



志涛集团

ZHITAO GROUP

Industrial Power Supply

Product Specification

# LRS-150

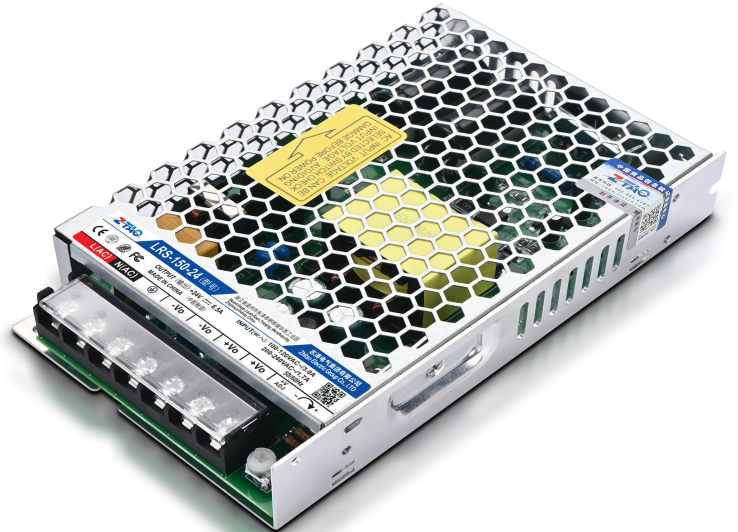
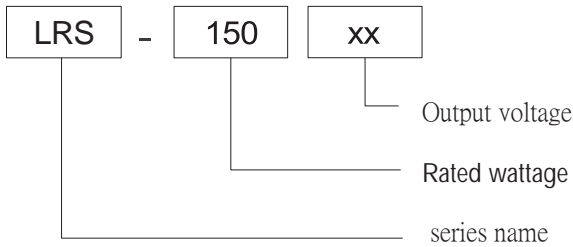
- Product Category: 150W single output switching power supply
- Version No.: ZTAO3.0
- Release date: May 1, 2025



## Product Overview

The AC input range is switched by a switch, no-load power consumption <1.7W, 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

- AC input is switched by switch,
- no-load power consumption <1.7W
- Small size, 1U low profile
- Protection type: short circuit/overload/overvoltage
- air cooling
- Power on LED indicator
- 100% full load burn-in test
- 3-year warranty



RoHS



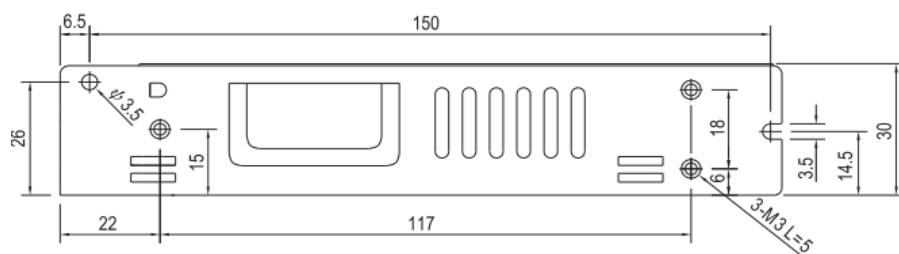
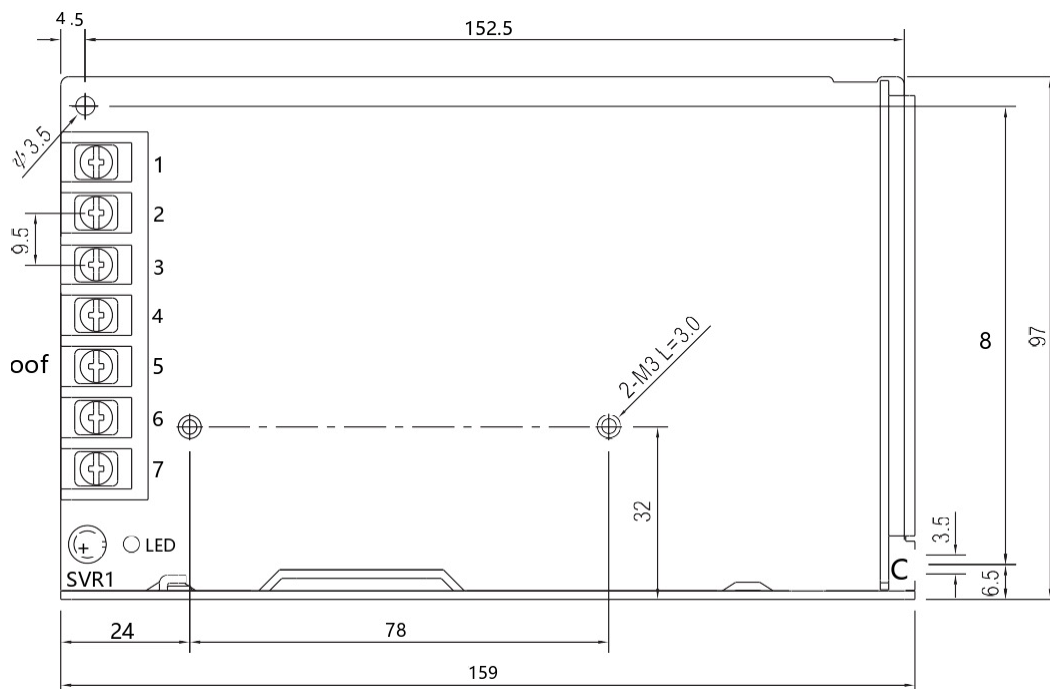
## Application Areas

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

## Electrical Specifications

model		LRS-150-12	LRS-150-15	LRS-150-24	LRS-150-36	LRS-150-48
Output	DC output voltage	12V	15V	24V	36V	48V
	Rated current	12.5A	10A	6.5A	4.3A	3.3A
	Current range	0~12.5A	0~10A	0~6.5A	0~4.3A	0~3.3A
	Rated Power	150W	150W	156W	154.8W	158.4W
	Ripple & Noise(Max)	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
	Voltage adjustment range	10.2~13.8V	13.5~16.5V	21.6~26.4V	32.4~39.6V	43.2~52.8V
	Voltage accuracy	±1%	±1%	±1%	±1%	±1%
	Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Load Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Startup & Rise Time	500ms,30ms/230VAC                      500ms,30ms/115VAC (full load)				
	Keep Time	30ms/230VAC 12ms/115VAC (at full load)				
Input	Input voltage	90-132 VAC/175~264VAC selectable by switch			245~370VDC(switch on 230VAC)	
	Input frequency	50~60HZ				
	efficiency	86%	86%	88%	88%	89%
	Input Current	3A/115VAC    1.7A/230VAC				
	Leakage Current	< 1mA/240VAC				
Protection	Overload protection	120~140% of rated power Protection mode: hiccup protection, automatic recovery after abnormal conditions are removed				
	Overvoltage protection	13.8~16.2V	18.7~21.7V	28.8~33.6V	41.4~48.6V	55.2~64.8V
Environment	Operating temperature	-20°C ~+65°C				
	Operating humidity	20~90%RH no condensation				
	Storage temperature/humidity	-40~+80°C 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°C/70%RH				
other	Product size	159*97*30mm (L*W*H)				
	Package	0.4kg/pcs				
Remark	<ol style="list-style-type: none"> <li>All parameters, unless otherwise specified, are measured at 230VAC input voltage, rated load and 25°C.</li> <li>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.</li> <li>Accuracy: includes setting error, line regulation and load regulation.</li> <li>Linear regulation measurement method: Test from low voltage to high voltage under rated load</li> <li>Load Regulation Measurement Method: From 0% to 100% rated load</li> <li>The startup time is measured under cold start condition. Rapid and frequent power on and off may increase the startup time.</li> <li>When the operating altitude is higher than 2000 meters (6500ft): the operating environment needs to be lowered by 5°C/1000 meters</li> </ol>					

Mechanical Specification and Installation (mm)



Terminal pin definition

pin number	Pin function	pin number	Pin function
1	AC/L	45	DC OUTPUT-V
2	AC/N	6.7	DC OUTPUT + V
3	FG +		

Pinout	Function
L	AC LINE
N	AC NETURAL
⊕	EARTH
-Vo	DC output -
-Vo	DC output -
+Vo	DC output +
+Vo	DC output +

Screw:M4\*9.5  
Torque: 22Kgf.cn (2. 2N.m)

8-M4 Customer system  
mounting hole Mounting  
screw: M4

Screw:M4\*9.5  
Torque: 22Kgf.cn (2. 2N.m)

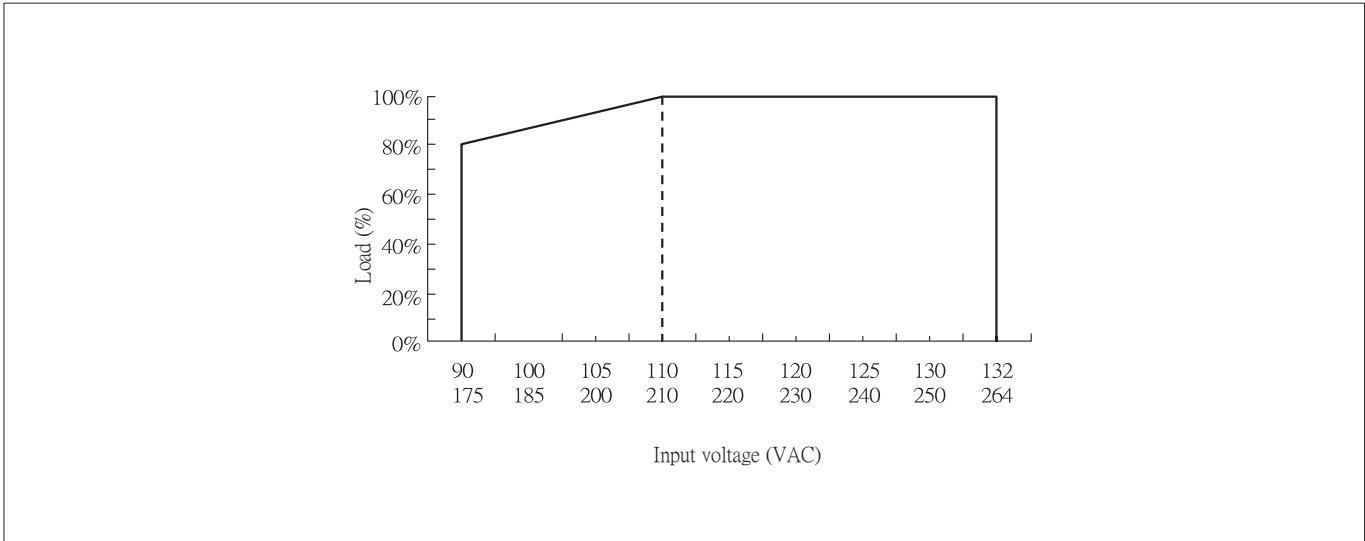
Installation torque: 8Kgf.cn (0.8Nm) The  
screw should not extend into the housing  
more than 3mm

Remark:

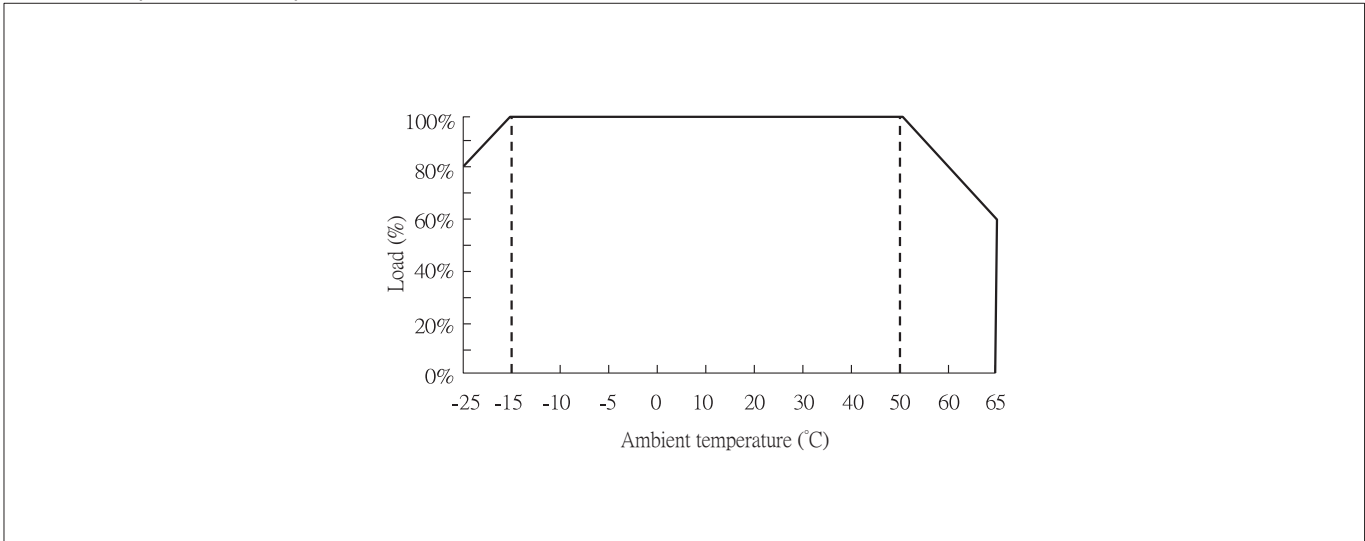
Unit: mm [inch]; tolerance not specified is  $\pm 0.5$  [ $\pm 0.020$ ]

## 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.