

Model : GS15x- 8 15W  
+48V / 0.31A

AC-DC Single Output Wall-mount adaptor

**OUTPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	240mVp-p (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	26mVp-p	P
2	VOLTAGE TOLERANCE	-2% - +2% (Max)	I/P:90VAC~264VAC O/P:FULL-MIN. LOAD Ta:25°C	-0.05% ~ +0.07%	P
3	LINE REGULATION	-0.5% - +0.5% (Max)	I/P:90VAC ~264VAC O/P:FULL LOAD Ta:25°C	-0% ~ +0%	P
4	LOAD REGULATION	-2% - +2% (Max)	I/P:230VAC O/P:FULL -MIN LOAD Ta:25°C	-0.05% ~ +0.07%	P
5	SET UP TIME	3000mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	1060mS	P
6	RISE TIME	50mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	28.8mS	P
7	HOLD UP TIME	16mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	22.4mS	P

**INPUT FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE RANGE	100VAC ~ 240VAC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	60V ~ 264V	P
2	FREQUENCY RANGE	50HZ - 60HZ (Typ) NO DAMAGE OSC	I/P: 100VAC ~ 240VAC O/P:FULL-MIN LOAD Ta:25°C	TEST: OK	P
3	EFFICIENCY	81% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	82.2%	P
4	AC CURRENT	0.5A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.31A	P
5	NO LOAD POWER	< 1W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.6W	P

6	INRUSH CURRENT	< 50A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	38.4A	P
7	LEAKAGE CURRENT	<0.25mA / 240VAC	I/P:240VAC O/P:Min LOAD Ta:25°C	L-FG:0.02mA N-FG:0.02mA	P

**PROTECTION FUNCTION TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	OVER LOAD PROTECTION	115~250%	I/P:230VAC O/P:TESTING Ta:25°C	242% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	CLAMP BY ZENER DIODE >120%	I/P:230VAC O/P:MIN LOAD Ta:25°C	131%(62.6V)	P
3	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD Ta:25°C	NO DAMAGE HICCUP MODE RESET AUTO RECOVER	P

**ENVIRONMENT TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT																																																						
1	TEMPERATURE RISE TEST	1. ROOM AMBIENT BURN-IN : 6HRS I/P:230VAC O/P:100% LOAD Ta=28.0°C 2. ROOM AMBIENT BURN-IN : 13HRS I/P:230VAC O/P:100% LOAD Ta=43.5°C 3. ROOM AMBIENT BURN-IN : 13HRS I/P:100VAC O/P:100% LOAD Ta=27.8°C			P																																																						
		<table border="1"> <thead> <tr> <th>NO</th> <th>Position</th> <th>P/N</th> <th>1</th> <th>2</th> <th>3</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>I/P C2</td> <td>FuhYin 33uF/400V 105°C 15*20 HFR</td> <td>56.4°C</td> <td>65.9°C</td> <td>65.7°C</td> </tr> <tr> <td>2</td> <td>Q1</td> <td>K2101</td> <td>73.8°C</td> <td>85.1°C</td> <td>82.4°C</td> </tr> <tr> <td>3</td> <td>VCC C4</td> <td>FuhYin 33uF/25V 105°C 5*11 HFR</td> <td>62.3°C</td> <td>70.5°C</td> <td>67.9°C</td> </tr> <tr> <td>4</td> <td>T1</td> <td>EE-20</td> <td>76.8°C</td> <td>86.2°C</td> <td>78.2°C</td> </tr> <tr> <td>5</td> <td>O/P D4</td> <td>EGP20G</td> <td>72.2°C</td> <td>82.7°C</td> <td>76.4°C</td> </tr> <tr> <td>6</td> <td>O/P C11</td> <td>LTEC 100uF/63V 105°C 8*16 LZG</td> <td>60.0°C</td> <td>68.6°C</td> <td>61.4°C</td> </tr> <tr> <td>7</td> <td>O/P C9</td> <td>LTEC 100uF/63V 105°C 8*16 LZG</td> <td>61.9°C</td> <td>70.5°C</td> <td>63.0°C</td> </tr> <tr> <td>8</td> <td>CASE</td> <td>UPON</td> <td>62.1°C</td> <td>71.5°C</td> <td>64.7°C</td> </tr> </tbody> </table>				NO	Position	P/N	1	2	3	1	I/P C2	FuhYin 33uF/400V 105°C 15*20 HFR	56.4°C	65.9°C	65.7°C	2	Q1	K2101	73.8°C	85.1°C	82.4°C	3	VCC C4	FuhYin 33uF/25V 105°C 5*11 HFR	62.3°C	70.5°C	67.9°C	4	T1	EE-20	76.8°C	86.2°C	78.2°C	5	O/P D4	EGP20G	72.2°C	82.7°C	76.4°C	6	O/P C11	LTEC 100uF/63V 105°C 8*16 LZG	60.0°C	68.6°C	61.4°C	7	O/P C9	LTEC 100uF/63V 105°C 8*16 LZG	61.9°C	70.5°C	63.0°C	8	CASE	UPON	62.1°C	71.5°C	64.7°C
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**SAFETY & E.M.C TEST**

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	SAFETY STANDARDS	TUV: Certificate NO : S 50071802 FOR CLASS I POWER (GS15A TYPE) S 50072133 FOR CLASS II POWER (GS15B/E TYPE) UL: File NO : E206808			P
2	HARMONIC	IEC61000-3-2 CLASS A	I/P:230VAC / 50HZ O/P:FULL LOAD Ta:25°C	PASS	P



3	CONDUCTION	EN55022 CLASS B	I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C	PASS	P
4	RADIATION	EN55022 CLASS B	I/P:230VAC (50HZ) O/P:FULL LOAD Ta:25°C	PASS	P
5	E.S.D	IEC61000-4-2 LIGHT INDUSTRY AIR:8KV / Contact:4KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
6	E.F.T	IEC61000-4-4 LIGHT INDUSTRY INPUT: 1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
7	SURGE	IEC61000-4-5 LIGHT INDUSTRY L-N :1KV	I/P:230VAC/50HZ O/P:FULL LOAD Ta:25°C	CRITERIA A	P
8	WITHSTAND VOLTAGE	I/P-O/P:4242VDC/min	I/P-O/P:4242VDC/min Ta:25°C	I/P-O/P:0.02mA NO DAMAGE	P
9	ISOLATION RESISTANCE	I/P-O/P:500VDC>50MΩ	I/P-O/P:500VDC Ta:25°C	I/P-O/P:>100MΩ NO DAMAGE	P

## OTHER

NO	TEST ITEM	SPECICATION	TEST CONDITION	RESULT	VERDICT
1	CAPACITOR LIFE CYCLE	SUPPOSE C9 IS THE MOST CRITICAL COMPONENT I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=122100Hrs I/P:230 VAC O/P:FULL LOAD Ta=40°C LIFE TIME=79447Hrs			P
2	MTBF	MIL-HDBK-217F NOTICES2 PARTS COUNT TOTAL FAILURE RATE: 1.702642 M.T.B.F: 587322HRS			P

DATE	SAMPLE	TEST RESULT	TESTER	APPROVAL
2007.4.17	GS15x-8	PASS	T.K.CHENG	MAX LIN