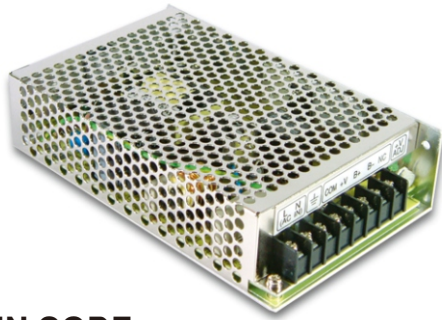




# 55W Single Output with 5V,4A AC-DC Converter

# ADS-55 series



- Features :
  - Universal AC input / Full range
  - Protections: Short circuit / Overload / Over voltage
  - Cooling by free air convection
  - 100% full load burn-in test
  - Fixed switching frequency at 45KHz
  - 2 years warranty

## ■ GTIN CODE

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

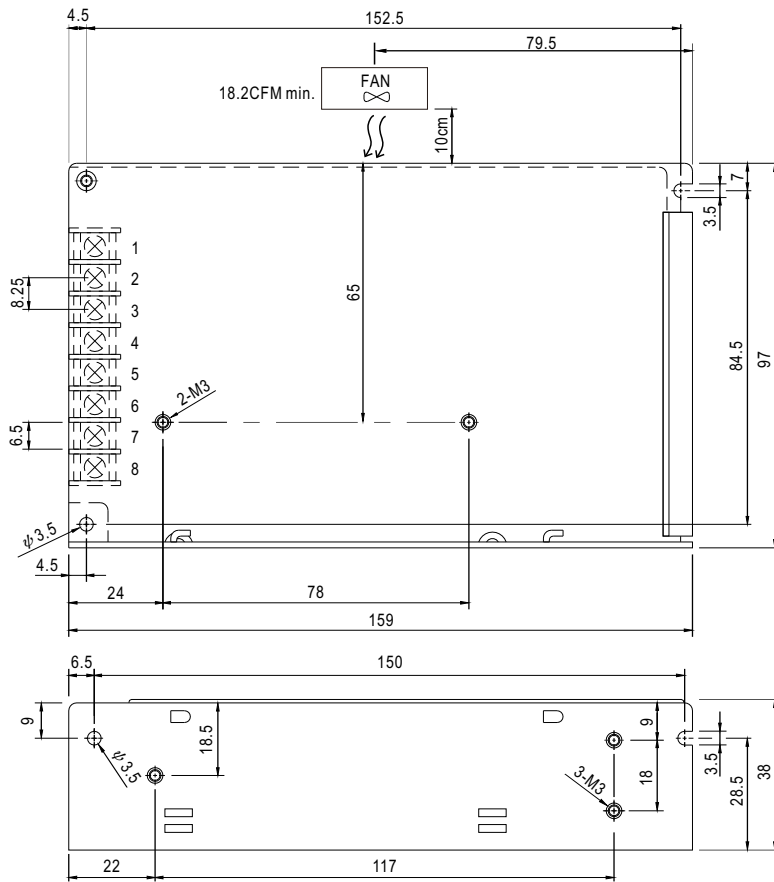


## SPECIFICATION

| MODEL                 | ADS-5512  |   | ADS-5524  |  |          |
|-----------------------|---|---|-----------|--|----------|
| OUTPUT                | OUTPUT NUMBER   | CH1   | CH2       | CH1  | CH2      |
|                       | DC VOLTAGE  | 12V   | 5V        | 24V  | 5V       |
|                       | RATED CURRENT   | 3A  | 3A        | 2A   | 2A       |
|                       | CURRENT RANGE   | 0 ~ 4A  | 0 ~ 4A    | 0 ~ 2.5A   | 0 ~ 4A   |
|                       | RATED POWER   | 51W   |           | 58W  |          |
|                       | RIPPLE & NOISE (max.) Note.2  | 100mVp-p  |           | 100mVp-p   | 100mVp-p |
|                       | VOLTAGE ADJ. RANGE  | CH1:10.8 ~ 13.2V  |           | CH1:21.6 ~ 26.4V   |          |
|                       | VOLTAGE TOLERANCE Note.3  | ±1.0%   | ±3.0%     | ±1.0%  | ±3.0%    |
|                       | LINE REGULATION   | ±0.5%   | ±0.5%     | ±1.0%  | ±0.5%    |
|                       | LOAD REGULATION   | ±0.5%   | ±0.5%     | ±1.0%  | ±0.5%    |
|                       | SETUP, RISE TIME  | 1400ms, 50ms/230VAC   |           | 3300ms, 50ms/115VAC at full load   |          |
| HOLD UP TIME (Typ.)   | 80ms/230VAC   | 16ms/115VAC at full load  |           |  |          |
| INPUT                 | VOLTAGE RANGE   | 88 ~ 264VAC 124 ~ 370VDC  |           |  |          |
|                       | FREQUENCY RANGE   | 47 ~ 63Hz   |           |  |          |
|                       | EFFICIENCY (Typ.)   | 76%   |           | 79%  |          |
|                       | AC CURRENT (Typ.)   | 1.6A/115VAC   | 1A/230VAC |  |          |
|                       | INRUSH CURRENT (Typ.)   | COLD START 20A/115VAC   |           | 40A/230VAC   |          |
| LEAKAGE CURRENT       | <1mA / 240VAC   |   |           |  |          |
| PROTECTION            | OVERLOAD  | 105 ~ 150% rated output power<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |           |  |          |
|                       | OVER VOLTAGE  | CH1:13.8 ~ 16.2V  |           | CH1:27.6 ~ 32.4V<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |          |
| ENVIRONMENT           | WORKING TEMP.   | -10 ~ +60°C (Refer to "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) on CH1 output  |           |  |          |
| VIBRATION             | 10 ~ 500Hz, 2G 10min./1cycle, 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                                      |           |  |          |
| EMC IMMUNITY          | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, BS EN/EN55035, light industry level, EAC TP TC 020  |   |           |  |          |
| OTHERS                | MTBF  | 2486.3K hrs min. Telcordia SR-332 (Bellcore) ; 416.3K hrs min. MIL-HDBK-217F (25°C)                                     |           |  |          |
|                       | DIMENSION   | 159*97*38mm (L*W*H)   |           |  |          |
|                       | PACKING   | 0.57Kg; 24pcs/13.7Kg/0.83CUFT   |           |  |          |
| NOTE                  | 1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.<br>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.<br>3. Tolerance : includes set up tolerance, line regulation and load regulation.<br>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 <a href="http://www.meanwell.com">http://www.meanwell.com</a> )<br>5. 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).<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |   |           |  |          |

## Mechanical Specification

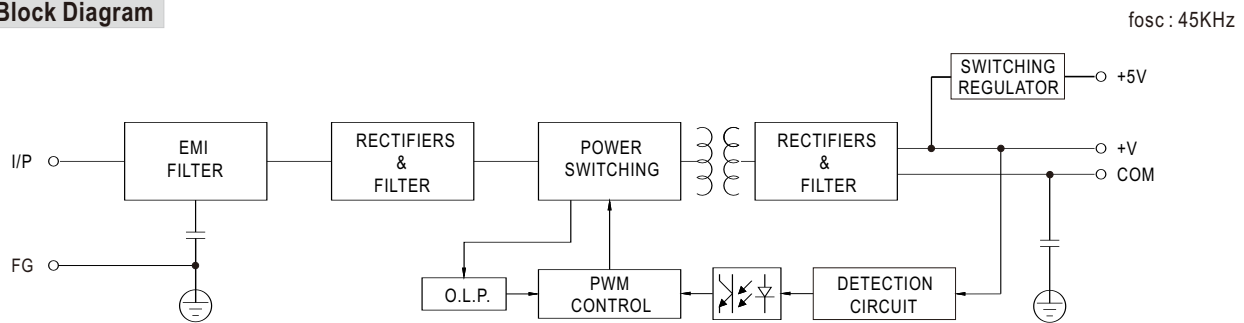
Case No. 901 Unit:mm



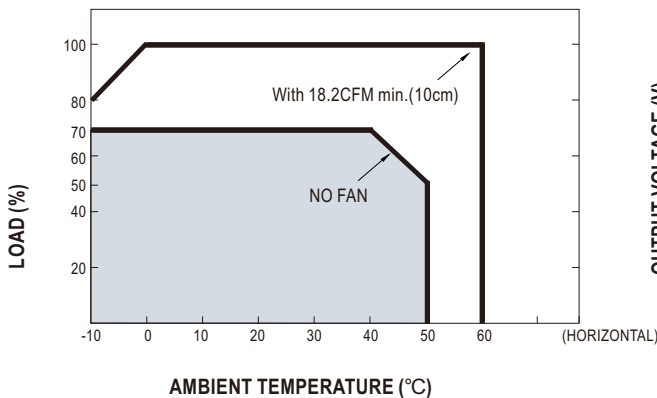
Terminal Pin No. Assignment :

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

## Block Diagram



## Derating Curve



## Static Characteristics (5512)

