



16W Single Output Switching Power Supply

APV-16 series



■ Features :

- Constant voltage design
- Universal AC input / Full range
- Protections: Short circuit / Over load / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- Class II power unit, no FG
- Class 2 power unit
- Pass LPS
- IP42 design
- Suitable for LED related fixture or appliance (such as LED Decoration or Advertisement devices)(Note.7)
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

User's Manual



■ GTIN CODE

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

SELV



LPS IP42



IS 15885(Part 2/Sec13)



R-41027766

(except for 15V)

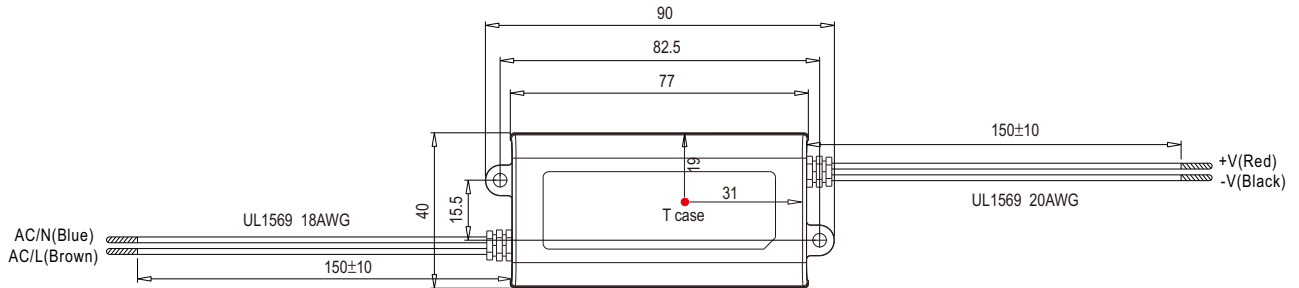


SPECIFICATION

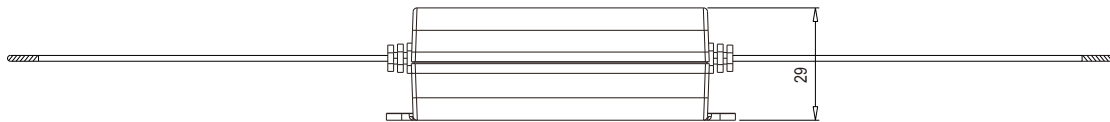
MODEL		APV-16-5		APV-16-12		APV-16-15		APV-16-24	
OUTPUT	DC VOLTAGE	5V		12V		15V		24V	
	RATED CURRENT	2.6A		1.25A		1A		0.67A	
	CURRENT RANGE	0 ~ 2.6A		0 ~ 1.25A		0 ~ 1A		0 ~ 0.67A	
	RATED POWER	13W		15W		15W		16.08W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p		120mVp-p		120mVp-p		150mVp-p	
	VOLTAGE TOLERANCE Note.3	±5.0%							
	LINE REGULATION	±1.0%							
	LOAD REGULATION	±2.0%							
	SETUP, RISE TIME Note.6	1500ms, 30ms / 230VAC		1500ms,30ms / 115VAC at full load					
HOLD UP TIME (Typ.)	20ms/230VAC		12ms/115VAC at full load						
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC		127 ~ 370VDC					
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	76%		80%		81%		83%	
	AC CURRENT	0.3A/230VAC 0.5A/115VAC							
	INRUSH CURRENT(Typ.)	COLD START 50A(twidth=250μs measured at 50% Ipeak) at 230VAC							
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	13 units (circuit breaker of type B) / 22 units (circuit breaker of type C) at 230VAC							
	LEAKAGE CURRENT	0.25mA / 240VAC							
PROTECTION	OVER LOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75 ~ 6.75V		13.8 ~ 16V		17.5 ~ 21V		27.6 ~ 32.4V	
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARDS Note.8	UL8750,CSA C22.2 No.250.0-08, BIS IS15885(except for 15V),EAC TP TC 004,IP42 , BS EN/EN 62368-1 approved							
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC							
	ISOLATION RESISTANCE	I/P-O/P:>100M Ohms / 500VDC / 25℃ / 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/EN55035,BS EN/EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), EAC TP TC 020							
OTHERS	MTBF	7265.5K hrs min. Telcordia SR-332 (Bellcore) ; 1128.9K hrs min. MIL-HDBK-217F (25℃)							
	DIMENSION	77*40*29mm (L*W*H)							
	PACKING	0.1Kg; 120pcs/14Kg/1.06CUFT							
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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. Derating may be needed under low input voltage. Please check the static characteristics for more details. Please connect L line to the positive pole and N line to the negative pole under DC input. 5. The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. (as available on https://www.meanwell.com/Upload/PDF/EMI_statement_en.pdf) 6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time. 7. This product is not intended for LED lighting luminaire applications in the EU and China.(In the EU and China the LPF/NPF/XLG/XLC/XLN series are recommended.) 8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft) 9. Products sourced from the Americas regions may not have the ENEC/BIS logo. Please contact your MEAN WELL sales for more information. 10. For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx								

Mechanical Specification

Unit:mm

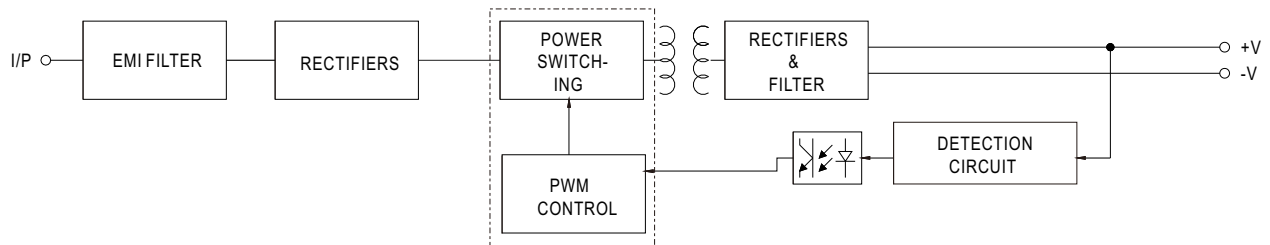


※ T case: Max. Case Temperature

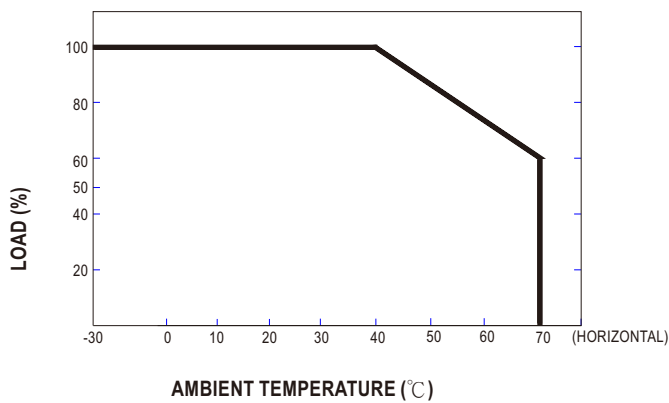


Block Diagram

fosc : 67KHz



Derating Curve



Static Characteristics

