



#### Features:

- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload / Over voltage
- Low profile: 33mm thickness
- LED indicator for power on
- Cooling by free air convection
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

## **SPECIFICATION**



| MODEL           |  | TP-75A  |  |          | TP-75B    | TP-75B   |          |           | TP-75C   |          |  |
|-----------------|--|---|--|----------|-----------|----------|----------|-----------|----------|----------|--|
|                 | OUTPUT NUMBER  | CH1   | CH2  | CH3      | CH1       | CH2      | CH3      | CH1       | CH2      | CH3      |  |
|                 | DC VOLTAGE   | 5V  | 12V  | -5V      | 5V        | 12V      | -12V     | 5V        | 15V      | -15V     |  |
|                 | RATED CURRENT  | 7A  | 3A   | 0.6A     | 7A        | 3A       | 0.4A     | 6A        | 2.5A     | 0.5A     |  |
|                 | CURRENT RANGE  | 1.5 ~ 10A   | 0.2 ~ 4A   | 0~0.6A   | 1.5 ~ 10A | 0.2 ~ 4A | 0 ~ 0.6A | 1.5 ~ 10A | 0.2 ~ 3A | 0 ~ 0.6A |  |
|                 | RATED POWER  | 74W   |  | 75.8W    |           | 75W      |          |           |          |          |  |
|                 | RIPPLE & NOISE (max.) Note.2   | 100mVp-p  | 120mVp-p   | 100mVp-p | 100mVp-p  | 120mVp-p | 120mVp-p | 100mVp-p  | 120mVp-p | 120mVp-p |  |
| OUTPUT          | VOLTAGE ADJ. RANGE   | CH1: 4.75 ~ 5.5V  |  |          |           |          |          |           |          |          |  |
|                 | VOLTAGE TOLERANCE Note.3   | ±3.0%   | ±4.0%  | ±8.0%    | ±3.0%     | ±4.0%    | ±8.0%    | ±3.0%     | ±4.0%    | ±8.0%    |  |
|                 | LINE REGULATION  | ±1.0%   | ±1.0%  | ±1.0%    | ±1.0%     | ±1.0%    | ±1.0%    | ±1.0%     | ±1.0%    | ±1.0%    |  |
|                 | LOAD REGULATION  | ±3.0%   | ±4.0%  | ±8.0%    | ±3.0%     | ±4.0%    | ±8.0%    | ±3.0%     | ±4.0%    | ±8.0%    |  |
|                 | SETUP, RISE TIME   | 800ms, 60ms at full load  |  |          |           |          |          |           |          |          |  |
|                 | HOLD UP TIME (Typ.)  | 36ms at full load   |  |          |           |          |          |           |          |          |  |
|                 | VOLTAGE RANGE Note.5   | 90 ~ 264VAC 127 ~ 370VDC  |  |          |           |          |          |           |          |          |  |
|                 | FREQUENCY RANGE  | 47 ~ 63Hz   |  |          |           |          |          |           |          |          |  |
|                 | POWER FACTOR (Typ.)  | PF>0.95/230VAC PF>0.98/115VAC at full load  |  |          |           |          |          |           |          |          |  |
| INPUT           | EFFICIENCY (Typ.)  | 70%   |  |          |           |          |          |           |          |          |  |
|                 | AC CURRENT (Typ.)  | 1.5A/115VAC 0.8A/115VAC   |  |          |           |          |          |           |          |          |  |
|                 | INRUSH CURRENT (Typ.)  | COLD START 20A/230VAC   |  |          |           |          |          |           |          |          |  |
|                 | LEAKAGE CURRENT  | <2mA/240VAC   |  |          |           |          |          |           |          |          |  |
| PROTECTION      |  | 105 ~ 150% rated output power   |  |          |           |          |          |           |          |          |  |
|                 | OVERLOAD   | Protection type: Hiccup mode, recovers automatically after fault condition is removed   |  |          |           |          |          |           |          |          |  |
|                 | AV   | 5.75 ~ 6.75V on +5V   |  |          |           |          |          |           |          |          |  |
|                 | OVER VOLTAGE   | Protection typ  | rotection type : Shut down o/p voltage, re-power on to recover |          |           |          |          |           |          |          |  |
| ENVIRONMENT     | WORKING TEMP.  | -10 ~ +60 °C (Refer to output load derating curve)  |  |          |           |          |          |           |          |          |  |
|                 | WORKING HUMIDITY   | 20 ~ 90% RH non-condensing  |  |          |           |          |          |           |          |          |  |
|                 | STORAGE TEMP., HUMIDITY  | -20 ~ +85°C, 10 ~ 95% RH  |  |          |           |          |          |           |          |          |  |
|                 | TEMP. COEFFICIENT  | ±0.03%/°C (0~50°C)  |  |          |           |          |          |           |          |          |  |
|                 | VIBRATION  | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes  |  |          |           |          |          |           |          |          |  |
|                 | SAFETY STANDARDS   | UL60950-1, TUV EN60950-1 approved   |  |          |           |          |          |           |          |          |  |
| 04555140        | WITHSTAND VOLTAGE  | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC 1min.   |  |          |           |          |          |           |          |          |  |
| SAFETY &        | ISOLATION RESISTANCE   | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/70% RH  |  |          |           |          |          |           |          |          |  |
| EMC<br>(Note 4) | <b>EMI CONDUCTION &amp; RADIATION</b>  | Compliance to EN55022 (CISPR22) Class B   |  |          |           |          |          |           |          |          |  |
| (               | HARMONIC CURRENT   | Compliance to EN61000-3-2,-3  |  |          |           |          |          |           |          |          |  |
|                 | EMS IMMUNITY   | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A   |  |          |           |          |          |           |          |          |  |
|                 | MTBF   | 198.4K hrs min. MIL-HDBK-217F (25°C)  |  |          |           |          |          |           |          |          |  |
| OTHERS          | DIMENSION  | 179*99*33mm (L*W*H)   |  |          |           |          |          |           |          |          |  |
|                 | PACKING  | 0.65Kg; 20pcs/12.7Kg/0.64CUFT   |  |          |           |          |          |           |          |          |  |
| NOTE            | <ol> <li>Ripple &amp; noise are measure</li> <li>Tolerance : includes set up</li> <li>The power supply is consided</li> <li>EMC directives. For guidan (as available on http://www.</li> </ol> | ecially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. Issured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. It up tolerance, line regulation and load regulation. Insidered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets indicate on how to perform these EMC tests, please refer to "EMI testing of component power supplies." In www.meanwell.com is dunder low input voltages. Please check the derating curve for more details. |  |          |           |          |          |           |          |          |  |





#### Features:

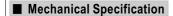
- Universal AC input / Full range
- Built-in active PFC function, PF>0.95
- Protections: Short circuit / Overload/ Over voltage
- Low profile: 33mm thickness
- LED indicator for power on
- Cooling by free air convection
- Fixed switching frequency at PFC:67KHz PWM:134KHz
- 3 years warranty

## SPECIFICATION

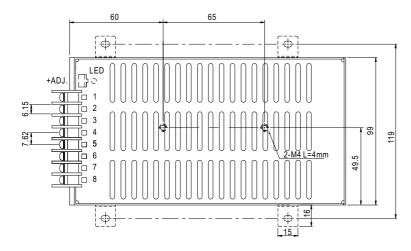


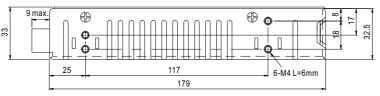
| MODEL           |   | TP-75D  |            |          | TP-7503   | TP-7503  |          |  |  |  |
|-----------------|---|---|------------|----------|-----------|----------|----------|--|--|--|
|                 | OUTPUT NUMBER   | CH1   | CH2        | CH3      | CH1       | CH2      | CH3      |  |  |  |
|                 | DC VOLTAGE  | 5V  | 24V        | 12V      | 5V        | 3.3V     | 12V      |  |  |  |
|                 | RATED CURRENT   | 7A  | 1.5A       | 0.4A     | 9A        | 8A       | 0.3A     |  |  |  |
|                 | CURRENT RANGE   | 1.5 ~ 10A   | 0.2 ~ 2.5A | 0 ~ 0.6A | 1.5 ~ 10A | 0.2 ~ 8A | 0 ~ 0.6A |  |  |  |
|                 | RATED POWER   | 75.8W   |            |          | 75W       |          |          |  |  |  |
| CUTDUT          | RIPPLE & NOISE (max.) Note.2  | 100mVp-p  | 120mVp-p   | 120mVp-p | 100mVp-p  | 50mVp-p  | 120mVp-p |  |  |  |
| OUTPUT          | VOLTAGE ADJ. RANGE  | CH1: 4.75 ~ 5.5V  |            |          |           |          |          |  |  |  |
|                 | VOLTAGE TOLERANCE Note.3  | ±3.0%   | ±4.0%      | ±8.0%    | ±3.0%     | ±4.0%    | ±8.0%    |  |  |  |
|                 | LINE REGULATION   | ±1.0%   | ±1.0%      | ±1.0%    | ±1.0%     | ±1.0%    | ±1.0%    |  |  |  |
|                 | LOAD REGULATION   | ±3.0%   | ±4.0%      | ±8.0%    | ±3.0%     | ±4.0%    | ±8.0%    |  |  |  |
|                 | SETUP, RISE TIME  | 800ms, 60ms at full load  |            |          |           |          |          |  |  |  |
|                 | HOLD UP TIME (Typ.)   | 36ms at full load   |            |          |           |          |          |  |  |  |
|                 | VOLTAGE RANGE Note.5  | 90 ~ 264VAC 127 ~ 370VDC  |            |          |           |          |          |  |  |  |
|                 | FREQUENCY RANGE   | 47 ~ 63Hz   |            |          |           |          |          |  |  |  |
|                 | POWER FACTOR  | PF>0.95/230VAC PF>0.98/115VAC at full load  |            |          |           |          |          |  |  |  |
| INPUT           | EFFICIENCY (Typ.)   | 70%   |            |          |           |          |          |  |  |  |
|                 | AC CURRENT  | 1.5A/115VAC   |            |          |           |          |          |  |  |  |
|                 | INRUSH CURRENT (max.)   | COLD START 20A/230VAC   |            |          |           |          |          |  |  |  |
|                 | LEAKAGE CURRENT   | <2mA / 240VAC   |            |          |           |          |          |  |  |  |
|                 |   | 105 ~ 150% rated output power   |            |          |           |          |          |  |  |  |
|                 | OVERLOAD  | Protection type: Hiccup mode, recovers automatically after fault condition is removed       |            |          |           |          |          |  |  |  |
| PROTECTION      |   | 5.75 ~ 6.75V on +5V   |            |          |           |          |          |  |  |  |
|                 | OVER VOLTAGE  Protection type : Shut down o/p voltage, re-power on to recover   |   |            |          |           |          |          |  |  |  |
|                 | WORKING TEMP.   | -10 ~ +60°C (Refer to output load derating curve)   |            |          |           |          |          |  |  |  |
|                 | WORKING HUMIDITY  | 20 ~ 90% RH non-condensing  |            |          |           |          |          |  |  |  |
| ENVIRONMENT     | STORAGE TEMP., HUMIDITY   | -20 ~ +85℃, 10 ~ 95% RH   |            |          |           |          |          |  |  |  |
|                 | TEMP. COEFFICIENT   | ±0.03%/°C (0~50°C)  |            |          |           |          |          |  |  |  |
|                 | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes                                |            |          |           |          |          |  |  |  |
|                 | SAFETY STANDARDS  | UL60950-1, TUV EN60950-1 approved   |            |          |           |          |          |  |  |  |
| CAFFTVO         | WITHSTAND VOLTAGE   | I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC 1min.   |            |          |           |          |          |  |  |  |
| SAFETY &        | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH                                  |            |          |           |          |          |  |  |  |
| EMC<br>(Note 4) | EMI CONDUCTION & RADIATION  | Compliance to EN55022 (CISPR22) Class B   |            |          |           |          |          |  |  |  |
| ,               | HARMONIC CURRENT  | Compliance to EN61000-3-2,-3  |            |          |           |          |          |  |  |  |
|                 | EMS IMMUNITY  | Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, light industry level, criteria A |            |          |           |          |          |  |  |  |
| OTHERS          | MTBF  | 198.4K hrs min. MIL-HDBK-217F (25°ℂ)  |            |          |           |          |          |  |  |  |
|                 | DIMENSION   | 179*99*33mm (L*W*H)   |            |          |           |          |          |  |  |  |
|                 | PACKING   | 0.65Kg; 20pcs/12.7Kg/0.64CUFT   |            |          |           |          |          |  |  |  |
| NOTE            | <ol> <li>All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>Tolerance: includes set up tolerance, line regulation and load regulation.</li> <li>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)</li> <li>Derating may be needed under low input voltages. Please check the derating curve for more details.</li> </ol> |   |            |          |           |          |          |  |  |  |





Case No. 920A Unit:mm



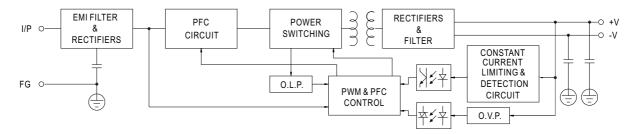


### Terminal Pin No. Assignment

| Pin No. | Pin No. Assignment |   | Assignment |  |  |
|---------|--------------------|---|------------|--|--|
| 1       | DC OUTPUT +V2      | 6 | FG ±       |  |  |
| 2,3     | COM                | 7 | AC/N       |  |  |
| 4       | DC OUTPUT +V1      | 8 | AC/L       |  |  |
| 5       | DC OUTPUT +V3      |   |            |  |  |

# **■** Block Diagram

PFC fosc : 67KHz PWM fosc : 134KHz



### ■ Derating Curve

### ■ Output Derating VS Input Voltage

