

# **MEAN WELL APC-8 Series 8W Single Output Switching Power Supply User Guide**

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MEAN WELL APC-8 Series 8W Single Output Switching Power Supply



- · Constant current design
- Universal AC input / Full range
- · Class II power unit, no FG
- · Fully isolated plastic case
- IP42 design
- · Small and compact size
- · Cooling by free air convection
- · Protection:Short circuit
- No load power consumption <0.5W
- 100% full load burn-in test
- · Low cost/ High reliability
- · 2 years warranty

## **Applications**

• Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.6)

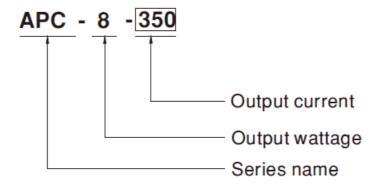
#### **GTIN cODE**

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

## **Description**

APC-8 series is one 8W AC/DC constant current mode single output LED power supply. It accepts the full range input 90-264VAC and provides four models with different output current, 250mA, 350mA, 500mA and 700mA, respectively, that the small wattage LED applications employ the most frequently. Exploiting Class II design (without FG pin) and adopting the 94V-0 flame retardant plastic enclosure, APC-8 ideally fits the entry-level LED applications.

## **Model Encoding**



# **SPECIFICATION**

MODEL	APC-8-250	APC-8-350	APC-8-500	APC-8-700
RATED CURREN T	250mA	350mA	500mA	700mA

OUTP	OPERATING VOL TAGE RANGE No te.4	16~32V	11~23V	8~16V	6~11V	
	RATED POWER	8W	8.05W	8W	7.7W	
	RIPPLE & NOISE (max.) Note.2	350mVp-p	300mVp-p	300mVp-p	250mVp-p	
	NO LOAD OUTP UT VOLTAGE	38V	29V	24V	17V	
	CURRENT ACCU RACY	±8.0%				
	SETUP, RISE TIM E	500ms, 180ms / 230VAC 3000ms, 150ms / 115VAC at full load				
	HOLD UP TIME ( Typ.)	20ms/230VAC at full load				
	VOLTAGE RANG E Note.3	90 ~ 264VAC 127 ~ 370VDC ( <b>Note.5</b> )				
	FREQUENCY RA	47 ~ 63Hz				
	EFFICIENCY(Typ.	82.5%	81.5%	81%	80%	
INPU T	AC CURRENT	0.15A/230VAC;0.3A/115VAC				
	INRUSH CURRE NT(Typ.)	COLD START 70A(twidth=120µs measured at 50% lpeak) at 230VAC				
	LEAKAGE CURR ENT	0.25mA / 240VAC				
PROT ECTI ON	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed.				
ENVI RON MENT	WORKING TEMP.	-15 ~ 70°C(Refer to "Derating Curve")				
	WORKING HUMI DITY	20 ~ 90% RH non-condensing				
	STORAGE TEMP. , HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH				
	TEMP. COEFFICI ENT	±0.2%/°C (0 ~45°C)				
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
	SAFETY STAND ARDS Note.7	UL8750,CSA C22.2 No.250.0-08, BIS IS15885, EAC TP TC 004; BS EN/EN 6236 8-1 approved				
	WITHSTAND VO LTAGE	I/P-O/P:3.75KVAC				
		<u> </u>				

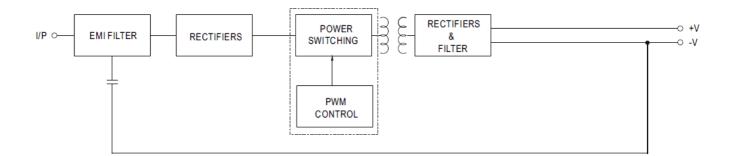
SAFE TY & EMC	ISOLATION RESI STANCE	I/P-O/P:>100M Ohms / 500VDC / 25°C/ 70% RH			
	EMC EMISSION	Compliance to BS EN/EN55032,BS EN/EN61000-3-2,BS EN/EN61000-3-3, EAC TP TC 020			
	EMC IMMUNITY	Compliance to BS EN/EN55024,BS EN/EN61000-4-2,3,4,5,6,8,11; light industry I evel(surge 2KV), EAC TP TC 020			
	MTBF	14511.7K hrs min. Telcordia SR-332 (Bellcore); 2275.9K hrs min. MIL-HDBK -217F (25°C)			
OTHE RS	DIMENSION	60*30*23.5mm(L*W*H)			
	PACKING	0.05Kg;144pcs/7.6Kg/0.70CUFT			

- 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25C of am bient temperature.
- 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated wit h a 0.1uf & 47uf parallel capactor.
- 3. Derating may be needed under low input voltage, please check the static characteristic for more det ails.
- 4. Constant current operation region is within 50% ~100% rated output voltage. This is the suitable op eration region for LED-related applications, but please reconfirm special electrical requirements for some specific system design.

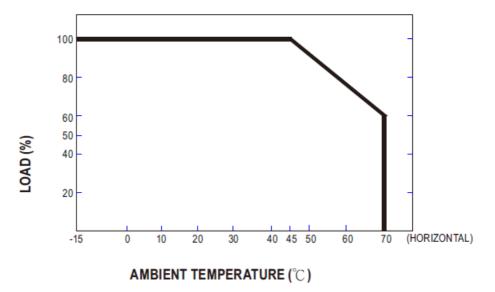
#### **NOTE**

- 5. When applying DC voltage for input, please connect the brown input wire to the positive side where as the blue input wire to the negative side.
- 6. This product is not intended for LED lighting luminaire applications in the EU.(In the EU the LPF/NP F/XLG series are recommended.)
- 7. The model certified for CCC(GB19510.14, GB19510.1, GB17743, and GB17625.1) is an optional model. Please contact MEAN WELL for details.
- 8. The ambient temperature derating of 3.5 C/1000m with fanless models and of 5C1000m with fan m odels for operating altitudes higher than 2000m(6500ft).
- 9. For any application note and IP waterproof function installation caution, please refer to our user manual before using.
- \* Product Liability Disclaimer For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

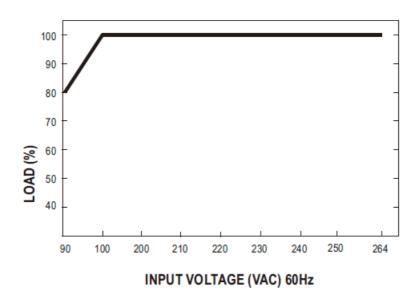
## **Mechanical Specification**



# **Block Diagram**



# **Derating Curve**



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### **Documents / Resources**



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