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ELECTRONICS

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Jameco Part Number 1954261



7.2~15W AC-DC Single Output Desktop

GS15A series



■ Features :

- Universal AC input / Full range
- No load power consumption <0.5W
- Meet energy star level IV(CEC) for 5 ~ 48V
- Meet EISA 2007 (Energy Independence and Security Act) for 5 ~ 48V
- 3 pole AC inlet IEC320-C14
- Class I power (with earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage
- Pass LPS
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / CB / FCC / CE
- 2 years warranty

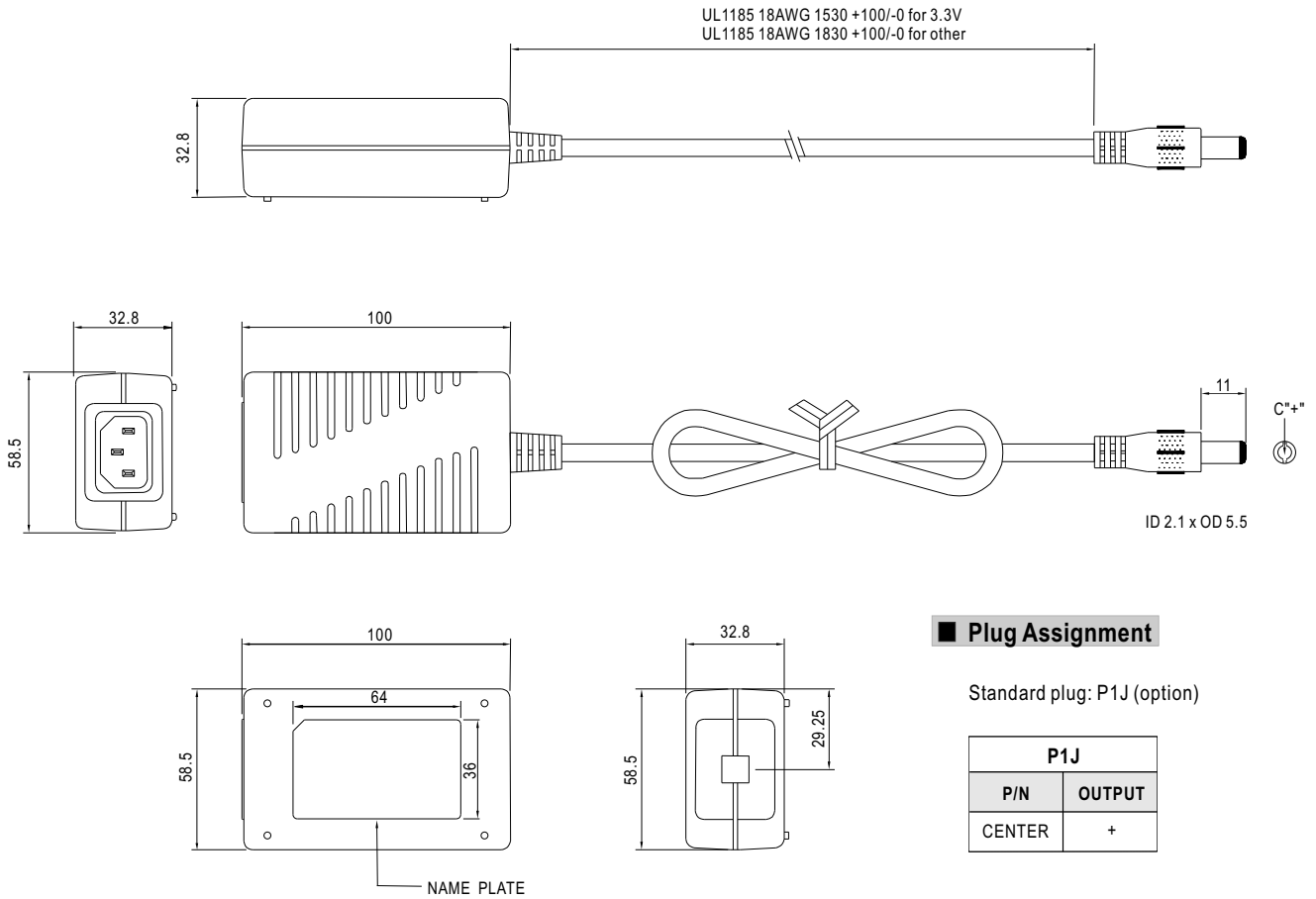


SPECIFICATION

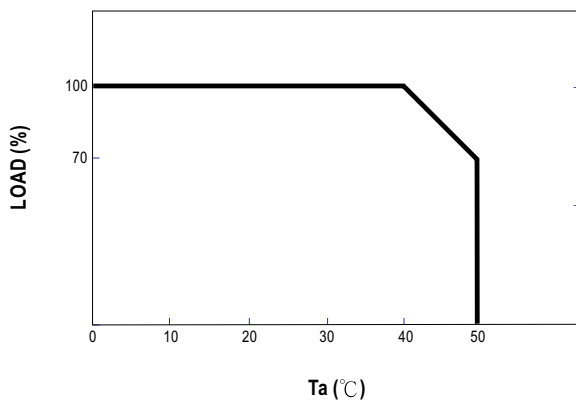
ORDER NO.		GS15A-0P1J	GS15A-1P1J	GS15A-11P1J	GS15A-2P1J	GS15A-3P1J	GS15A-4P1J	GS15A-5P1J	GS15A-6P1J	GS15A-8P1J
OUTPUT	SAFETY MODEL NO.	GPSU15A-0	GPSU15A-1	GPSU15A-1-1	GPSU15A-2	GPSU15A-3	GPSU15A-4	GPSU15A-5	GPSU15A-6	GPSU15A-8
	DC VOLTAGE Note.2	3.3V	5V	7.5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	2.18A	2.40A	1.60A	1.66A	1.25A	1.00A	0.83A	0.62A	0.31A
	CURRENT RANGE	0 ~ 2.18A	0 ~ 2.40A	0 ~ 1.60A	0 ~ 1.66A	0 ~ 1.25A	0 ~ 1.00A	0 ~ 0.83A	0 ~ 0.62A	0 ~ 0.31A
	RATED POWER	7.2W	12W	12W	15W	15W	15W	15W	15W	15W
	RIPPLE & NOISE (max.) Note.3	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p	150mVp-p	240mVp-p
	VOLTAGE ADJ. RANGE	3 ~ 5V	5 ~ 6V	6 ~ 8V	8 ~ 11V	11 ~ 13V	13 ~ 16V	16 ~ 21V	21 ~ 27V	33 ~ 48V
	VOLTAGE ADJ. RANGE	Fixed								
	VOLTAGE TOLERANCE Note.4	±6.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%
	LINE REGULATION Note.5	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
INPUT	LOAD REGULATION Note.6	±6.0%	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%
	SETUP, RISE, HOLD UP TIME	3000ms, 50ms, 16ms at full load								
	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.) Note.7	55%	65%	72%	74%	76%	77%	78%	80%	81%
	AC CURRENT	0.5A / 100VAC								
PROTECTION	INRUSH CURRENT (max.)	50A / 230VAC								
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC								
	OVERLOAD	115 ~ 250% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
ENVIRONMENT	OVER VOLTAGE	>120% rated output voltage Protection type : Clamp by zener diode								
	WORKING TEMP.	0 ~ +50℃ (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% / °C (0 ~ 50℃)								
SAFETY & EMC (Note. 8)	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
	SAFETY STANDARDS	UL60950-1, CSA22.2, EN60950-1 approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC , I/P-FG:1.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, FCC part 15 Class B								
	HARMONIC CURRENT	Compliance to EN61000-3-2,3								
OTHERS	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11, light industry level, criteria A								
	MTBF	500Khrs min. MIL-HDBK-217F(25℃)								
	DIMENSION	100*58.5*32.8mm (L*W*H)								
CONNECTOR	PACKING	190g ; 90pcs / 18Kg / CARTON								
	PLUG	Standard type P1J: 2.1φ * 5.5φ * 11mm, tuning fork type center positive for stock ; Other type available by customer requested								
NOTE	CABLE	Standard type 18Awg UL1185 6ft and 5ft for 3.3V output only for stock ; Other type available by customer requested								
	NOTE	1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 0% to 100% rated load 7.Efficiency is measured at 230VAC. 8.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.								

Mechanical Specification

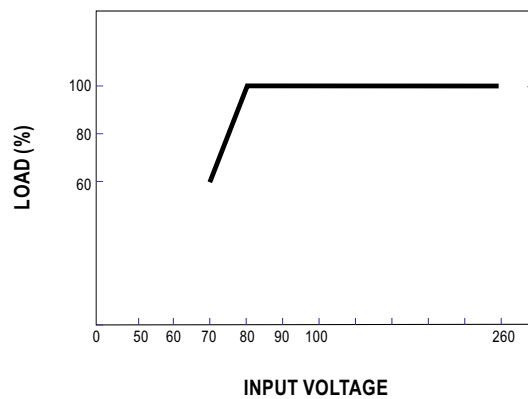
Unit:mm



Derating Curve



Static Characteristics



Model : GS15x - 4 15W
+15V / 1.0A

AC-DC Single Output Wall-mount adaptor

OUTPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	RIPPLE & NOISE	100mVp-p (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	20mVp-p	P
2	VOLTAGE TOLERANCE	-3% ~ +3% (Max)	I/P:90VAC~264VAC O/P:FULL~MIN. LOAD Ta:25°C	-0.1% ~ +1.3%	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	-3% ~ +3% (Max)	I/P:230VAC O/P:FULL ~MIN LOAD Ta:25°C	-0.7% ~ +0.7%	P
5	SET UP TIME	3000mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	680mS	P
6	RISE TIME	50mS (Max)	I/P:230VAC O/P:FULL LOAD Ta:25°C	5.15mS	P
7	HOLD UP TIME	16mS (Min)	I/P:115VAC O/P:FULL LOAD Ta:25°C	22.0 mS	P

INPUT FUNCTION TEST

NO	TEST ITEM	SPECIFICATION	TEST CONDITION	RESULT	VERDICT
1	VOLTAGE RANGE	100VAC ~ 240VAC (Typ)	I/P:TESTING O/P:FULL LOAD Ta:25°C	43.8V ~ 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	77% (Typ)	I/P:230VAC O/P:FULL LOAD Ta:25°C	78.3%	P
4	AC CURRENT	0.5A (Max)	I/P: 100VAC O/P:FULL LOAD Ta:25°C	0.34A	P
5	NO LOAD POWER	< 1W	I/P:230VAC O/P: NO LOAD Ta:25°C	0.5W	P

6	INRUSH CURRENT	< 50A COLD START	I/P:230VAC O/P:FULL LOAD Ta:25°C	45.8A	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℃	220% HICCUP MODE RESET AUTO RECOVER	P
2	OVER VOLTAGE PROTECTION	CLAMP BY ZENER DIODE >120%	I/P:230VAC O/P:MIN LOAD Ta:25℃	138% (20.7V)	P
3	SHORT PROTECTION	SHORT EVERY OUTPUT 1 HOUR NO DAMAGE	I/P:264VAC O/P:FULL LOAD Ta:25℃	NO DAMAGE HICCUP MODE RESET AUTO RECOVER	P

ENVIRONMENT TEST

[illegible]

SAFETY & E.M.C TEST

NO	TEST ITEM	SPECIFICATION	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=42870Hrs I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=21885Hrs I/P:230 VAC O/P:FULL LOAD Ta=25°C LIFE TIME=26390Hrs			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-4	PASS	T.K.CHENG	MAX LIN