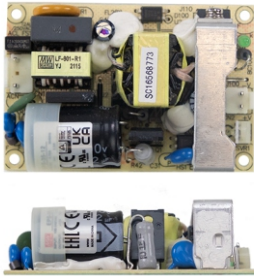




# 35W Single Output Switching Power Supply

# EPS-35 series



### ■ 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
- 3 years warranty



### ■ GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

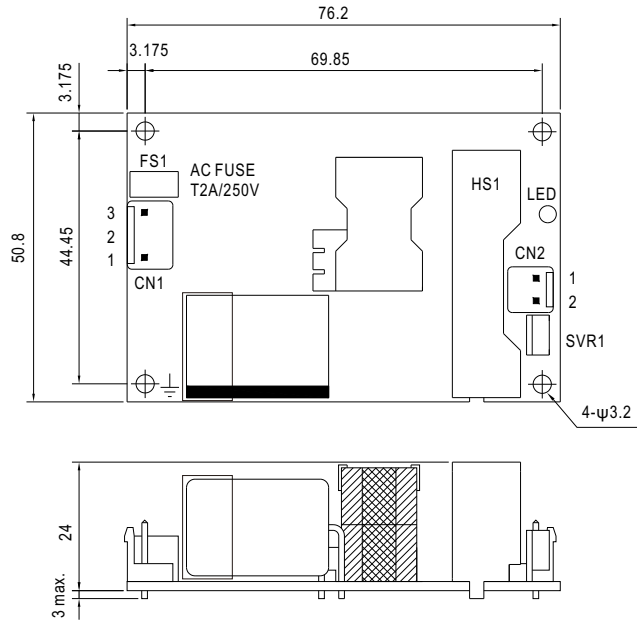


### SPECIFICATION

MODEL	EPS-35-3.3	EPS-35-5	EPS-35-7.5	EPS-35-12	EPS-35-15	EPS-35-24	EPS-35-27	EPS-35-36	EPS-35-48	
OUTPUT	DC VOLTAGE	3.3V	5V	7.5V	12V	15V	24V	27V	36V	48V
	RATED CURRENT	6A	6A	4.7A	3A	2.4A	1.5A	1.3A	1A	0.75A
	CURRENT RANGE	0 ~ 6.6A	0 ~ 6.6A	0 ~ 5.2A	0 ~ 3.3A	0 ~ 2.65A	0 ~ 1.65A	0 ~ 1.45A	0 ~ 1.1A	0 ~ 0.82A
	RATED POWER	19.8W	30W	35.25W	36W	36W	36W	35.1W	36W	36W
	PEAK LOAD(10sec.) <small>Note.6</small>	21.78W	33W	39W	39.6W	39.75W	39.6W	39.15W	39.6W	39.36W
	RIPPLE & NOISE (max.) <small>Note.2</small>	60mVp-p	70mVp-p	80mVp-p	100mVp-p	100mVp-p	180mVp-p	180mVp-p	200mVp-p	240mVp-p
	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	43.2 ~ 52.8V
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.5%	±2.0%	±2.0%	±1.0%	±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%	±0.5%
	LOAD REGULATION	±1.5%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
SETUP, RISE TIME	1000ms, 30ms/230VAC      1000ms, 30ms/115VAC at full load									
HOLD UP TIME (Typ.)	50ms/230VAC      16ms/115VAC at full load									
INPUT	VOLTAGE RANGE <small>Note.5</small>	85 ~ 264VAC		120 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	80%	82%	84%	87%	88%	89%	89%	89%	90%
	AC CURRENT (Typ.)	0.75A/115VAC		0.5A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 40A/230VAC								
LEAKAGE CURRENT	<1mA/240VAC									
PROTECTION	OVER LOAD	115 ~ 170% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER 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
		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								
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C )								
	OPERATING ALTITUDE <small>Note.8</small>	2000 meters								
SAFETY & EMC <small>(Note 4)</small>	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, CCC GB4943.1, EAC TP TC 004 approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, GB9254.1 Class B, GB17625 Class A, EAC TP TC 020								
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, heavy industry level, EAC TP TC 020								
OTHERS	MTBF	3673.9K hrs min. Telcordia SR-332 (Bellcore) ; 649.2K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	76.2*50.8*24mm (L*W*H)								
	PACKING	0.085Kg; 120pcs/11.2Kg/0.94CUFT								
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1 μF &amp; 47 μF parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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." (as available on <a href="https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf">https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf</a> )</li> <li>5. Derating may be needed under low input voltage. Please check the static characteristics for more details.</li> <li>6. 33% Duty cycle maximum within every 30 seconds. Average output power should not exceed the rated power.</li> <li>7. EPS-35-24/27/36/48 without Hs1.</li> <li>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).</li> </ol> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>									

**Mechanical Specification**

(Unit: mm, tolerance  $\pm 1$ mm)



AC Input Connector (CN1) : JST B3P-VH or equivalent

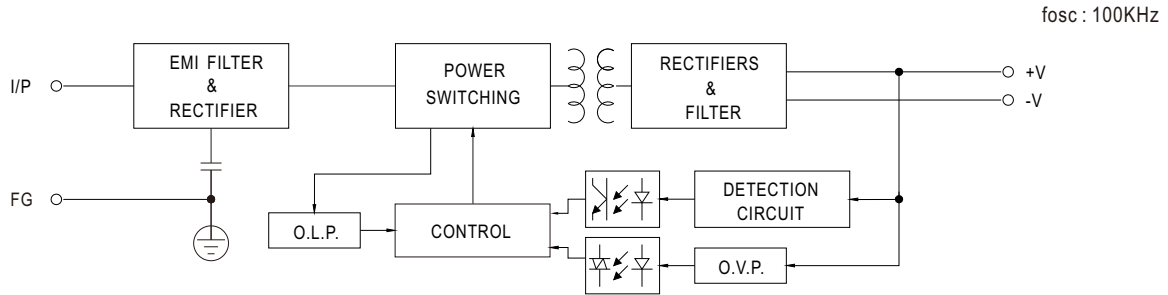
Pin No.	Assignment	Mating Housing	Terminal
1	AC/N	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	No Pin		
3	AC/L		

DC Output Connector (CN2) : JST B2P-VH or equivalent

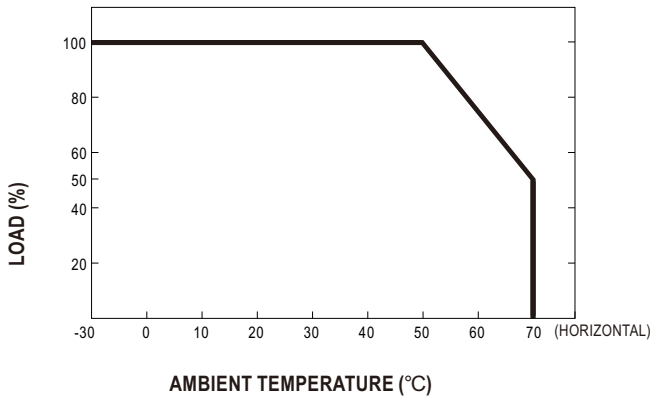
Pin No.	Assignment	Mating Housing	Terminal
1	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
2	+V		

⚠ HS1 (Note.7) must have safety isolation distance with system case.  
 $\perp$  : Grounding required

**Block Diagram**



**Output Derating**



**Static Characteristics**

