



Zhi Tao Group
ZHITAO GROUP

Industrial Power Supply

Product Specification

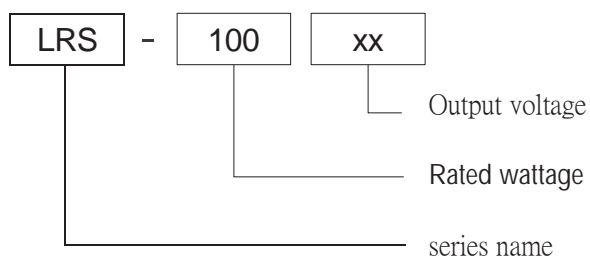
LRS-100

- Product Category: 100W Single output switching power supply
- supply Version No.: ZTAO3.0
- Release date: May,1st,2025

Product Overview

International full range AC input, no-load power consumption <1.5W, small size 1U low profile, protection types: short circuit/overload/overcurrent protection, natural air cooling, power start LED indicator, 100% full load burn-in test, 3-year warranty.

Model Encoding



Product Features

- International full range AC
- input no-load power consumption <1.5W
- Small size, 1U low profile
- Protection type: short circuit/overload/overvoltage
- natural air cooling
- Power on LED indicator
- 100% full load burn-in test
- 3-year warranty

Application Areas

Industrial control, mechanical and electrical, electronic instruments, industrial automation, electronic equipment, semiconductor equipment, etc. (excluding information technology equipment)



RoHS



01-01

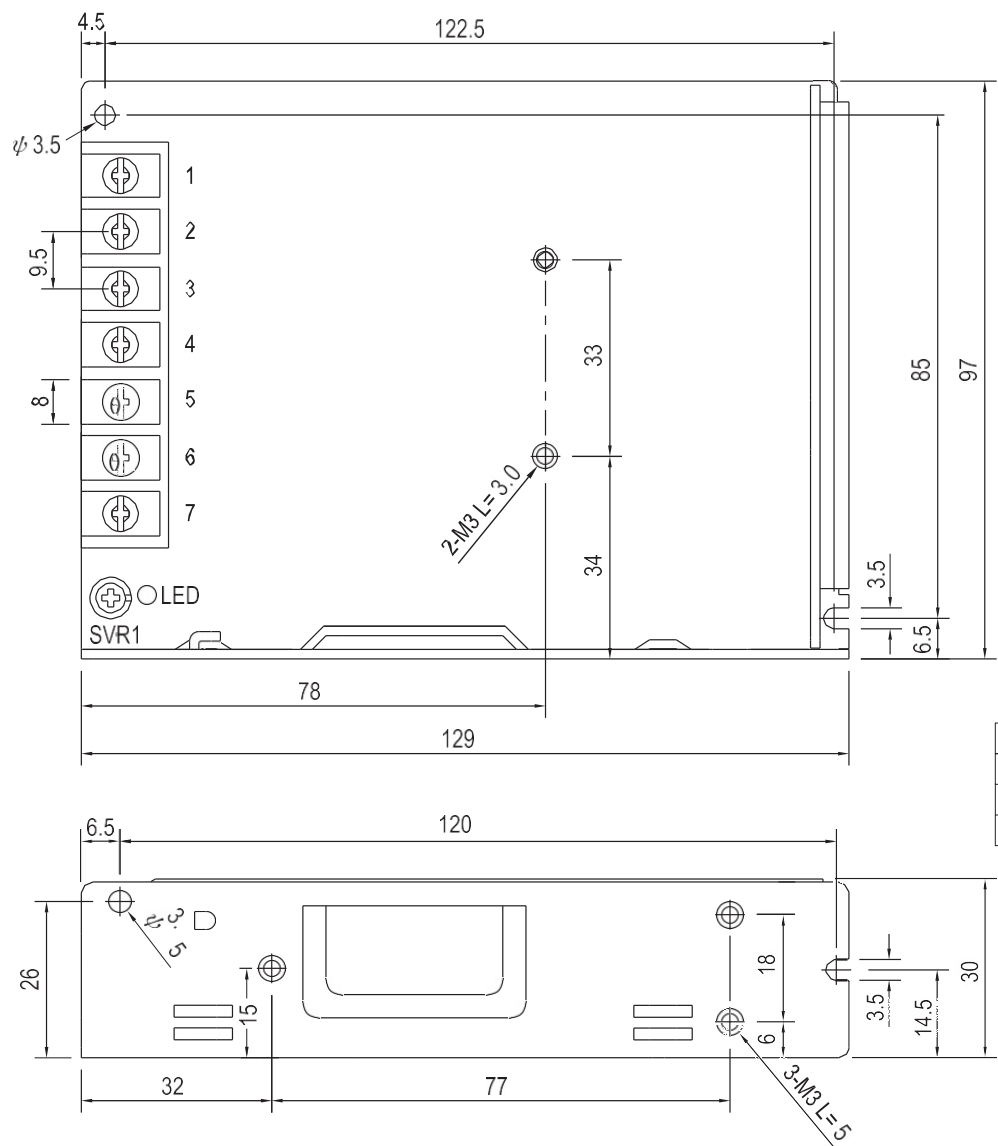
Zhitao Power Supply· Not just a full-power power supply

400-888-6287

Electrical Specifications

model		LRS-100-5	LRS-100-12	LRS-100-15	LRS-100-24	LRS-100-36	LRS-100-48
Output	DC output voltage	5V	12V	15V	24V	36V	48V
	Rated current	18A	8.5A	7A	4.5A	2.8A	2.3A
	Current range	0~18A	0~8.5A	0~7A	0~4.5A	0~2.8A	0~2.3A
	Rated Power	90W	102W	105W	108W	100.8W	110.4W
	Ripple & Noise(Max)	120mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage adj.range	4.5~5.5V	10.2~13.8V	13.5~16.5V	21.6~26.4V	32.4~39.6V	43.2~52.8V
	Voltage Tolerance	±1%	±1%	±1%	±1%	±1%	±1%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Startup & Rise Time	1000ms,30ms/230VAC 2000ms,30ms/115VAC (full load)					
	Keep Time	30ms/230VAC 12ms/115VAC (at full load)					
Input	Input voltage	90~264VAC 127~370VDC					
	Input frequency	50~60HZ					
	efficiency	82%	86%	87%	89%	89%	90%
	AC Current	1.9A/115VAC 1.2A/230VAC					
	Inrush Current	< 1mA/240VAC					
Protection	Overload protection	125~150% of rated power Protection mode: hiccup protection, automatic recovery after abnormal conditions are removed					
	Overvoltage protection	5.9~7.3V	13.8~16.2V	18.7~21.7V	28.8~33.6V	41.4~48.6V	55.2~64.8V
		Protection mode: turn off the output voltage and restart to recover					
Environment	Operating temperature	-20℃ ~+65℃					
	Operating humidity	20~90%RH no condensation					
	Storage temperature/humidity	-40~+80℃ 10~95%RH, no condensation					
	Vibration resistance	10~500HZ,5G 10 minutes/cycle,X,Y,Z 60 minutes each					
Safety	Pressure resistance	Input to output: 1.5KVAC; Input to ground: 1.5KVAC; Output to ground: 500VAC					
	Insulation resistance	Input to output, input to ground, output to ground: 100 Ohms/500VDC/25℃/70%RH					
other	Product size	127*97*30mm (L*W*H)					
	Package	0.3kg/pcs					
Remark		<ol style="list-style-type: none"> All parameters, unless otherwise specified, are measured at 230VAC input voltage, rated load and 25℃. The ripple and noise voltages are measured with a 20MHz bandwidth oscilloscope with 0.1μ and 47μ capacitors added to the ends of 12-inch twisted pair cables. The measurements are performed at a 20MHZ bandwidth. Accuracy: includes setting error, line regulation and load regulation. Linear regulation measurement method: Test from low voltage to high voltage under rated load Load Regulation Measurement Method: From 0% to 100% rated load The startup time is measured under cold start condition. Rapid and frequent power on and off may increase the startup time. When the operating altitude is higher than 2000 meters (6500ft): the operating environment needs to be lowered by 5℃/1000 meters 					

Appearance and Installation Dimensions (mm)



Terminal Pin No. Assignment

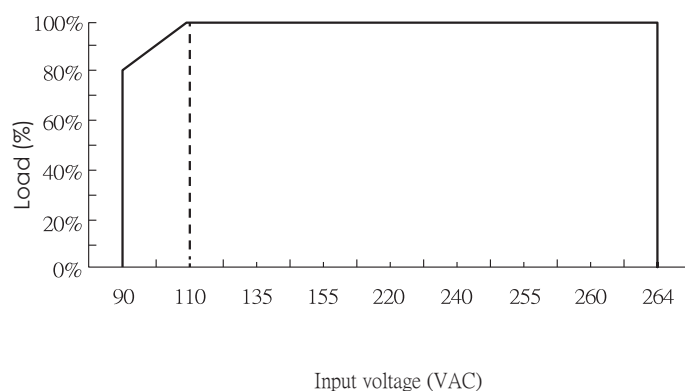
pin	Assignmen	Pin	Assignmen
1	AC/L	4,5	DC OUTPUT -V
2	AC/N	6,7	DC OUTPUT +V
3	FG \perp		

Pinout	Function	
L	AC LINE	Screw:M4*9.5 Torque: 22Kgf.cn (2.. 2N.m)
N	AC NETURAL	
\perp	EARTH	
-Vo	DC output -	Screw:M4*9.5 Torque: 22Kgf.cn (2.. 2N.m)
-Vo	DC output -	
+Vo	DC output +	
+Vo	DC output +	

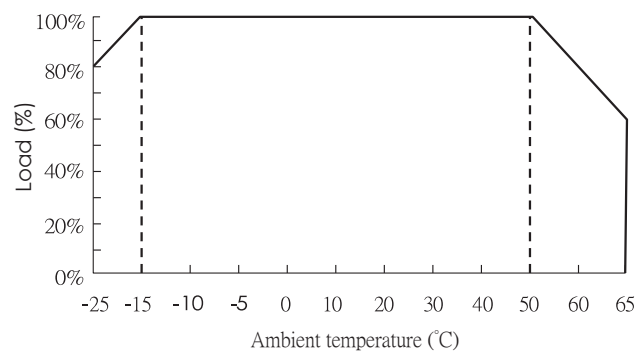
8-M4 Customer system mounting
hole Mounting screw: M4
Installation torque: 8Kgf.cn (0.8Nm) The screw
should not extend into the housing more than
3mm
Remark:
Unit: mm [inch]; tolerance not specified is ± 0.5 [± 0.020]

Characteristic Curves

Input voltage vs output load



Ambient temperature vs output load



Note:

1. If you need to know more detailed test data during application, please contact our technical support to obtain the application notes of the corresponding products.
2. This product is suitable for use in a natural air convection environment. If it is used in a closed environment, please contact our technical support personnel.