# APV-16 series

16W Single Output Switching Power Supply



## 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
- Display devices for decorative & advertising accessories (Note.7)
- General-purpose electronics operated in dusty or damp environments
- 100% full load burn-in test
- Low cost, high reliability
- 2 years warranty

User's Manual Click Me

## GTIN CODE

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

SELV LPS IP42 c UL us IS 15885(Part 2/Sec13) R-41027766 (except for 15V) EAC CE UKCA

## 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 |
| | | Protection type : Shut off o/p voltage, clamping by zener diode | | | |
| 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

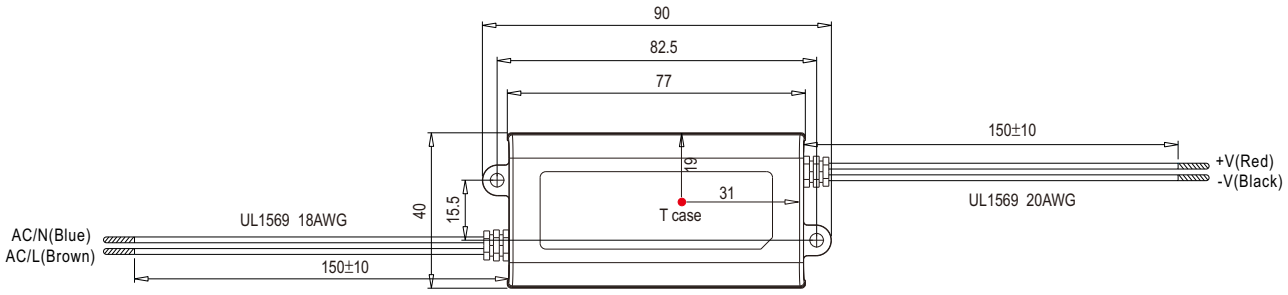
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx



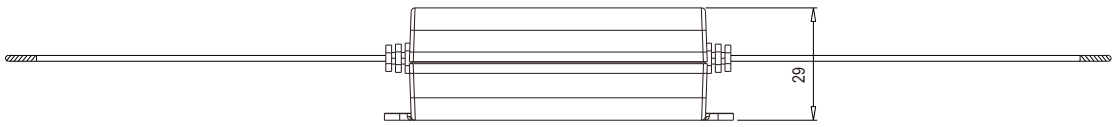
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

## ■ Mechanical Specification

Unit:mm Tolerance:±1

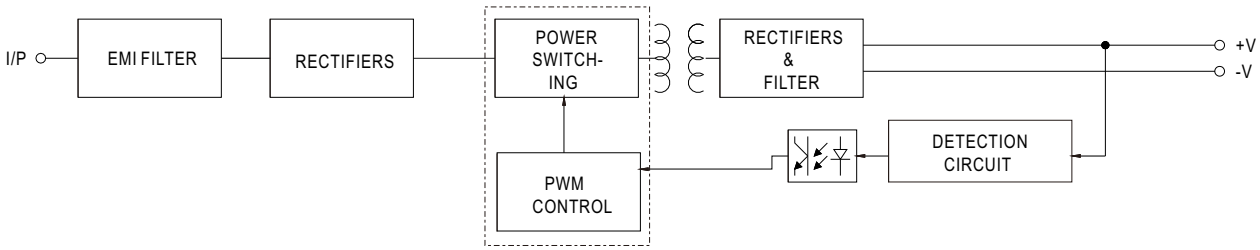



※ T case: Max. Case Temperature

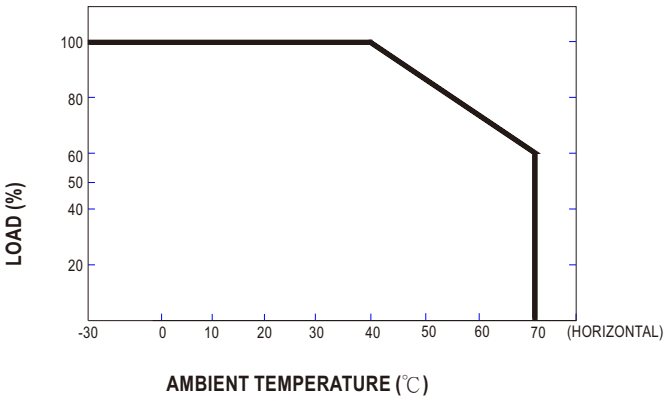



## ■ Block Diagram

fosc : 67KHz

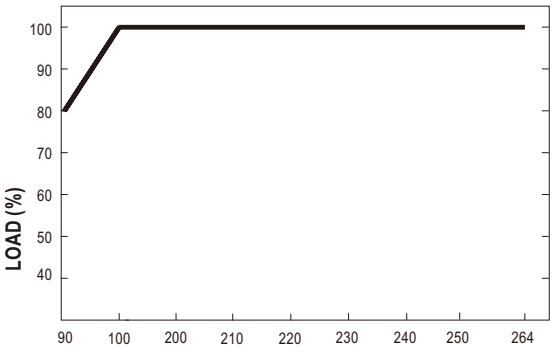



## ■ Derating Curve




AMBIENT TEMPERATURE (℃)

## ■ Static Characteristics




INPUT VOLTAGE (VAC) 60Hz