return (isolated)		

Mating Connectors				
J4 AC Input	Molex 09-50-3031 (connector) PINS: 08-52-0072			
AC Ground:	Molex 01-90020001			
DC Output (Barr)	Molex 19141-0058/0063 or 19099/0048 Spade lug based on Cable Ampacity/AWG			
Control Signals (J5)	Molex 90142-0010 (USA) PINS: 90119-2110 or Amp: 87977-3 PINS: 87309-8			
J3 Fan Output	Molex 51065-0200 Pins: 50212-8100			
The Artesyn Connector Kit #70-841-029, includes all of the above.				

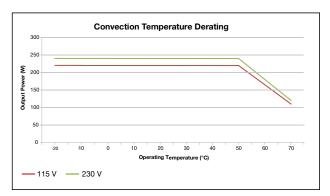
- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$ mm)
- 3. Mounting holes MH1 and MH2 should be grounded for EMI purposes.
- 4. Mounting hole MH1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25  $^{\circ}\text{C}$  unless otherwise stated.
- 6. This power supply requires mounting on metal standoffs 0.20" (5m) in height.
- 7. For forced air operation connect pin 6 to pin 8 of J5
- 8. Warranty: 2 years
- 9. Weight: 0.75 lb/0.34 kg

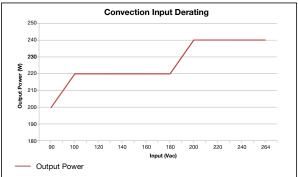
### **Mechanical Drawings**





#### **Performance Data**





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