MEAN WELL

120W AC-DC Single Output Desktop

GS120 series

Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Built-in active PFC function, PF>0.97
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Fully enclosed plastic case
- Approvals: UL / CUL / TUV / BSMI / CCC / CB / FCC / CE
- Class I power (with earth pin)
- LED indicator for power on
- No load power consumption<0.5W
- ErP step2 compliant
- Meet EISA 2007(Energy Independence and Security Act)
- 2 years warranty

SPECIFICATION

ORDER NO.			GS120A12-R7B	GS120A15-R7B	GS120A20-□ □=R7B,P1M	GS120A24-□ □=R7B,P1M	GS120A48-□ □=R7B,P1M
OUTPUT	SAFETY MODEL NO.		GS120A12	GS120A15	GS120A20	GS120A24	GS120A48
	DC VOLTAGE		12V	15V	20V	24V	48V
	RATED CURRENT		8.5A	7A	6A	5A	2.5A
	CURRENT RANGE		0 ~ 8.5A	0 ~ 7A	0 ~ 6A	0 ~ 5A	0 ~ 2.5A
	RATED POWER (max.)		102W	105W	120W	120W	120W
	RIPPLE & NOISE (max.) Note.2		80mVp-p	120mVp-p	150mVp-p	180mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.3		±5.0%	±5.0%	±5.0%	±3.0%	±2.0%
	LINE REGULATION Note.4		±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION		±5.0%	±5.0%	±4.0%	±3.0%	±2.0%
	SETUP, RISE TIME Note.6		2000ms, 30ms / 230VAC 2500ms, 30ms / 115VAC at full load				
	HOLD UP TIME (Typ.)		20ms / 230VAC 20ms / 115VAC at full load				
INPUT	VOLTAGE RANGE Note.7		85 ~ 264VAC 120 ~ 370VDC				
	FREQUENCY RANGE		47 ~ 63Hz				
	POWER FACTOR (Typ.)		PF>0.97 / 230VAC PF>0.99 / 115VAC at full load				
	EFFICIENCY (Typ.)	R7B	87.5%	89%	89%	90%	91%
		P1M	-----	-----	88.5%	89.5%	90.5%
	AC CURRENT		1.4A / 115VAC 0.7A / 230VAC				
	INRUSH CURRENT (max.)		70A / 230VAC				
	LEAKAGE CURRENT(max.)		0.75mA / 240VAC				
PROTECTION	OVERLOAD		105 ~ 160% rated output power				
			Protection type : Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE		105 ~ 135% rated output voltage				
			Protection type : Shut down o/p voltage, re-power on to recover				
	OVER TEMPERATURE		RTH2 ≧100 ±10℃				
			Protection type : Shut down o/p voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.		-30 ~ +70℃ (Refer to output load derating curve)				
	WORKING HUMIDITY		20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY		-40 ~ +85℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT		±0.03% / ℃ (0~50℃)				
	VIBRATION		10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes				
SAFETY & EMC (Note. 5)	SAFETY STANDARDS		UL60950-1, TUV EN60950-1, BSMI CNS14336, CCC GB4943 approved				
	WITHSTAND VOLTAGE		I/P-O/P: 3KVAC				
	ISOLATION RESISTANCE		I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH				
	EMI CONDUCTION & RADIATION		Compliance to EN55022(CISPR22) ,EN61204-3 class B, CNS13438 class B, GB9254-1 class B, FCC PART 15				
	HARMONIC CURRENT		Compliance to EN61000-3-2,3, GB17625.1				
	EMS IMMUNITY		Compliance to EN61000-4-2,3,4,5,6,8,11, light industry level, criteria A				
OTHERS	MTBF		400.7Khrs min. MIL-HDBK-217F(25℃)				
	DIMENSION		167*67*35mm (L*W*H)				
	PACKING		0.62Kg; 20pcs/13.4Kg/0.8CUFT				
CONNECTOR	PLUG		See page 2 ; Other type available by customer requested				
	CABLE		See page 2 ; Other type available by customer requested				

NOTE

1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.
2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.
3.Tolerance: includes set up tolerance, line regulation, load regulation.
4.Line regulation is measured from low line to high line at rated load.
5.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.
6. Length of set up time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.
7. Derating may be needed under low input voltage. Please check the derating curve for more details.

File Name:GS120-SPEC 2010-10-15

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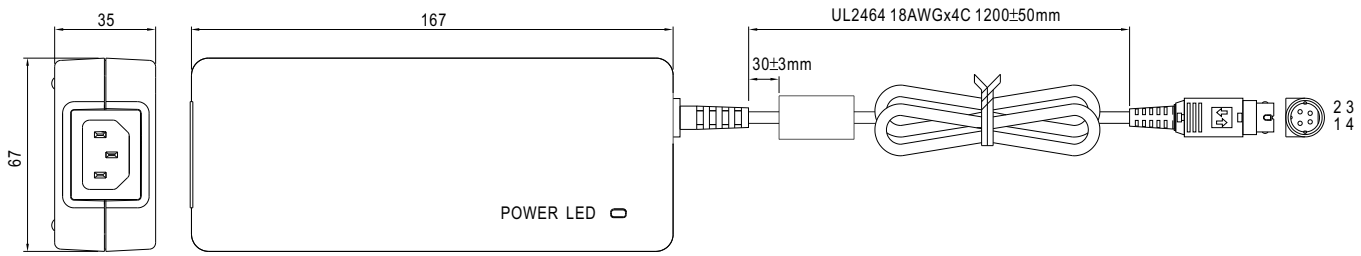
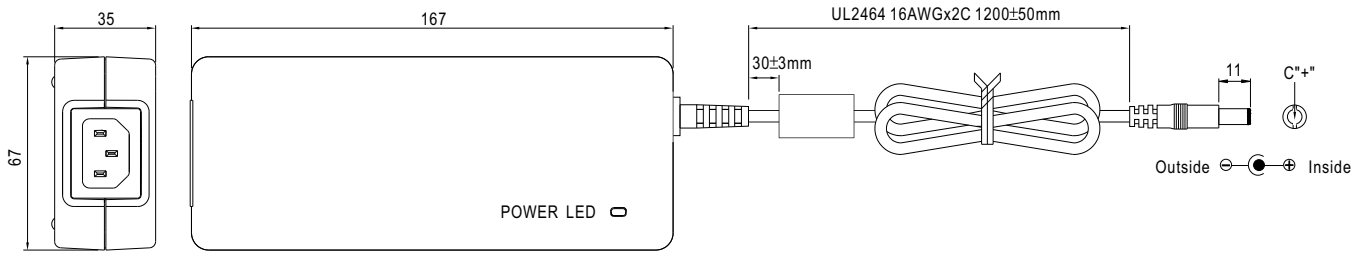
GS120 series

■ Mechanical Specification

Case No.GS120A Unit:mm

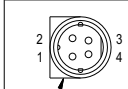




■ Plug Assignment

Standard plug (all models)

R7B		
	PIN NO.	OUTPUT
	1,4	+V
	2,3	-V

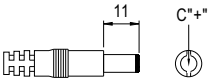


AC FG

-V connected to AC FG

Standard plug(For 20V,24V,48V only)

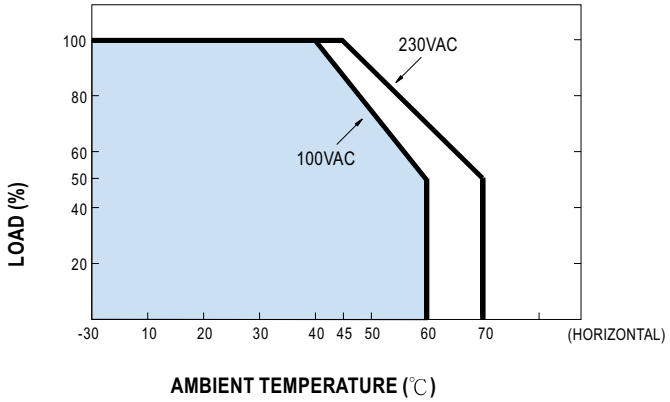
P1M	
P/N	OUTPUT
CENTER	+



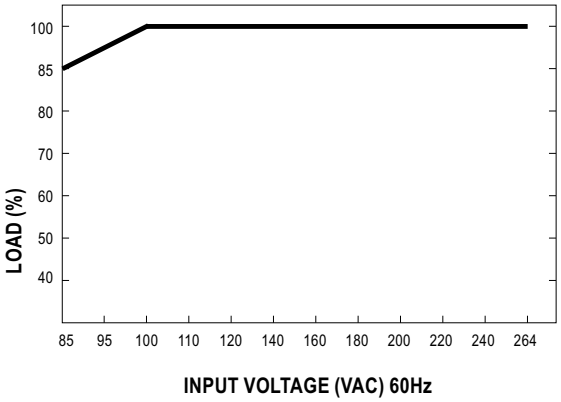
ID 2.5 x OD 5.5

Outside Inside

■ Derating Curve



■ Static Characteristics



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