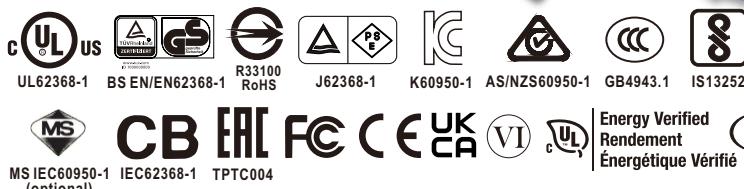


User's Manual



MS IEC60950-1 (optional)

IEC62368-1

TPTC004

SPECIFICATION

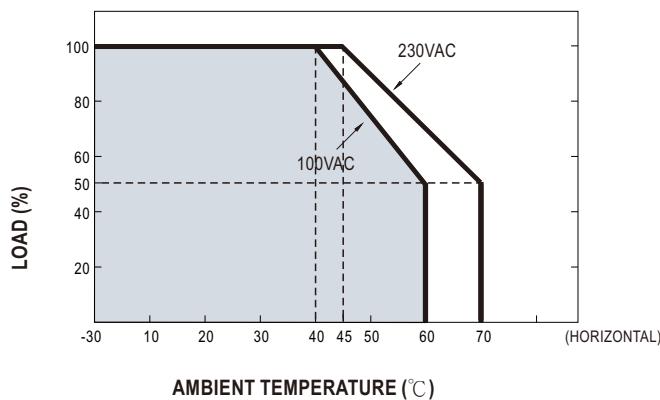
ORDER NO.	GST120A12-R7B	GST120A15-R7B	GST120A20-□ □=R7B,P1M	GST120A24-□ □=R7B,P1M	GST120A48-□ □=R7B,P1M				
OUTPUT	SAFETY MODEL NO.	GST120A12	GST120A15	GST120A20	GST120A24				
	DC VOLTAGE	12V	15V	20V	24V				
	RATED CURRENT	8.5A	7A	6A	5A				
	CURRENT RANGE	0 ~ 8.5A	0 ~ 7A	0 ~ 6A	0 ~ 5A				
	RATED POWER (max.)	102W	105W	120W	120W				
	RIPPLE & NOISE (max.) Note.2	120mVp-p	120mVp-p	150mVp-p	180mVp-p				
	VOLTAGE TOLERANCE Note.3	±5.0%	±5.0%	±5.0%	±3.0%				
	LINE REGULATION Note.4	±1.0%	±1.0%	±1.0%	±1.0%				
	LOAD REGULATION	±5.0%	±5.0%	±4.0%	±3.0%				
	SETUP, RISE TIME Note.5	2000ms, 30ms / 230VAC	2500ms, 30ms / 115VAC	at full load					
INPUT	HOLD UP TIME (Typ.)	20ms / 230VAC	20ms / 115VAC	at full load					
	VOLTAGE RANGE Note.6	85 ~ 264VAC	120 ~ 370VDC						
	FREQUENCY RANGE	47 ~ 63Hz							
	POWER FACTOR (Typ.)	PF>0.93 / 230VAC	PF>0.97 / 115VAC	at full load					
	EFFICIENCY (Typ.)	R7B	88.5%	89%	90%	90.5%			
		P1M	-----	-----	89%	89.5%			
	AC CURRENT	1.4A / 115VAC	0.7A / 230VAC						
	INRUSH CURRENT (max.)	Cold start 35 / 115AC	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						
ENVIRONMENT		OVER VOLTAGE	105 ~ 135% rated output voltage Protection type : Shut down o/p voltage, re-power on to recover						
		OVER TEMPERATURE	Shut down o/p voltage, re-power on to recover						
WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")								
SAFETY & EMC (Note. 8)	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH non-condensing							
	TEMP. COEFFICIENT	±0.03% / °C (0~45°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
	SAFETY STANDARDS Note.7	UL62368-1, CSA C22.2 No. 62368-1, TUV BS EN/EN62368-1, BSMI CNS14336, CCC GB4943.1, PSE J62368-1, AS/NZS 60950.1, BIS IS13252, KC K60950-1, EAC TP TC 004 approved; SIRIM MS IEC60950-1 (optional) approved							
OTHERS	WITHSTAND VOLTAGE	I/P-O/P: 3KVAC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Parameter	Standard	Test Level / Note					
CONNECTOR		Conducted emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B),CNS13438,GB17625.1 EAC TP TC 020,MSIP KN32	Class B					
		Radiated emission	BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 CAN ICES-3(B)/NMB-3(B),CNS13438,GB17625.1 EAC TP TC 020,MSIP KN32	Class B					
		Harmonic current	BS EN/EN61000-3-2,GB9254	Class A					
		Voltage flicker	BS EN/EN61000-3-3	-----					
NOTE	EMC IMMUNITY	Parameter	Standard	Test Level / Note					
		ESD	BS EN/EN61000-4-2	Level 4, 15KV air; Level 4, 8KV contact					
		RF field susceptibility	BS EN/EN61000-4-3	Level 2, 3V/m					
		EFT bursts	BS EN/EN61000-4-4	Level 2, 1KV					
		Surge susceptibility	BS EN/EN61000-4-5	Level 3, 1KV/Line-Line , 2KV/Line-FG					
		Conducted susceptibility	BS EN/EN61000-4-6	Level 2, 3V					
		Magnetic field immunity	BS EN/EN61000-4-8	Level 2, 3A/m					
		Voltage dips , interruption	BS EN/EN61000-4-11	>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods					
OTHERS	MTBF	368.75K hrs min. MIL-HDBK-217F(25°C)							
	DIMENSION	167*67*35mm (L*W*H)							
	PACKING	0.62Kg; 20pcs/13.4Kg/0.89CUFT							
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested							
	CABLE	See page 4~5 ; Other type available by customer requested							
1. All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. 2. Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μf & 47μf 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. 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. 6. Derating may be needed under low input voltage. Please check the derating curve for more details. 7. The demand for Malaysia safety is processed with the order no. GST120A □ -SIRIM by request. Please contact MEAN WELL for details. 8. The power supply is considered as an independent unit, but the final equipment still need to re-confirmed that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com)									
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx									



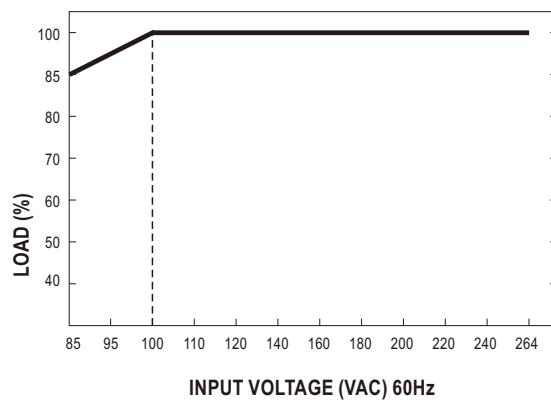
120W AC-DC Reliable Green Industrial Adaptor

GST120A series

■ Derating Curve

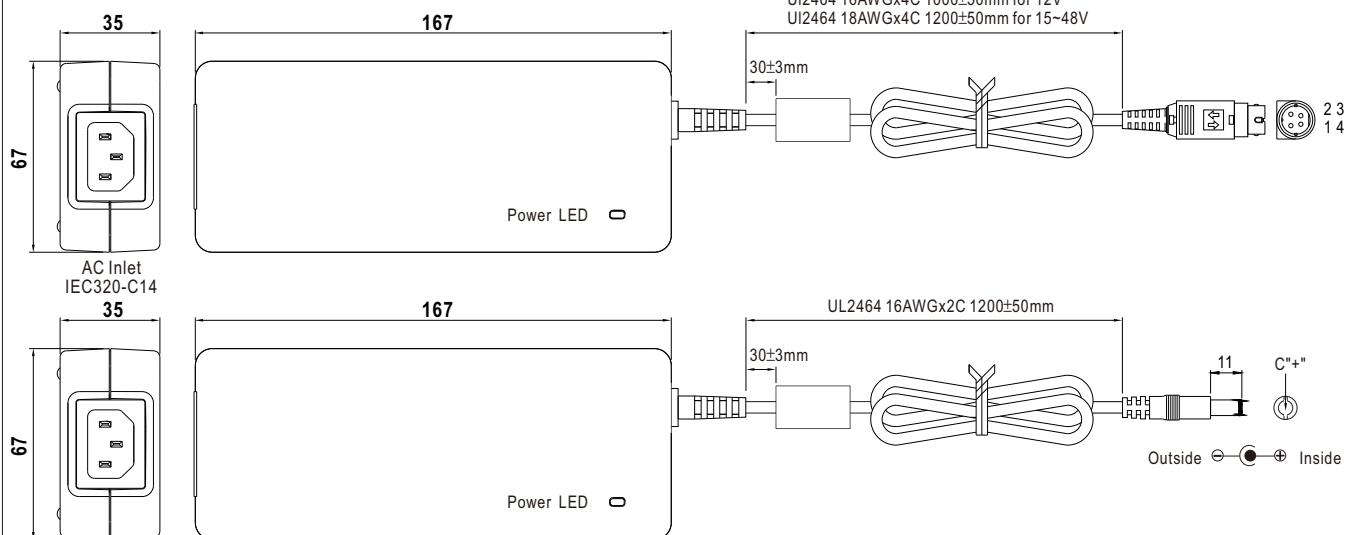


■ Static Characteristics



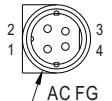
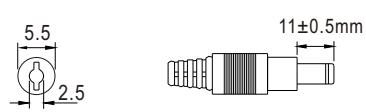
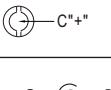
■ Mechanical Specification

Case No. GS120A Unit:mm



■ DC output plug

◎ Standard plug

R7B		Pin Assignment	
		 KYCON KPPX-4P equivalent	
		PIN NO.	OUTPUT
		1	+Vo
		2	-Vo
		3	-Vo
		4	+Vo
P1M		Pin Assignment	
 5.5 2.5		 11±0.5mm	
		Outside -V and Inside +V -V connected to AC FG	

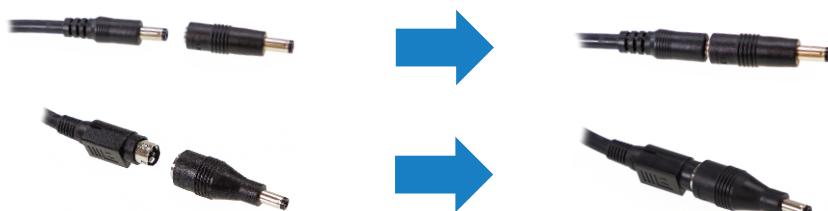
◎ DC plug changeable through:

(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

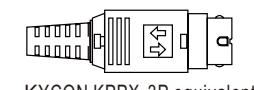
(2) Quick adapter accessory (sold separately without MOQ)

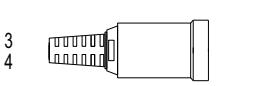
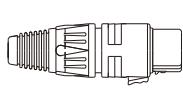
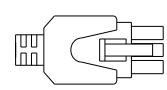
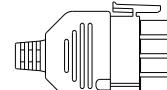
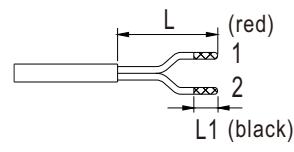
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:



◎ Optional DC plug: (Available in customized cable or quick adapter)

Tuning Fork Style	Type No.	A	B	C	Quick Adapter Accessory
		OD	ID	L	
	P1I	5.5	2.1	9.5	None
	P1L	5.5	2.5	9.5	
	P1J	5.5	2.1	11.0	
	P1JR	5.5	2.1	11.0	
	P1IR	5.5	2.1	9.5	
	P1LR	5.5	2.5	9.5	
	P1MR	5.5	2.5	11.0	
	Type No.	A	B	C	None
		OD	ID	L	
	P2I	5.5	2.1	9.5	
	P2J	5.5	2.1	11.0	
	P2L	5.5	2.5	9.5	
	P2M	5.5	2.5	11.0	
	P2IR	5.5	2.1	9.5	
	P2JR	5.5	2.1	11.0	
	Type No.	A	B	C	None
		OD	ID	L	
	P2S(S761K)	5.53	2.03	12.06	
	P2K(761K)	5.53	2.54	12.06	
	P2C(S760K)	5.53	2.03	9.52	
	Type No.	A	B	C	None
		OD	ID	L	
	P4A	5.5	3.4	11.0	
	P4B	6.5	4.4	11.0	
	Type No.	Pin Assignment			None
		PIN No.		Output	
	R6B	1		+Vo	
		2		-Vo	None
		3		+Vo	

Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment		Quick Adapter Accessory	
		PIN No.	Output		
	R7BF	1	+Vo	None	
		2	-Vo		
		3	-Vo		
KYCON KPJX-CM-4S equivalent		4	+Vo		
DIN 5 Pin (male)	Type No.	Pin Assignment		None	
	R1B	PIN No.	Output		
					
		1	-Vo		
		2	-Vo		
		3	+Vo		
		4	-Vo		
		5	+Vo		
NEUTRIK XLR NC4FX equivalent	Type No.	Pin Assignment		None	
	MIC4	PIN No.	Output		
					
		1	+Vo		
		2	+Vo		
		3	-Vo		
		4	-Vo		
MOLEX 39-01-2060 (4.2mm) equivalent	Type No.	Pin Assignment		None	
	C6P	PIN No.	Output		
					
		1	+Vo		
		2	+Vo		
		3	+Vo		
		4	-Vo		
		5	-Vo		
		6	-Vo		
AMP 1-480702-0 (6.35mm) equivalent	Type No.	Pin Assignment		None	
	C4P	PIN No.	Output		
					
		1	+Vo		
		2	+Vo		
		3	-Vo		
		4	-Vo		
Stripped and tinned leads	Type No.	Pin Assignment		None	
	by customer	PIN No.	Output		
					
Length of Land L1 by request (MW's standard length, L: <u>25</u> mm, L1: <u>5</u> mm)		1	+Vo		
		2	-Vo		

■ Installation Manual

Please refer to : <http://www.meanwell.com/manual.html>