

LPS Series 10W to 90W

AC-DC DIN Rail Power Supplies



Technical Datasheet

Key Features

- 5, 12 & 24 VDC
- Universal Input: 85-264VAC / 120-370VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



Technical Specification

Model	LPS-1-010-24DC	LPS-1-024-24DC	LPS-1-030-5DC	LPS-1-040-12DC
Input Voltage	85-264VAC / 120-370VDC			
Output Wattage	10W	24W	30W	40W
Output Voltage	24VDC	24VDC	5VDC	12VDC
Output Current	0.42A	1A	6A	3.33A
Efficiency	84%		78%	86%
General Specification				
Approval	cURus - Class 2			
Isolation Voltage	3000VAC/4242VDC			
Isolation Resistance	100MΩ @ 500VDC			
Ambient Temperature	-30 to +70°C (refer to derating curve)			
Derating	(50 to 70°C) 2.5%/°C			
Storage Temperature	-40 to +85°C			
Relative Humidity	20 to 95% RH			
Cooling	Free air convection			
Dimensions	92 x 23 x 100mm		92 x 41 x 100mm	
Weight	140g	150g	280g	
Case Material	Plastic			
Input Specifications				
Rated Input Voltage	85-264VAC / 120-370VDC			
Line Frequency	50/60Hz			
Inrush Current (115 / 230VAC)	35 / 70A		30 / 60A	
Output Specifications				
Output Voltage Accuracy	+1%			
Minimum Load	0%			
Line Regulation	±1%			
Load Regulation	±5%			
Turn On Time	500ms			
Voltage Fall Time	150ms			
Voltage Rise Time	30ms			
Hold Up Time (115 / 230VAC)	30 / 30ms			
Ripple & Noise	150mVp-p		80mVp-p	120mVp-p
Voltage Trim Range	21.6-28.8VDC		4.5-5.75VDC	21.6-28.8VDC
DC ON & LOW Indicator (Green & Red LED)	18-21.6VDC		3.5-4.5VDC	18-21.6VDC
Control & Protection				
Rated Overload Protection	> 105%-150%			
Over Voltage Protection	27.6-32.4VDC		6.25-7.25VDC	15.6-18VDC
Outout Short Circuit	Hiccup Mode			

LPS Series 10W to 90W AC-DC DIN Rail Power Supplies



Technical Datasheet

Key Features

- 5, 12 & 24 VDC
- Universal Input: 85-264VAC / 120-370VDC
- High Efficiency
- Short Circuit Protection
- Internal Input Filter
- IP20 Protection Rated
- Class 2



Technical Specification

Model	LPS-1-040-24DC	LPS-1-060-12DC	LPS-1-060-24DC	LPS-1-090-12DC
Input Voltage	85-264VAC / 120-370VDC			
Output Wattage	40W	60W	60W	90W
Output Voltage	24VDC	12VDC	24VDC	12VDC
Output Current	1.7A	5A	2.5A	7.5A
Efficiency	88%	86%	88%	83%
General Specification				
Approval	cURus - Class 2			
Isolation Voltage	3000VAC/4242VDC			
Isolation Resistance	100MΩ @ 500VDC			
Ambient Temperature	-30 to +70°C (refer to derating curve)			
Derating	(50 to 70°C) 2.5%/°C			
Storage Temperature	-40 to +85°C			
Relative Humidity	20 to 95% RH			
Cooling	Free air convection			
Dimensions	92 x 41 x 100mm			92 x 55 x 100mm
Weight	280g			400g
Case Material	Plastic			
Input Specifications				
Rated Input Voltage	85-264VAC / 120-370VDC			
Line Frequency	50/60Hz			
Inrush Current (115 / 230VAC)	30 / 60A			
Output Specifications				
Output Voltage Accuracy	+1%			
Minimum Load	0%			
Line Regulation	±1%	±2%		±1%
Load Regulation	±5%			±1%
Turn On Time	500ms			
Voltage Fall Time	150ms			
Voltage Rise Time	30ms			
Hold Up Time (115 / 230VAC)	30 / 30ms			
Ripple & Noise	150mVp-p	120mVp-p	150mVp-p	120mVp-p
Voltage Trim Range	21.6-28.8VDC	10.8-13.8VDC	21.6-28.8VDC	10.8-13.8VDC
DC ON & LOW Indicator (Green & Red LED)	18-21.6VDC	9-10.8VDC	18-21.6VDC	9-10.8VDC
Control & Protection				
Rated Overload Protection	> 105%-150%			
Over Voltage Protection	31.2-36VDC	15.6-18V	31.2-36VDC	15.6-18V
Output Short Circuit	Hiccup Mode			

IMO

Technical Datasheet

Technical drawings of three LPS-1 power supply units showing front, rear, and side views with dimensions.

Front View (Left): Shows the front panel with a width dimension of 23 mm (0.90 in).

Rear View (Middle): Shows the rear panel with a width dimension of 41 mm (1.61 in). Labels include: +V +V -V -V, DC OK, DC OK, +V ADJ, N, L.

Side View (Right): Shows the side profile with a height dimension of 92 mm (3.62 in) and a depth dimension of 100 mm (3.94 in).

Model Numbers:

- LPS-1-010-24DC
- LPS-1-024-24DC
- LPS-1-030-5DC
- LPS-1-040-12DC
- LPS-1-040-24DC
- LPS-1-060-12DC
- LPS-1-060-24DC
- LPS-1-090-12DC

Figure 1 consists of three graphs showing Load (%) versus Environment temperature (°C) for different LPS models. Each graph has a y-axis from 0 to 100% and an x-axis from -30 to 70°C.

- LPS-1-010-24DC:** The load is 100% from -30°C to 50°C, then decreases linearly to 50% at 70°C, and drops to 0% at 70°C.
- LPS-1-060-12DC:** The load is 100% from -20°C to 55°C. At 55°C, there are two lines: one for 12V, 24V, 48V which decreases linearly to 60% at 70°C, and another for 5V which decreases linearly to 50% at 70°C. Both lines drop to 0% at 70°C.
- LPS-1-090-12DC:** The load is 100% from -10°C to 40°C, then decreases linearly to 60% at 60°C, and drops to 0% at 60°C.

Input voltage(VAC)

LPS-1-010-24DC
LPS-1-024-24DC
LPS-1-030-5DC
LPS-1-040-12DC
LPS-1-040-24DC

Input voltage(VAC)

LPS-1-060-12DC
LPS-1-060-24DC

Input voltage(VAC)

LPS-1-090-12DC