
**■ Features :**

- Universal AC input / Full range
- Isolated output & GND for CH1,CH2
- Built-in active PFC function, PF>0.92
- Protections:Short circuit / Overload / Over voltage / Over temperature
- Remote control for CH1
- Peak load 170% for CH1 within 10 sec.
- Cooling by free air convection
- 100% full load burn-in test
- 3 years warranty


**■ GTIN CODE**

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

**SPECIFICATION**

| MODEL                 | PID-250A                                    |  | PID-250B            |                               | PID-250C     |                          | PID-250D     |                         |              |  |
|-----------------------|---|--|---------------------|-------------------------------|--------------|--------------------------|--------------|-------------------------|--------------|--|
| OUTPUT                | OUTPUT NUMBER                               | CH1  | CH2                 | CH1                           | CH2          | CH1                      | CH2          | CH1                     | CH2          |  |
|                       | DC VOLTAGE                                  | 12V  | 5V                  | 24V                           | 5V           | 36V                      | 5V           | 48V                     | 5V           |  |
|                       | RATED CURRENT                               | 15A(Peak 20A)  | 5A                  | 9.4A(Peak 16.7A)              | 5A           | 6.3A(Peak 11.1A)         | 5A           | 4.7A(Peak 8.4A)         | 5A           |  |
|                       | CURRENT RANGE <small>Note.6</small>         | 0 ~ 15A<br>(Peak 20A)  | 0 ~ 5A              | 0 ~ 9.4A<br>(Peak 16.7A)      | 0 ~ 5A       | 0 ~ 6.3A<br>(Peak 11.1A) | 0 ~ 5A       | 0 ~ 4.7A<br>(Peak 8.4A) | 0 ~ 5A       |  |
|                       | RATED POWER                                 | 205W   |                     | 250.6W                        |              | 251.8W                   |              | 250.6W                  |              |  |
|                       | RIPPLE & NOISE (max.) <small>Note.2</small> | 120mVp-p   | 50mVp-p             | 150mVp-p                      | 50mVp-p      | 200mVp-p                 | 50mVp-p      | 200mVp-p                | 50mVp-p      |  |
|                       | VOLTAGE ADJ. RANGE                          | 10.8 ~ 13.2V   | 4.75 ~ 5.25V        | 21.6 ~ 26.4V                  | 4.75 ~ 5.25V | 32.4 ~ 39.6V             | 4.75 ~ 5.25V | 43.2 ~ 52.8V            | 4.75 ~ 5.25V |  |
|                       | VOLTAGE TOLERANCE <small>Note.3</small>     | ±3.0%  | ±2.0%               | ±2.0%                         | ±2.0%        | ±2.0%                    | ±2.0%        | ±2.0%                   | ±2.0%        |  |
|                       | LINE REGULATION                             | ±0.5%  | ±0.5%               | ±0.5%                         | ±0.5%        | ±0.5%                    | ±0.5%        | ±0.5%                   | ±0.5%        |  |
|                       | LOAD REGULATION                             | ±1.0%  | ±2.0%               | ±1.0%                         | ±2.0%        | ±1.0%                    | ±2.0%        | ±1.0%                   | ±2.0%        |  |
| SETUP, RISE TIME      | 250ms, 60ms/115VAC                          |  | 1200ms, 60ms/230VAC |                               |              |                          |              |                         |              |  |
| HOLD UP TIME (Typ.)   | 30ms at full load                           |  |                     |                               |              |                          |              |                         |              |  |
| INPUT                 | VOLTAGE RANGE <small>Note.5</small>         | 90 ~ 264VAC  |                     | 127 ~ 370VDC                  |              |                          |              |                         |              |  |
|                       | FREQUENCY RANGE                             | 47 ~ 63Hz  |                     |                               |              |                          |              |                         |              |  |
|                       | POWER FACTOR                                | PF ≥ 0.92/230VAC   |                     | PF ≥ 0.97/115VAC at full load |              |                          |              |                         |              |  |
|                       | EFFICIENCY(Typ.)                            | 83%  |                     | 86%                           |              | 86%                      |              | 86%                     |              |  |
|                       | AC CURRENT (Typ.)                           | 3A/115VAC  |                     | 1.5A/230VAC                   |              |                          |              |                         |              |  |
|                       | INRUSH CURRENT (Typ.)                       | COLD START 58A/230VAC  |                     |                               |              |                          |              |                         |              |  |
| LEAKAGE CURRENT       | <3.5mA / 240VAC                             |  |                     |                               |              |                          |              |                         |              |  |
| PROTECTION            | OVERLOAD                                    | CH1: 105 ~ 170% rated output power<br>Normally work within 10 sec and then shut down, re-power on to recover<br>Over 180% rated power or short circuit, constant current limiting within 10 sec and then shut down, re-power on to recover<br>CH2: 101 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |                     |                               |              |                          |              |                         |              |  |
|                       | OVER VOLTAGE                                | 13.8 ~ 16.2V   | 5.5 ~ 6.75V         | 27.6 ~ 32.4V                  | 5.5 ~ 6.75V  | 40 ~ 48V                 | 5.5 ~ 6.75V  | 54 ~ 64.8V              | 5.5 ~ 6.75V  |  |
|                       | OVER TEMPERATURE                            | Shut down o/p voltage(CH1), recovers automatically after temperature goes down   |                     |                               |              |                          |              |                         |              |  |
| FUNCTION              | REMOTE CONTROL                              | CN52 : Open=CH1 & CH2 power on ; Short = CH1 power off, CH2 power on; when CH2 is malfunction, CH1 will be shut down   |                     |                               |              |                          |              |                         |              |  |
| ENVIRONMENT           | WORKING TEMP.                               | -20 ~ +70°C (Refer to "Derating Curve")  |                     |                               |              |                          |              |                         |              |  |
|                       | WORKING HUMIDITY                            | 20 ~ 90% RH non-condensing   |                     |                               |              |                          |              |                         |              |  |
|                       | STORAGE TEMP., HUMIDITY                     | -20 ~ +85°C, 10 ~ 95% RH   |                     |                               |              |                          |              |                         |              |  |
|                       | TEMP. COEFFICIENT                           | ±0.05%/°C (0 ~ 50°C)   |                     |                               |              |                          |              |                         |              |  |
|                       | VIBRATION                                   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min each along X, Y, Z axes   |                     |                               |              |                          |              |                         |              |  |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS                            | UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved   |                     |                               |              |                          |              |                         |              |  |
|                       | WITHSTAND VOLTAGE                           | I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC  |                     |                               |              |                          |              |                         |              |  |
|                       | ISOLATION RESISTANCE                        | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH   |                     |                               |              |                          |              |                         |              |  |
|                       | EMC EMISSION                                | Compliance to BS EN/EN55032 (CISPR32) Class B, BS EN/EN61000-3-2,-3, EAC TP TC 020   |                     |                               |              |                          |              |                         |              |  |
| OTHERS                | EMC IMMUNITY                                | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, BS EN/EN61000-6-2, heavy industry level, EAC TP TC 020  |                     |                               |              |                          |              |                         |              |  |
|                       | MTBF  | 2091.7K hrs min. Telcordia SR-332 (Bellcore) ; 150.5K hrs min. MIL-HDBK-217F (25°C)  |                     |                               |              |                          |              |                         |              |  |
|                       | DIMENSION                                   | 222*95*40mm (L*W*H)  |                     |                               |              |                          |              |                         |              |  |
|                       | PACKING                                     | 0.74Kg; 18pcs/14.3Kg/0.98CUFT  |                     |                               |              |                          |              |                         |              |  |

**NOTE**

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. 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. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <http://www.meanwell.com>)
5. Derating may be needed under low input voltage. Please check the derating curve for more details.
6. Peak current should reduce to 150% of rated value if the input voltage <110VAC.
7. Heat Sink HS1,HS2,HS3 can not be shorted.
8. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

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

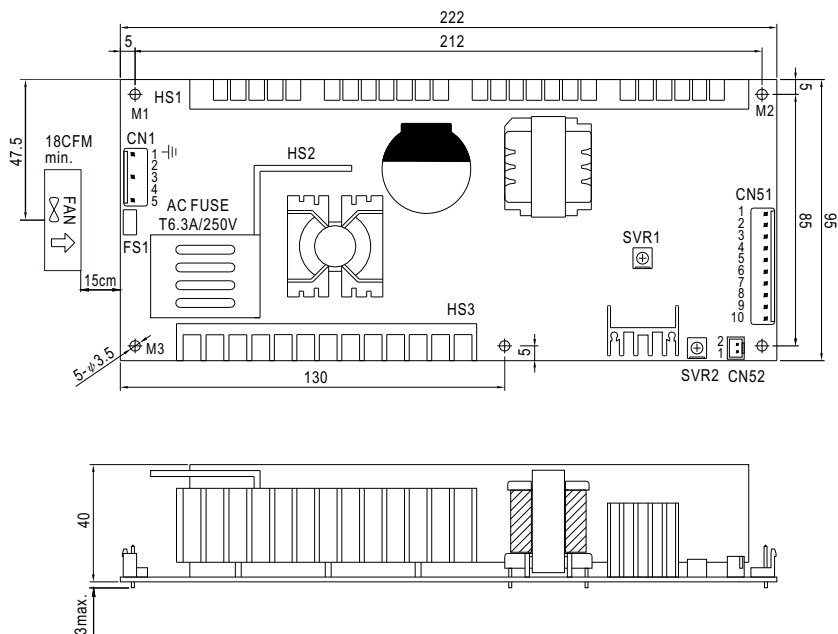


## 250W Isolated Dual Output with PFC Function

# PID-250

### Mechanical Specification

Unit:mm



AC Input Connector (CN1) : JST B5P-VH or equivalent

| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1       | FG $\perp$ | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 2,4     | No Pin     |                       |                                |
| 3       | AC/N       |                       |                                |
| 5       | AC/L       |                       |                                |

$\perp$  : Grounding Required

DC Output Connector (CN51) : JST B10P-VH or equivalent

| Pin No. | Assignment | Mating Housing        | Terminal                       |
|---------|------------|-----------------------|--------------------------------|
| 1,2,3   | COM1       | JST VHR or equivalent | JST SVH-21T-P1.1 or equivalent |
| 4,5,6   | V1         |                       |                                |
| 7,8     | COM2       |                       |                                |
| 9,10    | V2         |                       |                                |

Remote ON/OFF Connector(CN52):JST B2B-XH or equivalent

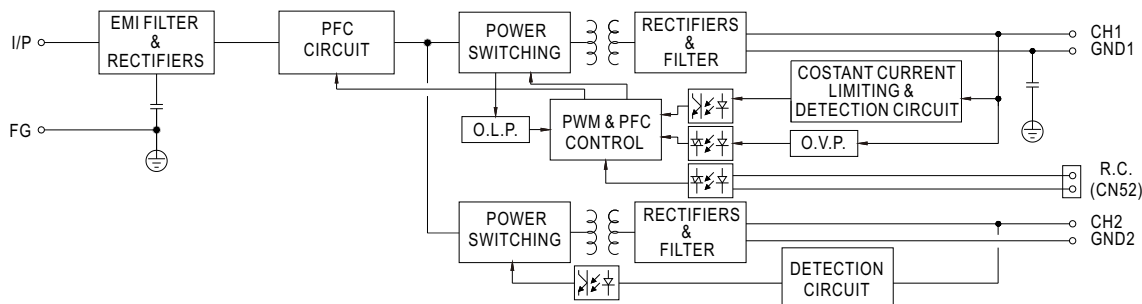
| Pin No.        | Status            | Mating Housing        | Terminal                        |
|----------------|-------------------|-----------------------|---------------------------------|
| PIN1,2 (Short) | V1: OFF<br>V2: ON | JST XHP or equivalent | JST SXH-001T-P0.6 or equivalent |
| PIN1,2 (Open)  | V1: ON<br>V2: ON  |                       |                                 |

|      |         |
|------|---------|
| SVR1 | For CH1 |
| SVR2 | For CH2 |



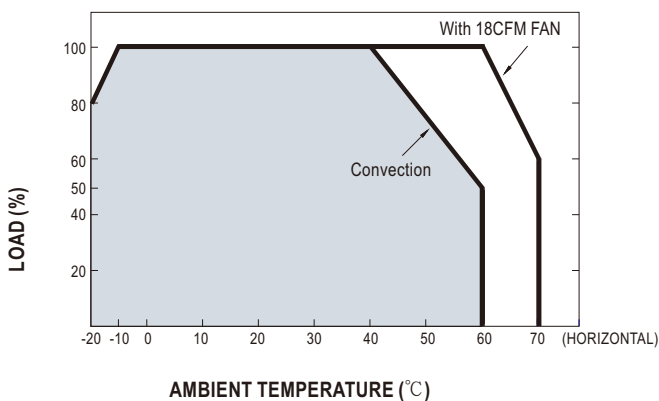
- 1.HS1,HS2,HS3 cannot be shorted.
- 2.CN1:Pin1 is safety ground. For better EMC performance,Please secure an electrical connection between M1,M2,M3,and chassis grounding.

### Block Diagram



PFC fosc : 100KHz  
 PWM fosc : 100KHz

### Derating Curve



### Output Derating VS Input Voltage

