



155W Single Output with 5V, 3A DC-DC Converter

ADS-155 series



■ 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



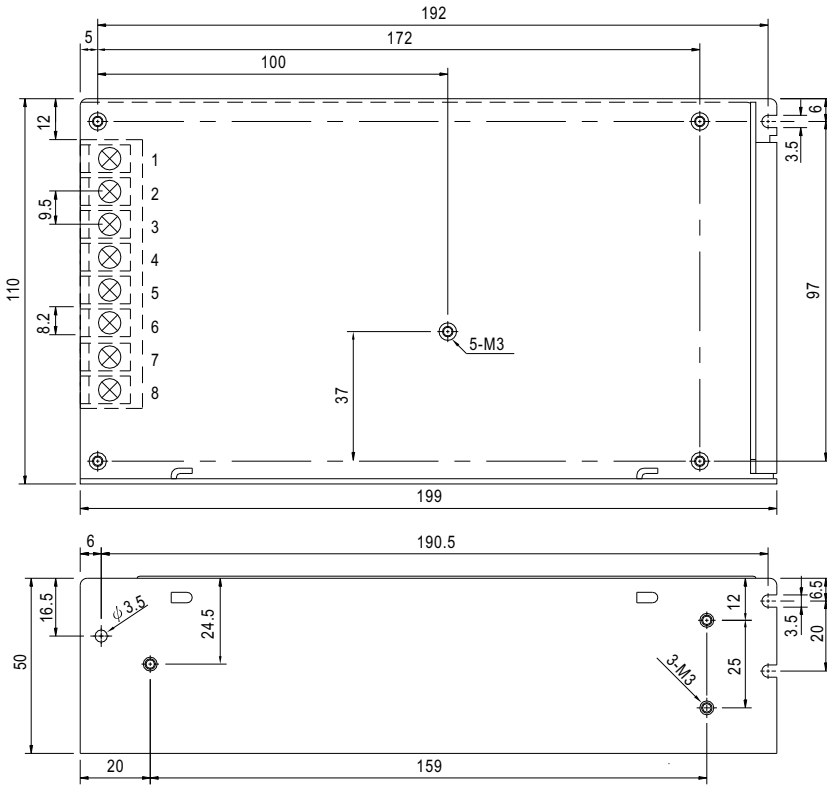
SPECIFICATION

| 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 | 100mVp-p | 150mVp-p | 100mVp-p | 240mVp-p | 100mVp-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 | | 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 | |
| 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 | | | | | |
| EMM 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 | 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. | | | | | | |



Case No. 906B Unit:mm

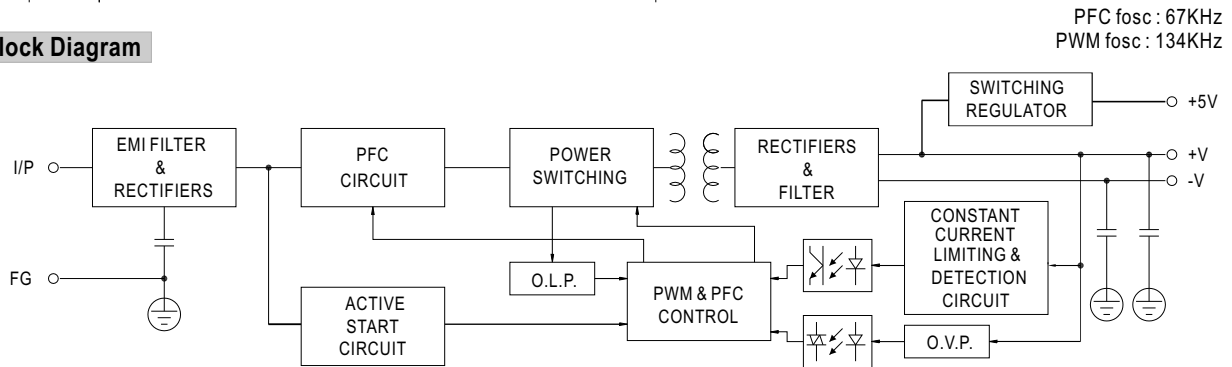
Mechanical Specification



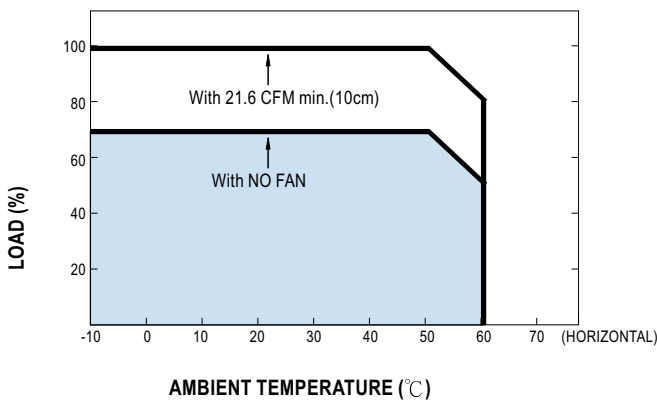
Terminal Pin No. Assignment

| 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



Derating Curve



Output Derating VS Input Voltage (15512)

