

## 50W Single Output Switching Power Supply LRS-50 series



### SPECIFICATION

MODEL		LRS-50-12	LRS-50-24
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	4.2A	2.2A
	CURRENT RANGE	0 ~ 4.2A	0 ~ 2.2A
	RATED POWER	50.4W	52.8W
	RIPPLE & NOISE (max.) Note.2	120mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	10.2 ~ 13.8V	21.6 ~ 28.8V
	VOLTAGE TOLERANCE Note.3	± 1.0%	± 1.0%
	LINE REGULATION Note.4	± 0.5%	± 0.5%
	LOAD REGULATION Note.5	± 0.5%	± 0.5%
	SETUP, RISE TIME	1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load	
	HOLD UP TIME (Typ.)	30ms/230VAC 12ms/115VAC at full load	
INPUT	VOLTAGE RANGE	85 ~ 264VAC	120 ~ 373VDC
	FREQUENCY RANGE	47 ~ 63Hz	
	EFFICIENCY (Typ.)	86%	88%
	AC CURRENT (Typ.)	0.95A/115VAC 0.56A/230VAC	
	INRUSH CURRENT (Typ.)	COLD START 45A/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	13.8 ~ 16.2V 28.8 ~ 33.6V Protection type : Shut down o/p voltage, re-power on to recover	
	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")	
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing	
	STORAGE TEMP., 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 (Note 9)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, EN60335-1, EN61558-1/-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, EN61000-3-2,-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	MTBF	645K hrs min. MIL-HDBK-217F (25°C)	
	DIMENSION	99*82*30mm (L*W*H)	
	PACKING	0.23Kg; 60pcs/14.8Kg/0.88CUFT	
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. 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. 7. 3.3V, 5V when the load factor 0~50%, the switching power less is reduced by burst operation, which will cause ripple and ripple noise to go beyond the specifications. 8. The ambient temperature derating of 5°C/1000m is needed for operating altitude greater than 2000m(6500ft). 9. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )	