



■ Features :

- Universal AC input / Full range
- Low leakage current <200 μ A
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Medical safety approved (MOPP level)
- Fixed switching frequency at 100KHz
- Low cost
- High reliability
- 3 years warranty

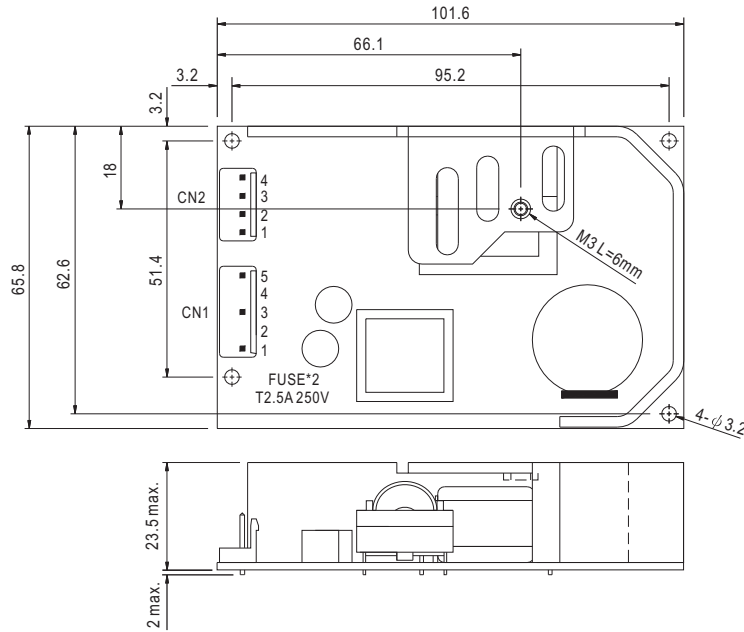


SPECIFICATION

| MODEL | MPS-30-5 | MPS-30-12 | MPS-30-15 | MPS-30-24 | MPS-30-27 | MPS-30-48 | |
|-----------------------|--|---|--------------|---------------|--------------|---------------|--------------|
| OUTPUT | DC VOLTAGE | 5V | 12V | 15V | 24V | 27V | 48V |
| | RATED CURRENT | 5A | 2.5A | 2A | 1.2A | 1.1A | 0.6A |
| | CURRENT RANGE | 0 ~ 5A | 0 ~ 2.5A | 0 ~ 2A | 0 ~ 1.2A | 0 ~ 1.1A | 0 ~ 0.6A |
| | RATED POWER | 25W | 30W | 30W | 28.8W | 29.7W | 28.8W |
| | RIPPLE & NOISE (max.) Note.2 | 80mVp-p | 120mVp-p | 150mVp-p | 240mVp-p | 240mVp-p | 240mVp-p |
| | VOLTAGE TOLERANCE Note.3 | $\pm 3.0\%$ | $\pm 3.0\%$ | $\pm 3.0\%$ | $\pm 3.0\%$ | $\pm 3.0\%$ | $\pm 2.0\%$ |
| | LINE REGULATION | $\pm 1.0\%$ | $\pm 1.0\%$ | $\pm 0.5\%$ | $\pm 0.5\%$ | $\pm 0.5\%$ | $\pm 0.5\%$ |
| | LOAD REGULATION | $\pm 2.0\%$ | $\pm 1.0\%$ | $\pm 1.0\%$ | $\pm 1.0\%$ | $\pm 1.0\%$ | $\pm 1.0\%$ |
| | SETUP, RISE TIME | 500ms, 30ms/230VAC 500ms, 30ms/115VAC at full load | | | | | |
| HOLD UP TIME (Typ.) | 70ms/230VAC 12ms/115VAC at full load | | | | | | |
| INPUT | VOLTAGE RANGE | 88 ~ 264VAC auto switch 120 ~ 370VDC | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | EFFICIENCY (Typ.) | 72% | 75% | 76% | 77% | 78% | 78% |
| | AC CURRENT (Typ.) | 0.8A/115VAC 0.5A/230VAC | | | | | |
| | INRUSH CURRENT (Typ.) | COLD START 30A/230VAC | | | | | |
| LEAKAGE CURRENT | Earth leakage current < 200 μ A/264VAC | | | | | | |
| PROTECTION | OVERLOAD | Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | |
| | OVER VOLTAGE | 5.5 ~ 6.75V | 13.2 ~ 16.2V | 16.5 ~ 20.25V | 26.4 ~ 32.4V | 29.7 ~ 36.45V | 52.8 ~ 64.8V |
| | OVER TEMPERATURE | Tj 135 $^{\circ}$ C typically (U1) detect on main control IC Protection type : Shut down o/p voltage, re-power on to recover | | | | | |
| ENVIRONMENT | WORKING TEMP. | -10 ~ +60 $^{\circ}$ C (Refer to "Derating Curve") | | | | | |
| | WORKING HUMIDITY | 20 ~ 90% RH non-condensing | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85 $^{\circ}$ C, 10 ~ 95% RH | | | | | |
| | TEMP. COEFFICIENT | $\pm 0.03\%/^{\circ}$ C (0 ~ 50 $^{\circ}$ C) | | | | | |
| VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | |
| SAFETY & EMC (Note 4) | SAFETY STANDARDS | ANSI/AAMI ES60601-1, TUV EN60601-1, IEC60601-1 approved | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:SHORT | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25 $^{\circ}$ C / 70% RH | | | | | |
| | EMC EMISSION | Compliance to EN55011 (CISPR11) Class B, EN61000-3-2,-3 | | | | | |
| EMC IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN60601-1-2, medical level, criteria A | | | | | | |
| OTHERS | MTBF | 547Khrs min. MIL-HDBK-217F (25 $^{\circ}$ C) | | | | | |
| | DIMENSION | 101.6*65.8*23.5mm (L*W*H) | | | | | |
| | PACKING | 0.16Kg; 90pcs/15.8Kg/1.02CUFT | | | | | |
| NOTE | <ol style="list-style-type: none"> 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25$^{\circ}$C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1μf & 47μf 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. 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) | | | | | | |

■ Mechanical Specification

Unit:mm



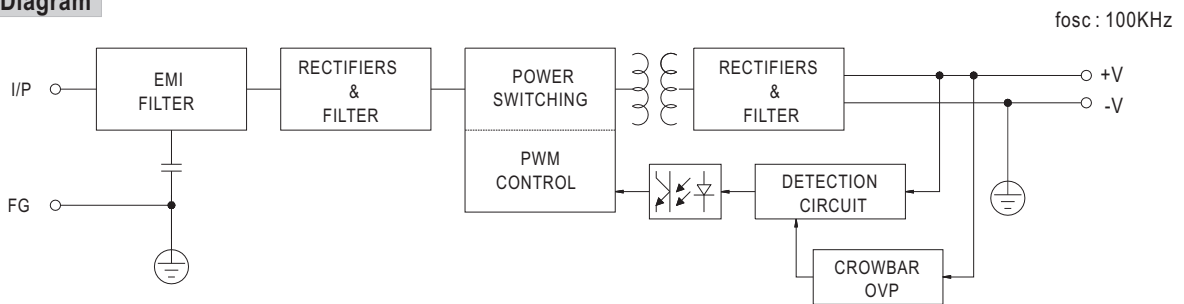
AC Input Connector (CN1) : Molex 41791-5 or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|-------------|--------------------------|--------------------------|
| 1 | FG \equiv | Molex 2139 or equivalent | Molex 2478 or equivalent |
| 2,4 | No Pin | | |
| 3 | AC/N | | |
| 5 | AC/L | | |

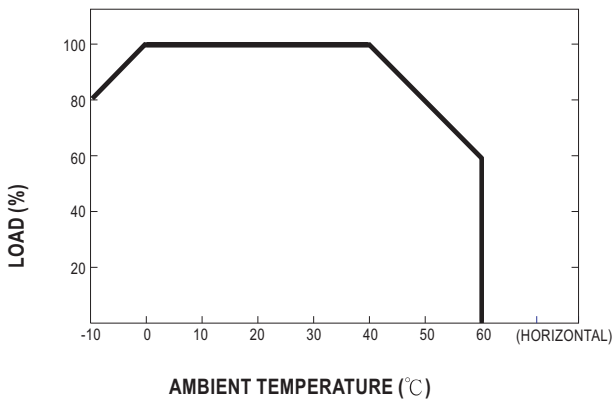
DC Output Connector (CN2) : Molex 41791-4 or equivalent

| Pin No. | Assignment | Mating Housing | Terminal |
|---------|------------|--------------------------|--------------------------|
| 1,2 | -V | Molex 2139 or equivalent | Molex 2478 or equivalent |
| 3,4 | +V | | |

■ Block Diagram



■ Derating Curve



■ Static Characteristics

