# LPS Series 240W AC-DC DIN Rail Power Supplies



Technical Datasheet

# **Key Features**

- 24 & 48 VDC
- Universal Input: 90-264VAC / 120-375VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated





# **Technical Specification - 240W & 300W Output**

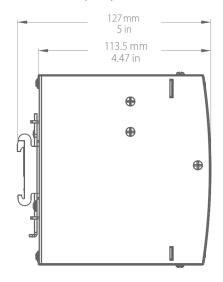
Model	LPS-1-240-24DC	LPS-1-240-48DC
Input Voltage	90-264VAC / 120-375VDC	
Output Wattage	240W	240W
Output Voltage / Power Dissipation	24VDC / 35W	48VDC / 32W
Output Current	10A	5A
Efficiency	85.5%	90%
General Specification		
Approval		cURus
Isolation Voltage	3000VAC/4242VDC	
Isolation Resistance	100MΩ @ 500VDC	
Ambient Temperature	-20 to +70°C	
Derating	(55 to 70°C) 2.5%/°C	
Storage Temperature	-40 to +85°C	
Relative Humidity	10 to 95% RH	
Cooling	Free air convection	
Dimensions	L125 x W63 x D113.5 (127 inc. DIN rail mount) mm	
Weight	1000g	
Case Material	Metal	
Input Specifications		
Rated Input Voltage	115-230VAC	
Input Voltage Range	90-264VAC, 127-375VDC	
Line Frequency	50/60Hz	
Power Factor @ 115VAC	0.6 Typical (0.61 Measured)	
Power Factor @ 230VAC	0.75 Typical (0.77 Measured)	
Inrush Current (115 / 230VAC)	20 / 35A	
Output Specifications		
Output Voltage Accuracy	±1%	
Minimum Load	0%	
Line Regulation	±0.5%	
Load Regulation	±1%	
Turn On Time	1000ms after AC applied to input at full resistive load	
Voltage Fall Time	150ms	
Voltage Rise Time	150ms	
Hold Up Time (115 / 230VAC)	10 / 16ms	
Temperature Coefficient	±0.03%/°C	
Ripple & Noise	150mVp-p	
Voltage Trim Range	22.5-28.5VDC	47-56VDC
Control & Protection		
Rated Overload Protection	105-130%	
Over Voltage Protection	29-33VDC	56-65VDC
Output Short Circuit	Shutdown Output Voltage with Auto Recovery	

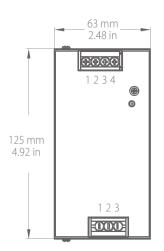
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# **Dimensions** (mm)





# **Pin Connections**

Input		
Pin No.	Description	
1	FG 🖶	
2	AC / N or DC-	
3	AC / L or DC+	

Output		
Pin No.	Description	
1, 2	DC OUTPUT V-	
3, 4	DC OUTPUT V+	

# Installation

#### Ventilation / Cooling Normal convection All sides 25mm free space For cooling recommended

#### **Connector Size Range**

AWG24-10 (0.2  $\sim$  4mm<sup>2</sup>) flexible / solid cable,

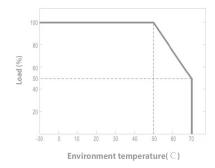
- Input connector can withstand torque at maximum 9 pound-inches
- Output connector can withstand torque at maximum 5.5 pound-inches 8 m/m striping cable end recommends

Use copper conductors only, 60 / 75°C

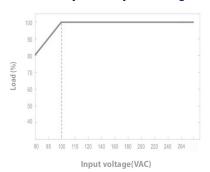
# Construction

Easy snap-on mounting onto the DIN-Rail (TS35/7.5 or TS35/15), unit sits safely and firmly on the rail.

# **Derating Curve**



# **Minus Output & Input Voltage Curves**



# **Circuit Schematic**

