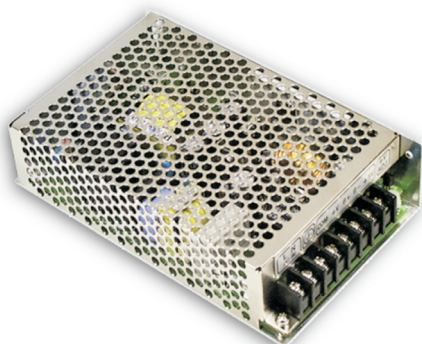
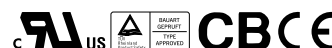




■ Features :

- 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



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	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 2000ms, 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.)	74%		74%	
	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 Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1:13.8 ~ 16.2V		CH1:27.6 ~ 32.4V Protection type : Hiccup mode, recovers automatically after fault condition is removed	
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0~50℃) on CH1 output			
	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℃ / 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	276.3K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	159*97*38mm (L*W*H)			
	PACKING	0.57Kg; 24pcs/13.7Kg/0.75CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ 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.				

Quality Engineering Test Report

SERIES: ADS-55 55W AC-DC SINGLE OUTPUT

SAMPLE: A.ADS-5512

**+V1: 12V / 3A
+V2: 5V / 3A**

B.ADS-5524

**+V1:24V / 2A
+V2:5V/2A**

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT
1	AC INPUT VOLTAGE RANGE	I/P:TESTING SPEC:88~264VAC O/P:FULL LOAD	A:62.9VAC~264VAC	P
2	LINE REGULATION	I/P:88V~264VAC SPEC: O/P:FULL LOAD A :+V1 :±0.5% +V2 :±0.5% B :+V1 :±1% +V2 :±0.5%	A: +V1: -0%~+0% +V2: -0%~+0.12% B: +V1: -0%~+0% +V2: -0%~+0.12%	P
3	LOAD REGULATION	I/P:230VAC SPEC: O/P:MIN. TO FULL LOAD A :+V1 : ±0.5% +V2 : ±0.5% B : +V1 : ±1% +V2 : ±0.5%	A: +V1: -0.049%~+0.049% +V2: -0%~+0.12% B: +V1: -0%~+0.04% +V2: -0%~+0.12%	P
4	OUTPUT VOLTAGE TOLERANCE	I/P:88~264VAC SPEC: O/P:MIN. TO FULL LOAD A :+V1 : ±1% +V2 : ±3% B : +V1 : ±1% +V2 : ±3%	A: +V1: -0.049%~+0% +V2: -0.12%~+0.14% B: +V1: -0.053%~+0.024% +V2: -0%~+0%	P
5	RIPPLE&NOISE	I/P:230VAC SPEC: O/P:FULL LOAD A :+V1 :100mV +V2 :100mV A :+V1 :100mV +V2 :100mV	A: +V1: 18mV +V2: 25mV B: +V1: 11mV +V2: 22mV	P
6	AC INPUT CURRENT	I/P:230VAC SPEC:1A O/P:FULL LOAD	A:0.641A	P
7	MAX. INRUSH CURREN	I/P:230VAC SPEC:40A O/P: FULL LOAD	A:35.984A	P
8	O/P VOLTAGE ADJ.RANGE	I/P:230VAC SPEC: CH1:±10% O/P:MIN. LOAD A: V1:10.8V~13.2V B: V1:21.6~26.4V	A: 10.632V~13.644V B: 15.28V~27.44V	P
9	SET UP TIME	I/P:230VAC SPEC:800mS O/P:FULL LOAD	A: 589mS	P
10	HOLD UP TIME	I/P:230VAC SPEC:60mS O/P:FULL LOAD	A: 109.3mS	P
11	EFFICIENCY	I/P:230VAC SPEC: A:74% O/P:FULL LOAD B:77%	A:76.1% B:80%	P
12	OVER LOAD PROTECTION	I/P:230VAC SPEC:105%~150% O/P:TESTING	A:123% B:128%	P
13	GROUND LEAKAGE CURRENT	I/P:240VAC SPEC: L-FG--<1mA N-FG--<1mA	A: L-FG:0.42mA N-FG:0.44mA	P
14	INSULATION RESISTANCE	SPEC: O/P-FG 500VDC/100M Ohms MIN. I/P-O/P 500VDC/100M Ohms MIN. I/P-FG 500VDC/100M Ohms MIN.	A: O/P-FG >100M Ohms I/P-O/P >100M Ohms I/P-FG >100M Ohms	P

NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT																																		
15	DIELECTRIC / WITHSTAND VOLTAGE	SPEC: I/P- O/P: 3000VAC/ 1 min.(10mA CUT-OFF) I/P - FG: 1500VAC/ 1 min.(10mA CUT-OFF) O/P - FG: 500VAC/ 1 min.(10mA CUT-OFF)	A: I/P-O/P 4.56mA I/P-FG 3.77mA O/P-FG 3.51mA	P																																		
16	BURN-IN TEST	I/P: 230VAC O/P100% LOAD with 17.8CFM FAN TA:25.9°C BURN-IN DURATION :2 hrs	A: NON BREAK	P																																		
17	ENVIRONMENT TEST	1.LOW TEMPERATURE TEST I/P:230 VAC O/P:100% LOAD AMBIENT TEMPERATURE:-10.3°C	A : AFTER 3 hrs POWER ON OK	P																																		
		2.HIGH AMBIENT TEMPERATURE FULL LOAD TEST I/P:230VAC O/P:FULL LOAD AMBIENT TEMPERATURE:59.3°C with 17.8CFM FAN	A : AFTER 12 hrs NON BREAK																																			
		3.HIGH HUMIDITY HIGH VOLTAGE ON/OFF TEST I/P:264VAC O/P:FULL LOAD AMBIENT TEMPERATURE : 25°C AMBIENT HUMIDITY : 95%	A : AFTER18 hrs POWER ON/OFFNON BREAK																																			
18	TEMPERATURE RISE TEST T rise OF PARTS	A: I/P :230VAC O/P :100%LOAD AFTER 2 hr BURN-IN TA:25.9°C with 17.8CFM FAN <table> <tr> <th></th><th>POSITION</th><th>P/N</th><th>TEMP</th><th>T rise</th></tr> <tr> <td></td><td>BD1</td><td>BRIDGE DIODE</td><td>31.9°C</td><td>9.9°C</td></tr> <tr> <td></td><td>Q1</td><td>MAIN TRANSISTOR</td><td>36.3°C</td><td>14.3°C</td></tr> <tr> <td></td><td>T1</td><td>MAIN TRANSFORMER</td><td>40.6°C</td><td>18.6°C</td></tr> <tr> <td></td><td>D20</td><td>O/P DIODE</td><td>47.0°C</td><td>25°C</td></tr> <tr> <td></td><td>C17</td><td>O/P FILTER CAPACITOR</td><td>42.3°C</td><td>20.3°C</td></tr> <tr> <td></td><td>C5</td><td>I/P FILTER CAPACITOR</td><td>32.4°C</td><td>10.4°C</td></tr> </table>		POSITION	P/N	TEMP	T rise		BD1	BRIDGE DIODE	31.9°C	9.9°C		Q1	MAIN TRANSISTOR	36.3°C	14.3°C		T1	MAIN TRANSFORMER	40.6°C	18.6°C		D20	O/P DIODE	47.0°C	25°C		C17	O/P FILTER CAPACITOR	42.3°C	20.3°C		C5	I/P FILTER CAPACITOR	32.4°C	10.4°C	P
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19	LIFE CYCLE	A: SUPPOSE C17 IS THE MOST CRITICAL COMPONENT with 17.8CFM FAN I/P:230VAC O/P:100% LOAD Ta:25°C Tc:41.4°C Life:471483hrs I/P:230VAC O/P:100% LOAD Ta:60°C Tc:72.5°C Life:54587hrs	P																																			
20	CRITICAL COMPONENT RECORD (FOR QC INSPECTION REFERENCE ONLY)	A: FUSE : F 3A/250V CHARGER 15AL/250V BRIDGE DIODE : D3SB60 LINE FILTER : TF-484-R2 EE-25 TRANSFOMER : TF-688 EER-28L POWER SWITCHER : 2SK1507 OUTPUT DIODE : BYQ-28X-200 OUTPUT CAPACITOR : RUBYCON 330uF/35V YXG 105°C INPUT CAPACITOR : 150uF/400V 85°C P.C.B : ADD-55-R1																																				
DATE	SAMPLE	TEST RESULT	TEST	APPROVAL																																		
20001007	RD SAMPLE	PASS	VINCENT	Max Lin																																		
20001116	A011B25 ADS-5512 ADS-5524	PASS	VINCENT	Max Lin																																		
20010822	A108A03 ADS-5512	PASS	VINCENT	Max Lin																																		