



# 75W Single Output with PFC Function

# ELP-75 series



### ■ Features :

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- High efficiency up to 90%
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 1U low profile
- LED indicator for power on
- No load power consumption<0.5W
- 3 years warranty



### ■ GTIN CODE

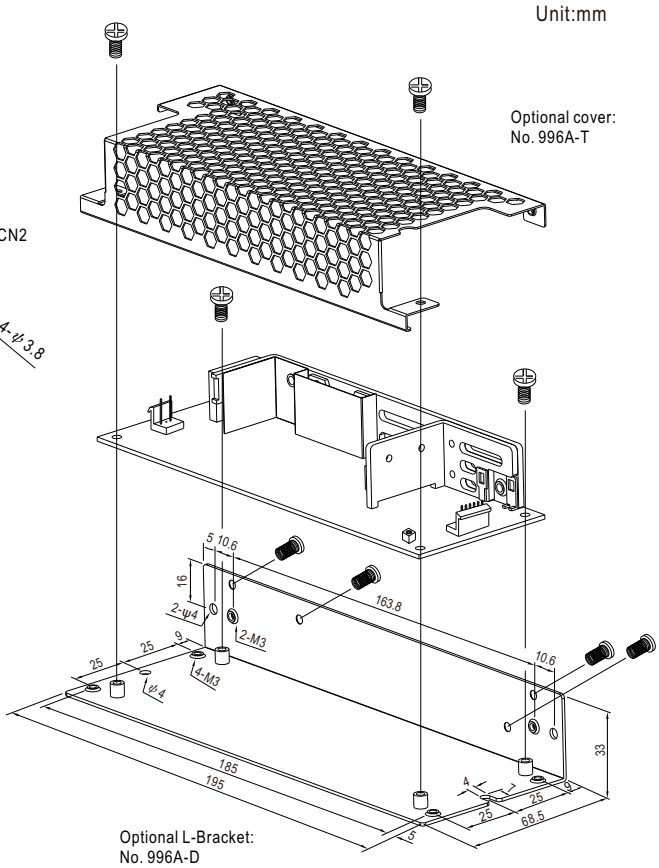
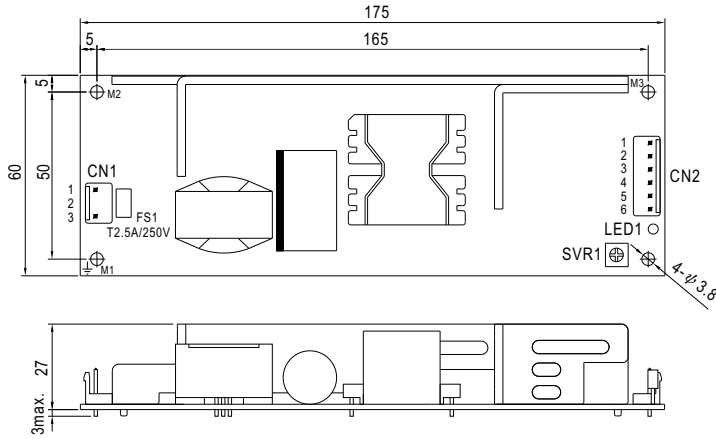
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>



### SPECIFICATION

MODEL	ELP-75-3.3	ELP-75-5	ELP-75-12	ELP-75-15	ELP-75-24	ELP-75-36	ELP-75-48	
OUTPUT	DC VOLTAGE	3.3V	5V	12V	15V	24V	36V	48V
	RATED CURRENT	15A	15A	6.25A	5A	3.15A	2.1A	1.6A
	CURRENT RANGE	0 ~ 15A	0 ~ 15A	0 ~ 6.25A	0 ~ 5A	0 ~ 3.15A	0 ~ 2.1A	0 ~ 1.6A
	RATED POWER	49.5W	75W	75W	75W	75.6W	75.6W	76.8W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	80mVp-p	120mVp-p	150mVp-p	240mVp-p	280mVp-p	300mVp-p
	VOLTAGE ADJ. RANGE	3 ~ 3.6V	4.75 ~ 5.5V	10.8 ~ 13.2V	13.5 ~ 16.5V	21.6 ~ 26.4V	32.4 ~ 39.6V	43.2 ~ 52.8V
	VOLTAGE TOLERANCE Note.3	±3.0%	±2.0%	±2.0%	±2.0%	±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%	±1.5%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	2500ms, 50ms/230VAC      2500ms, 50ms/115VAC at full load						
HOLD UP TIME (Typ.)	20ms/230VAC      20ms/115VAC at full load							
INPUT	VOLTAGE RANGE Note.6	90 ~ 264VAC      127 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR (Typ.) Note.5	3.3V: PF>0.91/230VAC      5V~48V: PF>0.95/230VAC      PF>0.98/115VAC at full load						
	EFFICIENCY (Typ.)	80%	82%	89%	90%	90%	90%	90%
	AC CURRENT (Typ.)	1.8A/115VAC      1 A/230VAC						
	INRUSH CURRENT (Typ.)	COLD START 60A/230VAC						
	LEAKAGE CURRENT	<1mA/240VAC						
PROTECTION	OVER LOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	3.7 ~ 4.45V	5.6 ~ 6.75V	13.8 ~ 16.2V	17.25 ~ 20.25V	27.6 ~ 32.4V	39.7 ~ 46.8V	53.3 ~ 64.8V
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)						
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL62368-1, TUV BS EN/EN62368-1, 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/ 500VDC / 25°C/ 70% RH						
	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020						
OTHERS	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN55024, heavy industry level, EAC TP TC 020						
	MTBF	2229.2K hrs min.    Telcordia SR-332 (Bellcore) ; 345.3K hrs min.    MIL-HDBK-217F (25°C)						
	DIMENSION	PCB:175*60*27mm (L*W*H) with optional CASE:195*68.5*33mm (L*W*H)						
NOTE	PACKING	PCB:0.25Kg; 48pcs/13Kg/0.96CUFT with optional CASE:0.54Kg; 25pcs/14.5Kg/0.7CUFT						
		<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 0.1uf &amp; 47uf 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="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>5. 3.3V PF&gt;0.92/230VAC, others PF&gt;0.95/230VAC.</li> <li>6. Derating may be needed under low input voltage. Please check the derating curve for more details.</li> <li>7. 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**



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

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

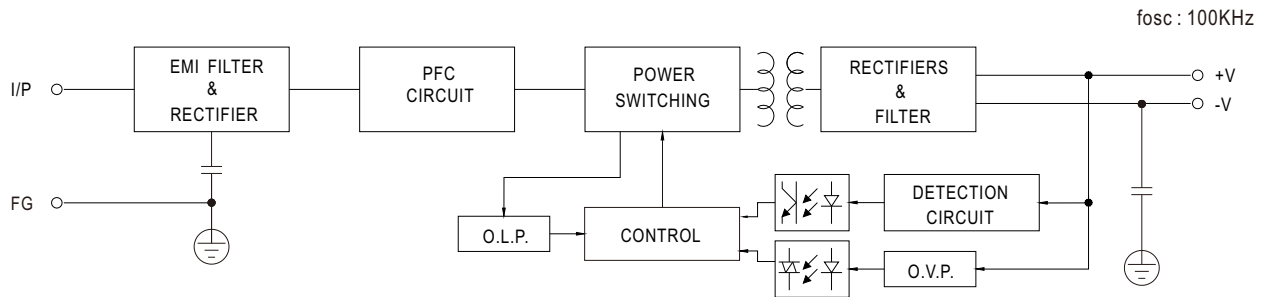
DC Output Connector (CN2) : JST B6P-VH or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2,3	-V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
4,5,6	+V		

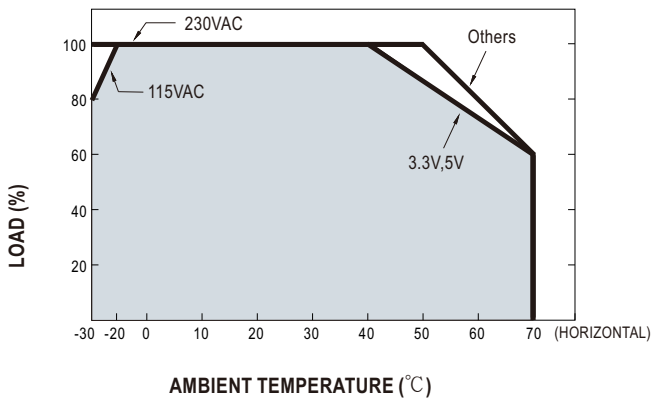
⊕ : Grounding Required

1.M1 is safety ground. For better EMC performance, Please secure an electrical connection between M1, M2, M3, and chassis grounding

**Block Diagram**



**Output Derating**



**Output Derating VS Input Voltage**

