

E-Star Power Development Co., Ltd. (E-STAR)

1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City

22069, Taiwan (R.O.C.)

Phone: 886-2-2957 5580 Fax: 886-2-2957 7473

25W Open Frame type Single output power supply > EPS-25



RIPPLE & NOISE (max.) Note.2 60mVp-p

SETUP, RISE TIME

OUTPUT

Features:

- · Universal AC input / Full range
- High efficiency up to 90%
- · Protections: Short circuit / Overload / Over voltage
- · Cooling by free air convection
- 3"×2" compact size
- · LED indicator for power on
- No load power consumption<0.3W

100mVp-p

180mVp-p

180mVp-p

· 3 years warranty



200mVp-p

240mVp-p

 $\pm 1.0\%$

 $\pm 0.5\%$

 $\pm 0.5\%$

43.2 ~ 52.8V

SPECIFICATION MODEL EPS-25-5 EPS-25-7.5 EPS-25-12 EPS-25-15 EPS-25-24 EPS-25-27 EPS-25-36 EPS-25-48 EPS-25-3.3 DC VOLTAGE 12V 24V 27V 3.3V 5V 7.5V 15V 48V RATED CURRENT 5A 5A 3.4A 2.1A 1.7A 1.05A 0.95A 0.7A 0.53A 0~3.74A 0~2.34A 0 ~ 1.87A 0 ~ 1.17A 0~0.78A 0~0.59A **CURRENT RANGE** 0 ~ 5.5A 0 ~ 5.5A 0~1.05A RATED POWER 16.5W 25W 25.5W 25.2W 25.5W 25.2W 25.65W 25.2W 25.44W PEAK LOAD(10sec.) Note.6 18.15W 27.5W 28.05W 28.08W 28.05W 28.08W 28.35W 28.08W 28.32W

100mVp-p

1000ms, 30ms/115VAC at full load

OUIPUI	VOLTAGE ADJ. RANGE	3.1 ~ 3.6V	4.75 ~ 5.5V	7.13 ~ 8.25V	10.8 ~ 13.5V	13.5 ~ 16.5V	21.6 ~ 27V	24.3 ~ 29.7V	32.4 ~ 39.6V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±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%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%

80mVp-p

HOLD UP TIME (Typ.)		50ms/230VAC	16ms/115VAC at full load	
VOLTAGE RANGE	Note.5	85 ~ 264VAC	120 ~ 370VDC	

1000ms, 30ms/230VAC

60mVp-p

	FREQUENCY RANGE	47 ~ 63Hz								
INPUT	EFFICIENCY (Typ.)	79%	81%	83%	86%	87%	88%	89%	89%	90%
	AC CURRENT (Typ.)	0.6A/115VAC	0.6A/115VAC 0.4A/230VAC							
	INRUSH CURRENT (Typ.)	COLD STAR	COLD START 35A/230VAC							

ı	LEARAGE CORRENT	< IIIIA/240VAC
OVERLOAD	OVERLOAD	115 ~ 170% rated output power
	OVERTOAD	

	 OVER LOAD	Protection type: Hiccup mode, recovers automatically after fault condition is removed								
PROTECTION	OVED VOLTAGE	3.7 ~ 4.6V	5.6 ~ 6.75V	8.63~ 10.5V	14 ~ 17V	17.25 ~ 20.25V	27.6 ~ 32.4V	31.05 ~ 36.45V	39.7 ~ 46.8V	53.3 ~ 64.8V
	OVER VOLTAGE		01 1 1	1 11						

	Protection type: Shut down o/p voltage, re-power on to recover
WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")

	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH		
	TEMP COEFFICIENT	+0.03%/°C (0 ~ 50°C)		

OPERATING ALTITUDE Note.8	2000 meters			
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			

	SAFETY STANDARDS	UL62368-1, TUV EN62368-1, EAC TP TC 004 approved
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC
EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH

EMC (Note 4)	EMC	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH		
	(Note 4)	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020		
		EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, heavy industry level, criteria A, EAC TP TC 020		

OTHERS		MTBF	655.3K hrs min. MIL-HDBK-217F (25°C)
	OTHERS	DIMENSION	76.2*50.8*24mm (L*W*H)

0.081Kg; 120pcs/10.7Kg/0.94CUFT

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. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm 360mm metal plate with 1mm of thickness. 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."
- 5. Derating may be needed under low input voltage. Please check the static characteristics for more details.
- 6. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.

7. EPS-25-15/24/27/36/48 without Hs1.

PACKING

NOTE

8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).



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