

## Features

- Input Voltage 90~305V AC
- Built in Active PFC Function
- Approved to UKCA, CE
- Safety Approved to IEC 62368-1 BS EN/EN 62368-1
- Efficiency up to 90%
- Protection: OLP, OVP, OTP SCP
- 3 Years Warranty



Certified to UKCA, CE, RoHS, REACH & IEC 62368-1/BS EN 62368-1/EN 62368-1 Standards and complies with the relevant Efficiency Regulations. These are primarily used in ITE, Audio & Video Industries and customised solutions are available upon request.

### Models

Model Number	DC Voltage (V)	Rated Current (A)	Rated Power (W)	Voltage Adj. Range (V)	Efficiency (%)	Max Capacitive Load
56YEP150-05	5	30	150	4.75~5.5	87	10000uF
56YEP150-7.5	7.5	20	150	6.75~8.25	88	8000uF
56YEP150-12	12	12.5	150	11.4~13.2	89	5000uF
56YEP150-13.5	13.5	11.2	151.2	12.8~14.9	89	5000uF
56YEP150-15	15	10	150	14.3~16.5	88.5	5000uF
56YEP150-24	24	6.25	150	22.8~26.4	89	5000uF
56YEP150-27	27	5.6	151.2	25.7~29.7	89.5	4000uF
56YEP150-36	36	4.17	150	34.2~39.6	89	
56YEP150-48	48	3.12	149.8	45.6~52.8	90	3000uF
56YEP159-60	60	2.5	150	57~66	89	

### Input Specifications

Voltage Range	90-305VAC/127-430VDC
Frequency Range	47-63Hz
Power Factor	PF>0.93/230VAC at full load PF>0.98/115VAC at full load
Ac Current (Typ.)	1.6A/115VAC 0.8A/230VAC
Inrush Current (Typ.)	COLD START 45A/230VAC
Leakage Current	<2mA/240VAC

**Output Specifications**

Ripple & Noise (Max)	100mVp-p	5v, 7.5v, 12v, 15v
	150mVp-p	24v, 27v
	250mVp-p	48v
Voltage Tolerance	±2.0%	
Line Regulation	±0.5%	
Load Regulation	±1.0%	5v
	±0.5%	Others
Setup, Rise Time	600ms, 30ms at full load	
Hold Up Time (Typ.)	16ms at full load	

**Protection**

Overload	105%-135% Rated Output Power	
	Protection type: Constant current limiting, recovers automatically after fault condition is removed	
Over Voltage	5.75~6.75v	5v
	8.6~10.2v	7.5v
	13.2~16.2v	12v
	14.85~18.23v	13.5v
	16.5~20.25v	15v
	26.4~32.4v	24v
	29.7~36.45v	27v
	39.6~48.6v	36v
	52.8~64.8v	48v
66~18v	60v	
Over Temperature	Protection type: Shut down o/p voltage, re-power on to recover.	
	Protection type: Shut down o/p voltage, recovers automatically after temperature goes down.	

**Function**

Remote Control	CN:<0~0.8VDC POWER ON. 4~10VDC POWER OFF
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**Environmental Characteristics**

Working Temp.	-30°C to +70°C (Refer to "Derating Curve")
Working Humidity	20~90% RH non-condensing
Storage Temp., Humidity	-40°C to +85°C, 10~95% RH non-condensing
Temp. Coefficient	±0.05%/ °C (0~50°C)
Vibration	10~500Hz, 2G 10min./1 cycle, 60min. each along X, Y, Z axes
Over Voltage Category	III; According to EN61558, EN50178, EN60664-1, EN62477-1; altitude up to 2000 meters

**Safety**

Safety Standards	BS EN/EN62368-1, BS EN/EN61558-1, BS EN/EN 61558-1-16
Withstand Voltage	I/P-O/P:4KVAC I/P-FG:2KVAC O/P:0.5KVAC
Isolation Resistance	I/P-O/P, I/P-FG, O/P-F/G: 100M Ohms/ 500VDC/ 25°C/ 70% RH
EMC Emission	Compliance to BS EN/EN55032 (CISPR32) Class B
	BS EN/EN61000-3-2 Class A, BS EN/EN61000-3-3

EMC Immunity	Compliance to BS EN/EN61000-4-3, 11 Criteria B
	BS EN/EN61000-4-2,4,5,6,8 Criteria A

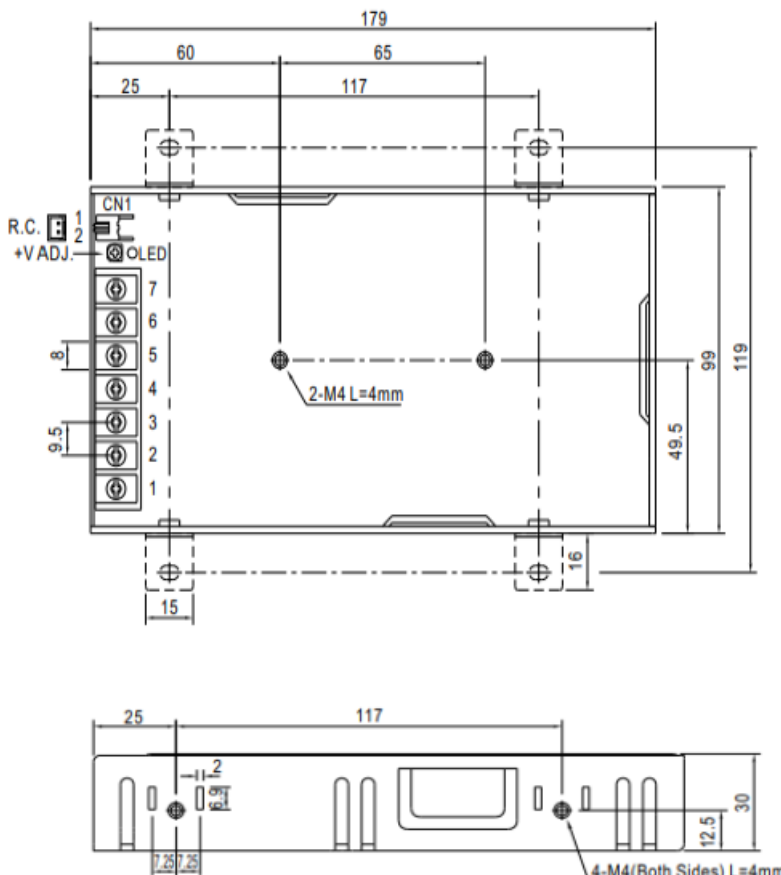
### Other Specifications

MTBF	280K hrs min. MIL-HDBK-217F (25°C)
Safety Protection	Class 1
Dimension	179x99x30mm(L*W*H)
Weight	550g

Notes:

1. All parameters NOT specially mentioned are measured at 115/230VAC input, rated load and 25°C of ambient temperature.
2. Ripple and noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
3. 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 the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies".
4. Derating may be needed under low input voltages. Please check the derating curve for more details.
5. Strongly recommended that external output capacitance should not exceed 10000uF (Only for models with output voltage 5/12V)
6. 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).

### Mechanical Drawing



Input

No.	Description
1	AC/L
2	AC/N
3	FG $\perp$

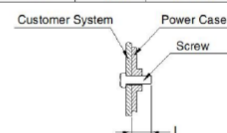
Output

No.	Description
4,5	DC OUTPUT -V
6,7	DC OUTPUT +V

Remote ON/OFF(CN): JST S 2B-XH or equivalent(optional)

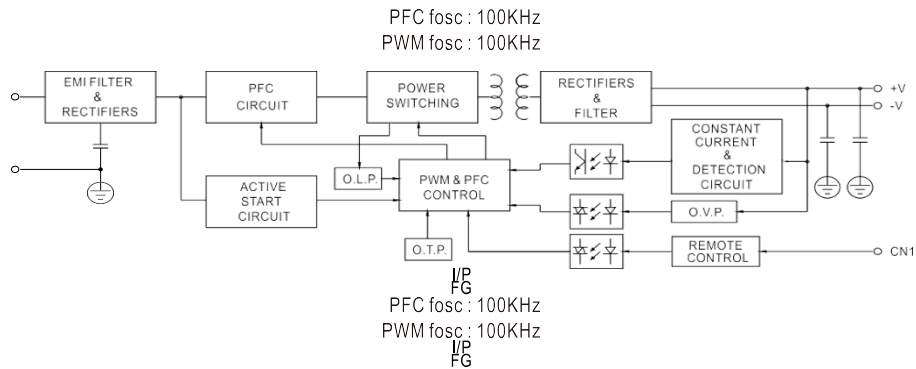
No.	Description	Mating Housing	Terminal
1	RC+	JST XHP or equivalent	JST SXH-001T-P0.6 or equivalent
2	RC-		

Screw Spec.	L(max)	Torque(max)
M4	4mm	0.9N-m



Note:  
Unit: mm[inch]  
Wire range: 22-12AWG  
Connector tightening torque: M3.5 , 0.8N-m  
General tolerances:  $\pm 1.00[\pm 0.039]$

**Block Diagram**



**Derating Curves**

