## Features:

- Universal AC input / Full range
- High efficiency up to 90%
- Protections: Short circuit /Over load /Over voltage
- Cooling by free air convection
- 4" × 2" compact size
- LED indicator for power on
- No load power consumption <0.3W(5V/7.5V <0.5W)
- Operating altitude up to 4000 meters
- 3 years warranty
- Compliance to IEC/EN/UL 62368-1

## Specification

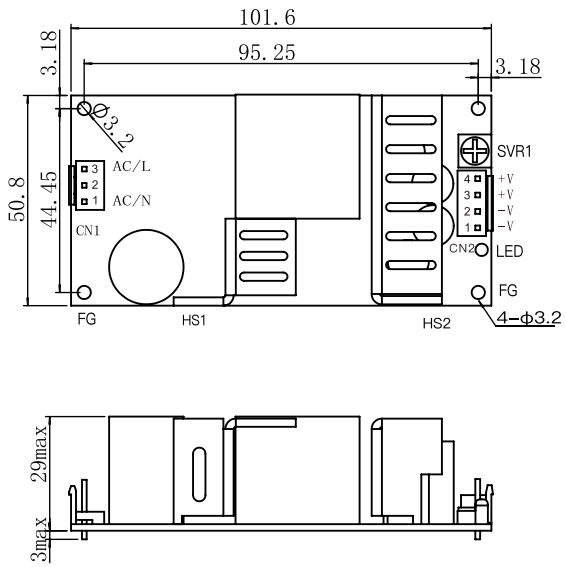
| MODEL | | PS-65-5 | PS-65-7.5 | PS-65-12 | PS-65-15 | PS-65-24 | PS-65-36 | PS-65-48 |
|---|---|---|---|---|---|---|---|---|
| INPUT | VOLTAGE RANGE | 90～264VAC 127~370VDC (Refer to "Static characteristics") | | | | | | |
| | FREQUENCY RANGE | 47～63Hz | | | | | | |
| | EFFICIENCY(Typ.) | 87% | 87% | 86% | 87% | 90% | 89% | 90% |
| | AC CURRENT(Typ.) | 1.8A/115Vac 1A/230Vac | | | | | | |
| | INRUSH CURRENT(Typ.) | 60A/230Vac (cold start) | | | | | | |
| | LEAKAGE CURRENT | <2mA/240Vac | | | | | | |
| OUTPUT | DC VOLTAGE | 5V | 7.5V | 12V | 15V | 24V | 36V | 48V |
| | RATED CURRENT | 11A | 8A | 5.42A | 4.34A | 2.71A | 1.81A | 1.36A |
| | CURRENT RANGE | 0~12A | 0~8.8A | 0~6A | 0~4.8A | 0～3A | 0～2A | 0~1.5 |
| | RATED POWER | 55W | 60W | 65.04W | 65.1W | 65.04W | 65.16W | 65.28W |
| | PEAK LOAD(10 SEC.) | 60W | 66W | 72W | 72W | 72W | 72W | 72W |
| | RIPPLE&NOISE(max.) | 80mVp-p | 100mVp-p | 120mVp-p | 150mVp-p | 240mVp-p | 280mVp-p | 300mVp-p |
| | VOLTAGE ADJ.RANGE | 4.75～5.5V | 7.13～8.25V | 10.8～13.5V | 13.5～16.5V | 21.6～26.4V | 32.4～39.6V | 43.2～52.8V |
| | VOLTAGE TOLERANCE | ±2% | ±2% | ±2% | ±2% | ±1% | ±1% | ±1% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% | ±1% |
| | SETUP, RISE TIME | 800ms,50ms/230Vac 1600ms,50ms/115Vac | | | | | | |
| | HOLD UP TIME(Typ.) | 40ms/230Vac 10ms/115Vac at full load. | | | | | | |
| PROTECTION | OVER LOAD | 115%～160% rated output power | | | | | | |
| | | Protection type: Hiccup mode .recovers automatically after fault condition is removed. | | | | | | |
| | OVER VOLTAGE | 5.6~6.75V | 8.63~10.1V | 13.8～16.2V | 17.2～20.25V | 27.6~32.4V | 39.7~46.8V | 43.2～52.8V |
| | | Protection type: Shutdown o/p voltage , re-power on to recover | | | | | | |
| ENVIRONIMENT | WORKING TEMP. | -30～+70℃ (Refer to'derating curve') . | | | | | | |
| | WORKING HUMIDITY. | 20～90% RH non-condensing | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40～+85℃, 10～95% RH | | | | | | |
| | TEMP. COEFFICIENT | ±0.03%/℃ (0～50℃) | | | | | | |
| | OPERATING ALTITUDE | 4000 meters | | | | | | |
| | VIBRATION | 10～500Hz, 2G 10min./1 cycle, period for 60 min. each along X、Y、Z axes | | | | | | |

| | | | | |
|---|---|---|---|---|
| Safety and electromagnetic compatibility | Safety standards | Refer to UL62368–1,TUV EN62368–1,CCC GB4943.1 | | |
| | Withstand voltage and isolation resistance | I/P–O/P: 3KVac; 100MΩ / 500Vdc / 25℃ / 70%RH | | |
| | | I/P–FG: 2KVac; 100MΩ / 500Vdc / 25℃ / 70%RH | | |
| | | O/P–FG: 0.5KVac; 100MΩ / 500Vdc / 25℃ / 70%RH | | |
| | Electromagnetic | **Parameter** | **Standard** | **Test Level / Note** |
| | | Conducted emission | BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1 | Class B |
| | | Radiated emission | BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1 | Class B |
| | | Harmonic current | BS EN/EN61000–3–2,GB17625.1 | Class A |
| | | Voltage flicker | BS EN/EN61000–3–3 | ---- |
| | Electromagnetic compatibility immunity | BS EN/EN55035 | | |
| | | **Parameter** | **Standard** | **Test Level /Note** |
| | | ESD | BS EN/EN61000–4–2 | Level 4, 8KV air, Level 2, 4KV contact, criteria A |
| | | RF field susceptibility | BS EN/EN61000–4–3 | Level 3, criteria A |
| | | EFT bursts | BS EN/EN61000–4–4 | Level 3, criteria A |
| | | Surge susceptibility | BS EN/EN61000–4–5 | Level 4, 2KV/L–N, 4KV/L/N–FG criteria A |
| | | Conducted susceptibility | BS EN/EN61000–4–6 | Level 3, criteria A |
| | | Magnetic field immunity | BS EN/EN61000–4–8 | Level 4, criteria A |
| | | Voltage dips and interruptions | BS EN/EN61000–4–11 | >95% dip 0.5 periods, 30% dip 25 periods , >95% interruptions 250 periods |
| OTHERS | MTBF | ≥585Khrs MIL–HDBK–217F(25℃) | | |
| | DIMENSION | PCB: 101.6*50.8*29mm(L*W*H) | | |
| | PACKING | 0.15Kg; 96pcs/15.4Kg/1.51CUFT | | |

**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. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured from 0% to 100% rated load
6. Length of set up time is measured at cold first start, Turning ON/OFF the power supply very quickly may lead to increase of the set up time.
7. The ambient temperature derating of 5℃/1000m is needed for operating altitude great than 2000m(6500ft).
8. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re–confirmed that it still meets EMC directives.

## Mechanical specification




NOTE:
Unit: mm
SVR1:Output adjustable resistor
TOL: ±1.00

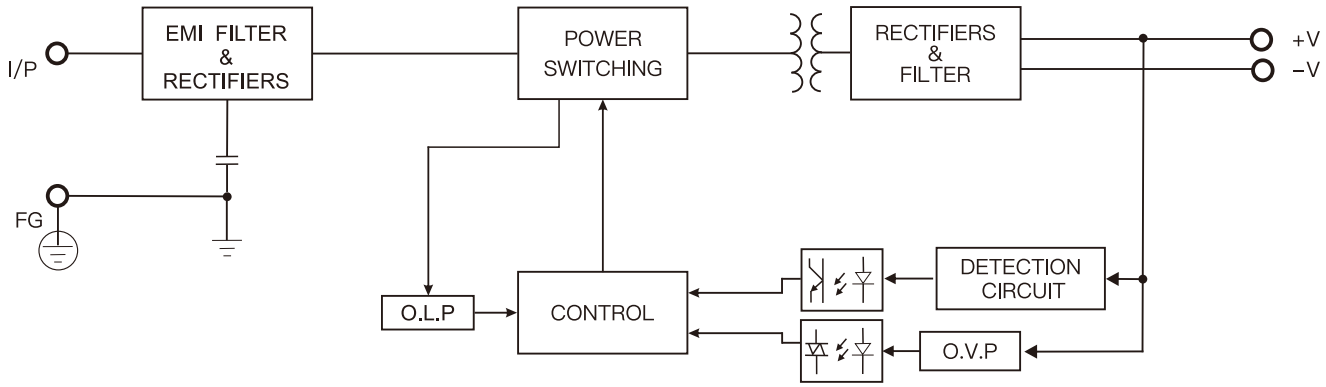
AC Input Connector (CN1) : JST B3P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Termina |
|---|---|---|---|
| 1 | AC/N | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2 | No Pin | | |
| 3 | AC/L | | |

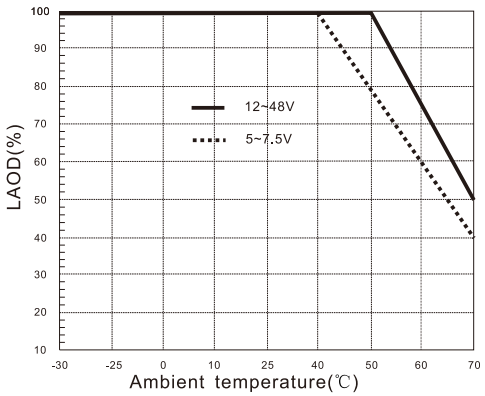
DC Output Connector (CN2) : JST B2P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Termina |
|---|---|---|---|
| 1~2 | -V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 3~4 | +V | | |

## Block diagram




## Derating curve




## Static characteristics