

# 60 Watts UNIVERSAL INPUT SWITCH MODE

## DESKTOP POWER SUPPLIES

### PSE60 SERIES



#### DESCRIPTION

The PSE60 series of AC/DC switching power supplies offer 60 watts of continuous output power. All models meet CISPR class B and FCC class B emission limits, and are designed to comply with UL, CSA, VDE and IEC requirements.

#### FEATURES

- Optional output connectors
- 100% burn-in
- Wide input voltage 85 to 264 VAC
- Input surge current protection
- Overvoltage protection
- Overcurrent protection

#### SAFETY APPROVALS

- UL, cUL
- CE
- TUV

#### ELECTRICAL SPECIFICATIONS

##### INPUT

|                               |                           |
|-------------------------------|---------------------------|
| Input voltage                 | 85 to 264 VAC             |
| Input frequency               | 47 to 440 Hz              |
| Input current                 | 1.6A max at low line      |
| Safety ground leakage current | 0.75mA max @ 240 VAC 50Hz |

##### OUTPUT

|                         |                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Output voltage          | See Rating Chart                                                                                                          |
| Output current          | See Rating Chart                                                                                                          |
| Output power range      | 0-60 watts                                                                                                                |
| Ripple                  | 1% peak to peak maximum                                                                                                   |
| Overvoltage protection  | Provided on output #1 only; set at 112-132% of its nominal output voltage                                                 |
| Overcurrent protection  | All outputs protected to short circuit conditions                                                                         |
| Temperature coefficient | All outputs $\pm 0.04\%/^{\circ}\text{C}$ maximum                                                                         |
| Transient response      | Maximum excursion of 4% or better on all models recovering to 1% of final value within 500uS after a 25% step load change |

##### ENVIRONMENTAL

|                       |                                                     |
|-----------------------|-----------------------------------------------------|
| Operation temperature | 0°C to +70°C                                        |
| Derating              | Derated from 100% at +40°C linearly to 50% at +70°C |
| Storage temperature   | -40°C to +85°C                                      |
| Relative Humidity     | 5% to 95% non-condensing                            |

##### GENERAL

|                           |                                                                                             |
|---------------------------|---------------------------------------------------------------------------------------------|
| Efficiency                | 65% minimum at 60W output                                                                   |
| Hold-up time              | 5 msec minimum                                                                              |
| Line regulation           | $\pm 0.5\%$ maximum at full load                                                            |
| Inrush current            | 15 amps @ 115 VAC, or 30 amps @ 230 VAC at 25°C cold start                                  |
| Withstand voltage         | 3000 VAC from input to output, 1500 VAC from input to ground, 500 VAC from output to ground |
| Insulation resistance     | 50 Mohm minimum from output to ground                                                       |
| Mean time between failure | 100,000 hours minimum at full load at 25°C ambient                                          |
| EMI requirements          | Meets conduction limits of (a) FCC 20780 CLASS B<br>(b) CISPR CLASS B                       |
| Safety requirements       | Meets or exceeds: (a) UL 1950 (b) CSA C22.2 NO.234<br>(c) IEC 950                           |

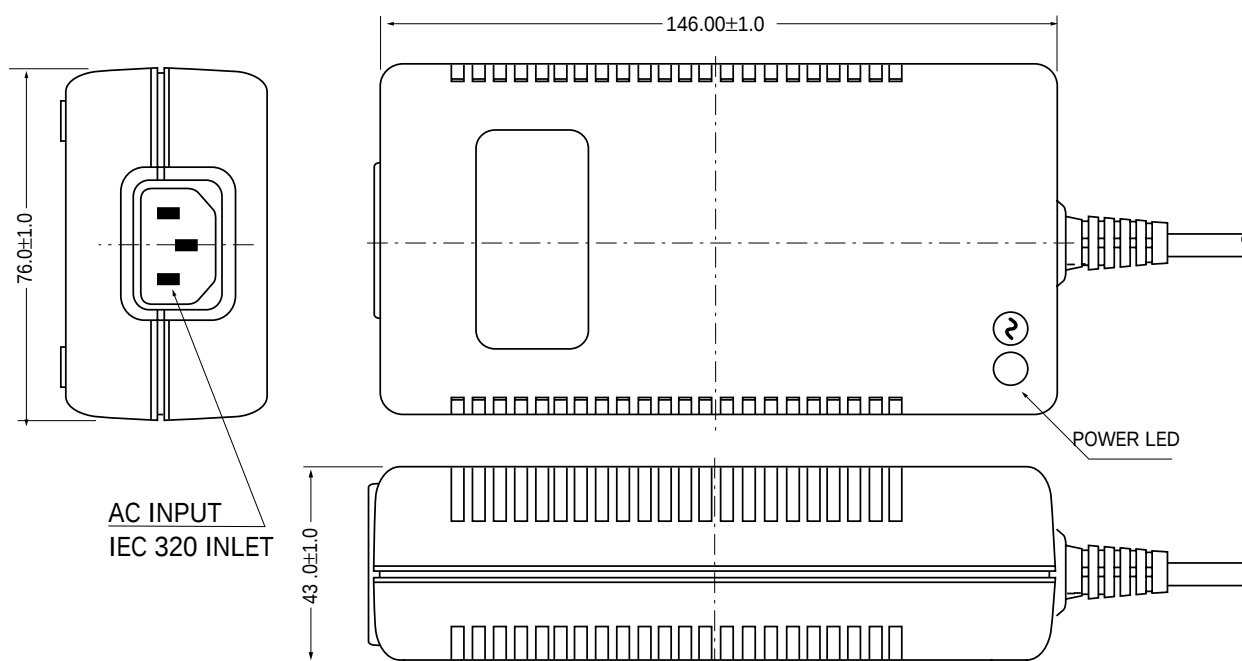
## OUTPUT VOLTAGE/CURRENT RATING CHART - PSE60 SERIES

| MODEL NO   | OUTPUT VOLTAGE | OUTPUT CURRENT | MAXIMUM OUTPUT POWER |
|------------|----------------|----------------|----------------------|
| PSE60-1XX  | 5-6 VDC        | 10.0-8.30A     | 50W                  |
| PSE60-11XX | 6-9 VDC        | 9.16-6.11A     | 55W                  |
| PSE60-2XX  | 9-11 VDC       | 6.50-5.31A     | 58.5W                |
| PSE60-3XX  | 11-13VDC       | 5.45-4.61A     | 60W                  |
| PSE60-4XX  | 13-16 VDC      | 4.61-3.75A     | 60W                  |
| PSE60-5XX  | 16-21 VDC      | 3.75-2.85A     | 60W                  |
| PSE60-6XX  | 21-27 VDC      | 2.85-2.22A     | 60W                  |
| PSE60-7XX  | 27-33 VDC      | 2.22-1.81A     | 60W                  |
| PSE60-8XX  | 33-40 VDC      | 1.81-1.50A     | 60W                  |
| PSE60-9XX  | 40-50 VDC      | 1.50-1.20A     | 60W                  |

Note: XX = Output voltage required e.g. 5V part number = PSE60-105

## DRAWINGS

### MECHANICAL DIMENSIONS MM



### NOTE:

1. Optional output connectors: see page Appendix