

■ Features :

- Universal AC input / Full range
- Built-in active PFC function
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at PFC 67KHz, PWM 134KHz
- 2 years warranty

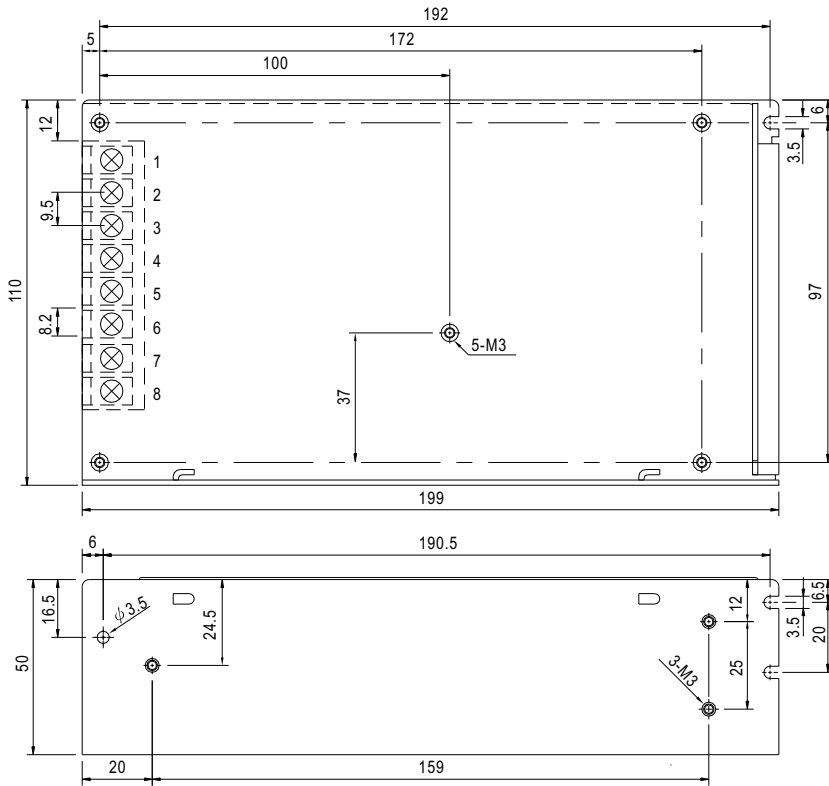


**SPECIFICATION**

| MODEL                 | ADS-15512  |  | ADS-15524 |                  | ADS-15548 |                  |        |
|-----------------------|--|--|-----------|------------------|-----------|------------------|--------|
| OUTPUT                | OUTPUT NUMBER  | CH1  | CH2       | CH1              | CH2       | CH1              | CH2    |
|                       | DC VOLTAGE   | 12V  | 5V        | 24V              | 5V        | 48V              | 5V     |
|                       | RATED CURRENT  | 11.5A  | 3A        | 5.8A             | 3A        | 2.9A             | 3A     |
|                       | CURRENT RANGE  | 0 ~ 12.5A  | 0 ~ 3A    | 0 ~ 6.5A         | 0 ~ 3A    | 0 ~ 3.2A         | 0 ~ 3A |
|                       | RATED POWER  | 153W   |           | 154.2W           |           | 154.2W           |        |
|                       | RIPPLE & NOISE (max.) Note.2   | 150mVp-p   |           | 150mVp-p         |           | 240mVp-p         |        |
|                       | VOLTAGE ADJ. RANGE   | CH1:10.8 ~ 13.2V   |           | CH1:21.6 ~ 26.4V |           | CH1:43.2 ~ 52.8V |        |
|                       | VOLTAGE TOLERANCE Note.3   | ±2.0%  | ±3.0%     | ±1.0%            | ±3.0%     | ±1.0%            | ±5.0%  |
|                       | LINE REGULATION  | ±0.5%  | ±0.5%     | ±0.5%            | ±0.5%     | ±0.5%            | ±0.5%  |
|                       | LOAD REGULATION  | ±1.0%  | ±2.0%     | ±0.5%            | ±2.0%     | ±1.0%            | ±1.0%  |
|                       | SETUP, RISE TIME   | 1000ms, 90ms/230VAC    2000ms, 90ms/115VAC at full load  |           |                  |           |                  |        |
| HOLD UP TIME (Typ.)   | 24ms/230VAC    20ms/115VAC at full load  |  |           |                  |           |                  |        |
| INPUT                 | VOLTAGE RANGE  | 88 ~ 264VAC    124 ~ 370VDC  |           |                  |           |                  |        |
|                       | FREQUENCY RANGE  | 47 ~ 63Hz  |           |                  |           |                  |        |
|                       | POWER FACTOR (Typ.)  | PF>0.92  |           |                  |           |                  |        |
|                       | EFFICIENCY (Typ.)  | 77%  |           | 82%              |           | 82%              |        |
|                       | AC CURRENT (Typ.)  | 2.5A/115VAC    1.5A/230VAC   |           |                  |           |                  |        |
|                       | INRUSH CURRENT (Typ.)  | COLD START 20A/115VAC    40A/230VAC  |           |                  |           |                  |        |
|                       | LEAKAGE CURRENT  | <1mA / 240VAC  |           |                  |           |                  |        |
| PROTECTION            | OVERLOAD   | 105 ~ 135% rated output power<br>Protection type : Constant current limiting, recovers automatically after fault condition is reoved |           |                  |           |                  |        |
|                       | OVER VOLTAGE   | CH1:13.8 ~ 16.2V   |           | CH1:27.6 ~ 32.4V |           | CH1:55.2 ~ 64.8V |        |
|                       |  | Protection 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 & 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 / 25°C / 70% RH   |           |                  |           |                  |        |
|                       | 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   | 202.3K hrs min.    MIL-HDBK-217F (25°C)  |           |                  |           |                  |        |
|                       | DIMENSION  | 199*110*50mm (L*W*H)   |           |                  |           |                  |        |
|                       | PACKING  | 1Kg; 16pcs/16Kg/0.95CUFT   |           |                  |           |                  |        |
| NOTE                  | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. 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.</p> <p>3. Tolerance : includes set up tolerance, line regulation and load regulation.</p> <p>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.</p> |  |           |                  |           |                  |        |

Case No. 906B Unit:mm

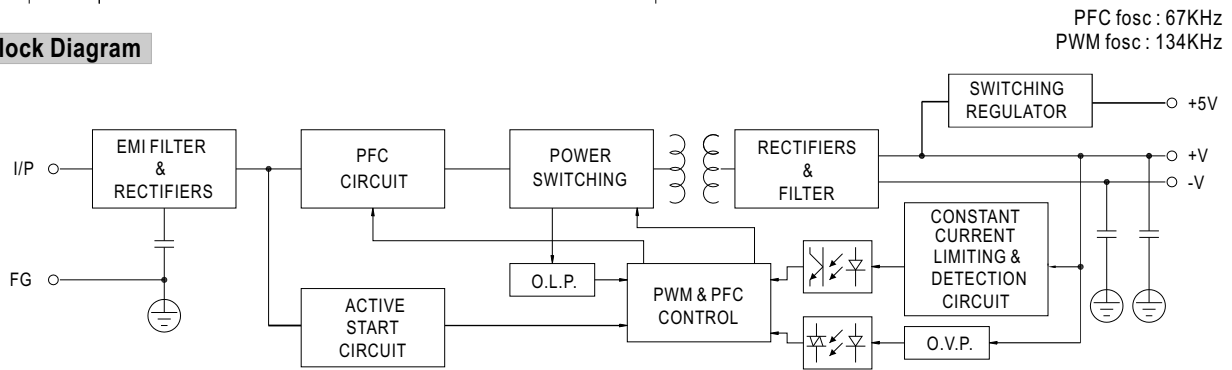
### Mechanical Specification



Terminal Pin No. Assignment

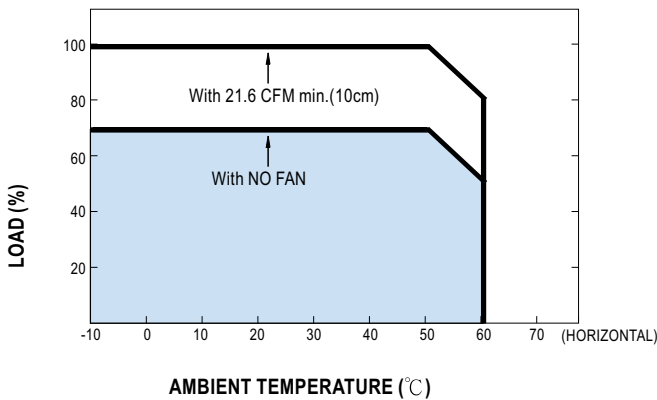
| Pin No. | Assignment | Pin No. | Assignment    |
|---------|------------|---------|---------------|
| 1       | AC/L       | 5       | NC            |
| 2       | AC/N       | 6,7     | DC OUTPUT COM |
| 3       | FG $\perp$ | 8       | DC OUTPUT +V  |
| 4       | +5V        |         |               |

### Block Diagram



PFC fosc : 67KHz  
PWM fosc : 134KHz

### Derating Curve



### Output Derating VS Input Voltage (15512)

