

■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit/Over load/Over voltage
- PWM control and regulated
- High power density 6.117W/inch³
- Built-in remote sense function
- LED indicator for power on
- 100% full load burn-in test
- 125W with 18CFM FAN
- 5"x3" compact size
- 3 years warranty

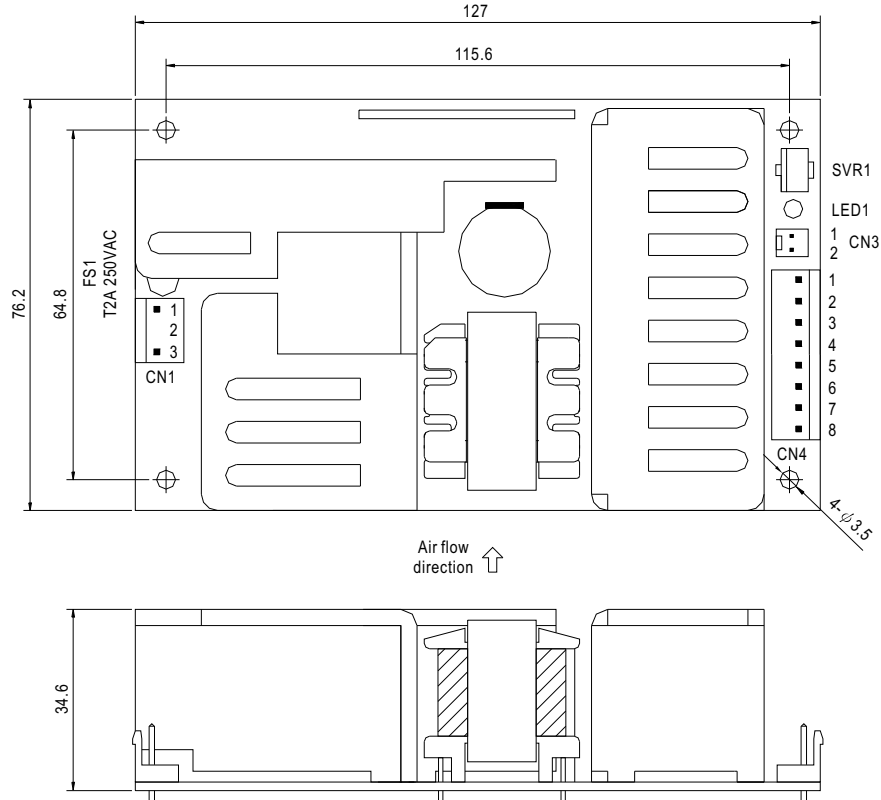


SPECIFICATION

| MODEL | PPS-125-3.3 | PPS-125-5 | PPS-125-12 | PPS-125-13.5 | PPS-125-15 | PPS-125-24 | PPS-125-27 | PPS-125-48 | | |
|-----------------------|---|---|--------------|----------------|----------------|----------------|----------------|----------------|----------------|--|
| OUTPUT | DC VOLTAGE | 3.3V | 5V | 12V | 13.5V | 15V | 24V | 27V | 48V | |
| | RATED CURRENT | 20A | 20A | 8.5A | 7.5A | 6.7A | 4.2A | 3.8A | 2.1A | |
| | CURRENT RANGE (convection) | 0 ~ 20A | 0 ~ 20A | 0 ~ 8.5A | 0 ~ 7.5A | 0 ~ 6.7A | 0 ~ 4.2A | 0 ~ 3.8A | 0 ~ 2.1A | |
| | CURRENT RANGE (18CFM FAN) | 0 ~ 25A | 0 ~ 25A | 0 ~ 10.5A | 0 ~ 9.3A | 0 ~ 8.4A | 0 ~ 5.2A | 0 ~ 4.6A | 0 ~ 2.6A | |
| | RATED POWER (convection) | 66W | 100W | 102W | 101.25W | 100.5W | 100.8W | 102.6W | 100.8W | |
| | RATED POWER (18CFM FAN) | 82.5W | 125W | 126W | 125.55W | 126W | 124.8W | 124.2W | 124.8W | |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-p | 100mVp-p | 100mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 250mVp-p | |
| | VOLTAGE ADJ. RANGE | 3.13 ~ 3.46V | 4.75 ~ 5.25V | 11.40 ~ 12.60V | 12.82 ~ 14.17V | 14.25 ~ 15.75V | 22.80 ~ 25.20V | 25.65 ~ 28.35V | 45.60 ~ 50.40V | |
| | VOLTAGE TOLERANCE Note.3 | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±2.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | |
| | LOAD REGULATION | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | SETUP, RISE TIME | 1000ms, 30ms/230VAC 2000ms, 30ms/115VAC at full load | | | | | | | | |
| HOLD TIME (Typ.) | 24ms/230VAC 24ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 127 ~ 370VDC | | | | | | | | |
| | FREQUENCY RANGE | 47~63Hz | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.93/230VAC PF>0.98/115VAC at full load | | | | | | | | |
| | EFFICIENCY (Typ.) | 70% | 79% | 80% | 80% | 80% | 83% | 83% | 84% | |
| | AC CURRENT (Typ.) | 115VAC | 1.2A | 1.7A | | | | | | |
| | | 230VAC | 0.6A | 0.75A | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 24A/230VAC | | | | | | | | |
| LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | | |
| PROTECTION | OVER LOAD | 130 ~ 160% rated output power Protection type : Fold back current limiting, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 3.63 ~ 4.45V | 5.5 ~ 6.75V | 13.8 ~ 16.2V | 15.5 ~ 20.25V | 17.25 ~ 20.25V | 27.6 ~ 32.4V | 31.05 ~ 36.45V | 57.6 ~ 67.2V | |
| ENVIRONMENT | WORKING TEMP. | -20 ~ +70°C (Refer to output load derating curve) | | | | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C, 10 ~ 95% RH | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.05%/°C (0 ~ 50°C) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 Approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | | |
| OTHERS | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A | | | | | | | | |
| | MTBF | 111.7Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 127*76.2*34.6mm (L*W*H) | | | | | | | | |
| NOTE | PACKING | 0.37Kg; 36pcs/14.3Kg/0.91CUFT | | | | | | | | |
| | | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. | | | | | | | | |

Mechanical Specification

Unit:mm



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

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

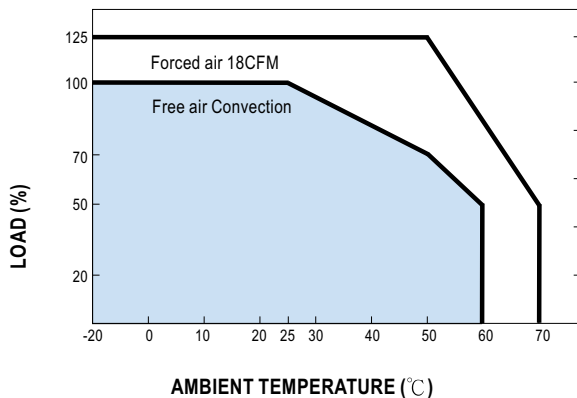
DC Output Connector (CN4) : JST B8P-VH or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1-4 | -V | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 5-8 | +V | | |

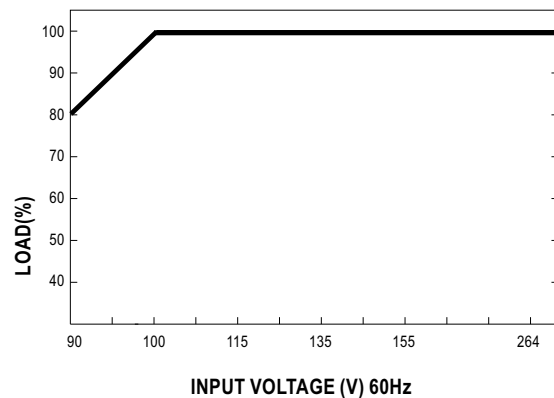
(CN3) : Remote Sense

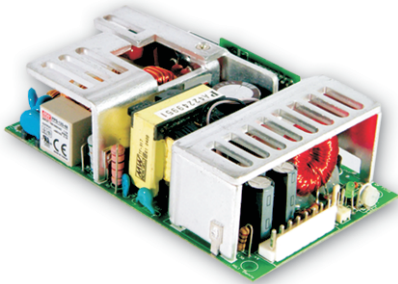
| Pin No. | Assignment |
|---------|------------|
| 1 | RS+ |
| 2 | RS- |

Derating Curve



Output Derating VS Input Voltage





■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit/Over load/Over voltage
- PWM control and regulated
- High power density 6.117W/inch³
- LED indicator for power on
- 100% full load burn-in test
- 125W with 18CFM FAN
- 5"x3" compact size
- 3 years warranty

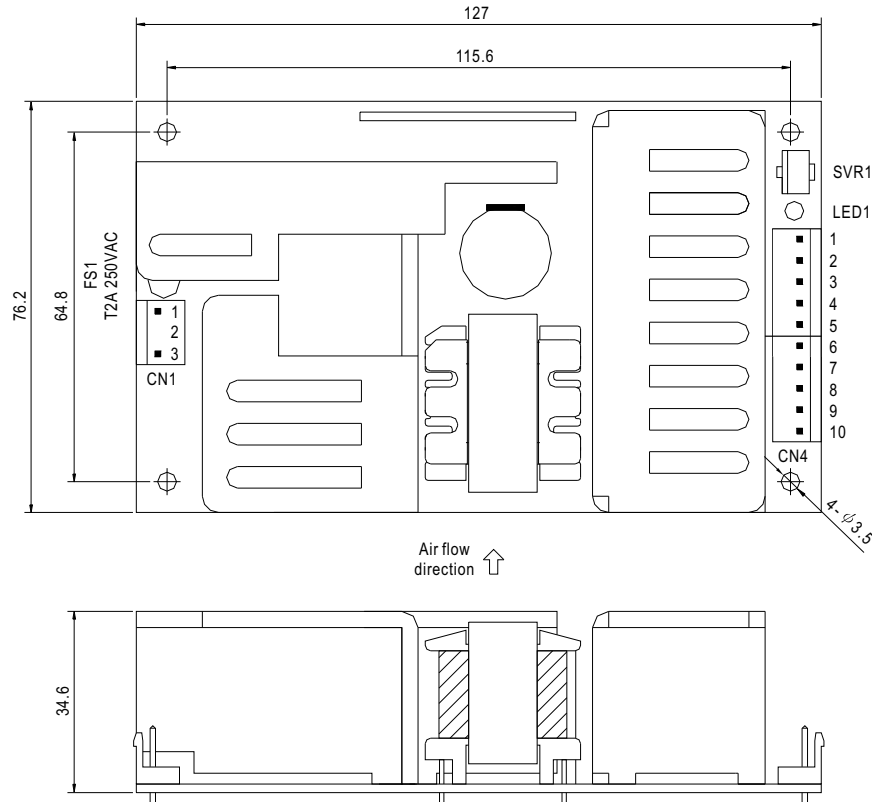


SPECIFICATION

| MODEL | | PPT-125A | | | PPT-125B | | | PPT-125C | | | PPT-125D | | |
|-----------------------|------------------------------|---|-----------|--------------|----------------------------------|-------------|--------------|------------------|--------------|--------------|------------------|--------------|--------------|
| OUTPUT | OUTPUT NUMBER | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 | CH1 | CH2 | CH3 |
| | DC VOLTAGE | 3.3V | 5V | 12V | 5V | 12V | -12V | 5V | 15V | -15V | 5V | 24V | 12V |
| | RATED CURRENT | 10A | 8A | 0.5A | 11.5A | 3A | 0.5A | 11A | 2.5A | 0.5A | 7A | 2.5A | 0.5A |
| | CURRENT RANGE (convection) | 1 ~ 10A | 0.8 ~ 8A | 0.05 ~ 0.5A | 1 ~ 11.5A | 0.3 ~ 3A | 0.05 ~ 0.5A | 1 ~ 11A | 0.25 ~ 2.5A | 0.05 ~ 0.5A | 1 ~ 7A | 0.25 ~ 2.5A | 0.05 ~ 0.5A |
| | CURRENT RANGE (18CFM FAN) | 1 ~ 12.5A | 0.8 ~ 10A | 0.05 ~ 0.63A | 1 ~ 14.38A | 0.3 ~ 3.75A | 0.05 ~ 0.63A | 1 ~ 13.75A | 0.25 ~ 3.13A | 0.05 ~ 0.63A | 1 ~ 8.75A | 0.25 ~ 3.13A | 0.05 ~ 0.63A |
| | RATED POWER (convection) | 79W | | | 99.5W | | | 100W | | | 101W | | |
| | RATED POWER (18CFM FAN) | 98.8W | | | 124.46W | | | 125.15W | | | 126.43W | | |
| | RIPPLE & NOISE (max.) Note.2 | 100mVp-p | 100mVp-p | 120mVp-p | 100mVp-p | 120mVp-p | 120mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 100mVp-p | 240mVp-p | 120mVp-p |
| | VOLTAGE ADJ. RANGE | CH1:3.13 ~ 3.46V | | | CH1:4.75 ~ 5.25V | | | CH1:4.75 ~ 5.25V | | | CH1:4.75 ~ 5.25V | | |
| | VOLTAGE TOLERANCE Note.3 | ±3.0% | ±5.0% | ±6.0% | ±3.0% | ±5.0% | ±6.0% | ±3.0% | ±5.0% | ±6.0% | ±3.0% | ±5.0% | ±6.0% |
| | LINE REGULATION | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±3.0% | ±3.0% | ±5.0% | ±3.0% | ±3.0% | ±5.0% | ±3.0% | ±3.0% | ±5.0% | ±3.0% | ±3.0% | ±5.0% |
| | SETUP, RISE TIME | 1000ms, 30ms/230VAC | | | 2000ms, 30ms/115VAC at full load | | | | | | | | |
| | HOLD TIME (Typ.) | 24ms/230VAC | | | 24ms/115VAC at full load | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC | | | 127 ~ 370VDC | | | | | | | | |
| | FREQUENCY RANGE | 47~63Hz | | | | | | | | | | | |
| | POWER FACTOR (Typ.) | PF>0.93/230VAC | | | PF>0.98/115VAC at full load | | | | | | | | |
| | EFFICIENCY (Typ.) | 75% | | | 78% | | | 78% | | | 78% | | |
| | AC CURRENT (Typ.) | 1.7A/115VAC | | | 0.75A/230VAC | | | | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 24A/230VAC | | | | | | | | | | | |
| | LEAKAGE CURRENT | <2mA / 240VAC | | | | | | | | | | | |
| PROTECTION | OVER LOAD | 130 ~ 160% rated output power Protection type : Fold back current limiting, recovers automatically after fault condition is removed | | | | | | | | | | | |
| | OVER VOLTAGE | CH1:3.6 ~ 4.45V | | | CH1:5.75 ~ 6.75V | | | CH1:5.75 ~ 6.75V | | | CH1:5.75 ~ 6.75V | | |
| ENVIRONMENT | WORKING TEMP., HUMIDITY | -20 ~ +70°C (Refer to output load derating curve) | | | | | | | | | | | |
| | WORKING TEMP. | 20 ~ 90% RH non-condensing | | | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85°C, 10 ~ 95% RH | | | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.05%/°C (0 ~ 50°C) | | | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes | | | | | | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | UL60950-1, TUV EN60950-1 Approved | | | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC | | | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC | | | | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022 (CISPR22) Class B | | | | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,-3 | | | | | | | | | | | |
| OTHERS | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A | | | | | | | | | | | |
| | MTBF | 94.7Khrs min. MIL-HDBK-217F (25°C) | | | | | | | | | | | |
| | DIMENSION | 127*76.2*34.6mm (L*W*H) | | | | | | | | | | | |
| NOTE | PACKING | 0.37Kg; 36pcs/14.3Kg/0.91CUFT | | | | | | | | | | | |
| | | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C 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. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. | | | | | | | | | | | |

Mechanical Specification

Unit:mm



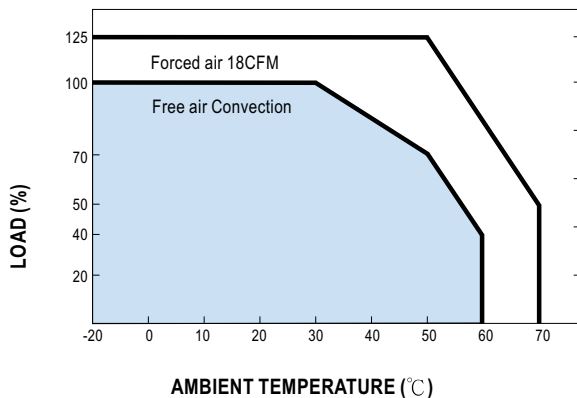
AC Input Connector (CN1) : JST B3P-VH or equivalent

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

DC Output Connector (CN4) : JST B5P-VH*2 or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|-----------------------|--------------------------------|
| 1 | CH3 | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2,3 | CH2 | | |
| 4-8 | GND | | |
| 9,10 | CH1 | | |

Derating Curve



Output Derating VS Input Voltage

