

100W Single Output Switching Power Supply

LRS-100 series



Features:

- Universal AC input/ full range
- Withstand 300VAC surge input for 5 second
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- High operating temperature up to 70°C
- High efficiency, long life and high reliability

SPECIFICATION							
OUTPUT							
Model	LRS-100-3.3	LRS-100-5	LRS-100-12	LRS-100-15	LRS-100-24	LRS-100-36	LRS-100-48
DC Voltage	3.3V	5V	12V	15V	24V	36V	48V
Rated Current	20A	18A	8.5A	7A	4.5A	2.8A	2.3A
Current Range	0~20A	0~18A	0~8.5A	0~7A	0~4.5A	0~2.8A	0~2.3A
Rated Power	66W	90W	102W	105W	108W	100.8W	110.4W
Ripple&Noise	100mVp-p	100mVp-p	120mVp-p	120mVp-p	150mVp-p	200mVp-p	200mVp-p
VoltageAdj. Range	2.97~3.6V	4.5 ~ 5.5V	10.2~ 13.8V	13.5~18V	21.6~28.8V	32.4~39.6V	43.2~52.8V
Voltage Tolerance	±3.0%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
Line Regulation	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Load Regulation	±2.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
Setup,Rise Time	500ms, 30ms/230VAC 500ms, 30ms/115VAC at full load						
Hold Up Time	55ms/230VAC 10ms/115VAC at full load						
INPUT							
Voltage Range	85 ~ 264VAC 120 ~ 373VDC						
Frequency Range	47 ~ 63Hz						
Efficiency	84.5%	86%	88%	88.5%	90%	90.5%	91%
AC Current	1.9A/115VAC 1.2A/230VAC						
Inrush Current	Cold start 50A/230VAC						
Leakage Current	<0.75mA / 240VAC						
PROTECTION							
Over Load	110 ~ 150% rated output power Protection type: Hiccup mode, recovers automatically after fault condition is removed						
Over Voltage	3.8~4.45V	5.75~6.75V	13.8~16.2V	18.75~21.75V	28.8~33.6V	41.4~48.6V	55.2~64.8V
	Protection type: shut down o/p voltage, re-power on to recover						
ENVIRONMENT							
Working Temp.	-30 ~ +70°C (Refer to “derating curve”)						
Working Humidity	20 ~ 90% RH non-condensing						
StorageTemp., Humidity	-40 ~ +85°C, 10 ~ 95% RH						
Temp. Coefficient	±0.03%/°C (0 ~ 50°C)						
Vibration	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes						

SAFETY & EMC	
Safety Standards	UL60950-1, TUV EN60950-1, EN60335-1/-2-16, CCC GB4943 approved
Withstand Voltage	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:1.25KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH
EMC Emission	Compliance to EN55022(CISPR22), GB9254 CLASS B, EN55014 EN 61000-3-2,-3
EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61000-6-2(EN50082-2), heavy industry level, criteria A

OTHERS

Dimension	129*97*30mm (L*W*H)
Weight	0.34Kg
Packing	40pcs/carton/14.6kg/0.92CUFT

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.
2. Ripple & noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. Tolerance: includes set up tolerance, line regulation and load regulation.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 0% to 100% rated load.
6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.
7. Length of set up time is measured at cold first start. Turning ON/OFF the power supply very quickly may lead to increase of the set up time.