



12W Wall Mount power supply < SGA12E



(Cable connection)



(USB connection)



Features

- Ultra slim
- Universal AC input / Full range
- 2 pole EURO plug, Class II power unit
- No load power consumption<0.075W
- **Energy efficiency Level VI**
- Comply with EU ErP and meet CoC version 5
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 54V model available for PoE(optional)
- [Various DC plug quick adapter accessory available](#)
- 3 years warranty

Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments
- Power sourcing equipment of PoE

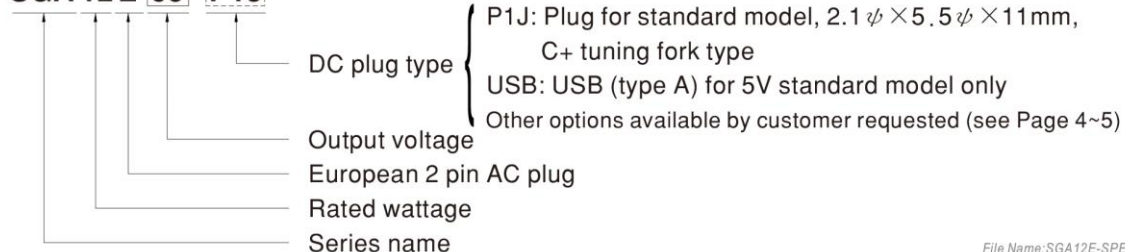
Description

SGA12E is a 12W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA12E is a class II power unit (no FG) equipped with the standard 2-Pin European plug, accepting the input range from 90VAC to 264VAC. The whole series provides different models with output voltages ranging between 5VDC and 48VDC that it can satisfy the demands for various types of consumer electronic devices.

With the efficiency up to 86% and the extremely low no-load power consumption below 0.075W, SGA12E is compliant with EU ErP and meet CoC version 5. The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for international safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazards.

Model Encoding

SGA 12 E 05 -P1J





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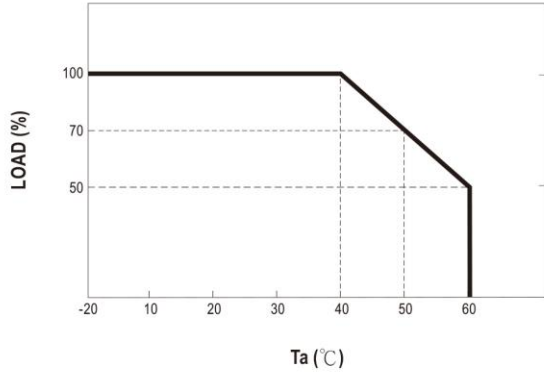
SPECIFICATION

ORDER NO.		SGA12E05-□ □=P1J, USB	SGA12E07-P1J	SGA12E09-P1J	SGA12E12-P1J	SGA12E15-P1J	SGA12E18-P1J	SGA12E24-P1J	SGA12E48-P1J		
OUTPUT	SAFETY MODEL NO.	SGA12E05	SGA12E07	SGA12E09	SGA12E12	SGA12E15	SGA12E18	SGA12E24	SGA12E48		
	DC VOLTAGE <small>Note.2</small>	5V	7.5V	9V	12V	15V	18V	24V	48V		
	RATED CURRENT	2.4A	1.6A	1.33A	1A	0.8A	0.66A	0.5A	0.25A		
	CURRENT RANGE	0 ~ 2.4A	0 ~ 1.6A	0 ~ 1.33A	0 ~ 1A	0 ~ 0.8A	0 ~ 0.66A	0 ~ 0.5A	0 ~ 0.25A		
	RATED POWER (max.)	12W	12W	12W	12W	12W	12W	12W	12W		
	RIPPLE & NOISE (max.) <small>Note.3</small>	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p		
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%		
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	LOAD REGULATION <small>Note.6</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±3.0%	±2.0%	±2.0%		
SETUP, RISE, HOLD UP TIME	1500ms, 50ms, 10ms/230VAC 1500ms, 50ms, 10ms/115VAC at full load										
INPUT	VOLTAGE RANGE	90 ~ 264VAC									
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY (Typ.)	80%	83%	82.5%	83%	83%	83.5%	84%	86%		
	AC CURRENT	0.4A / 115VAC 0.2A / 230VAC									
	INRUSH CURRENT (max.)	Cold start 30A / 115VAC 60A / 230VAC									
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC									
PROTECTION	OVERLOAD	110 ~ 200% rated output power						120 ~ 250% rated output power			
	OVER VOLTAGE	110 ~ 140% rated output voltage Protection type : Clamp by zener diode, output short									
ENVIRONMENT	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")									
	WORKING HUMIDITY	20% ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH non-condensing									
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 40°C)									
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes									
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	TUV EN62368-1, EAC TP TC 004 approved									
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC									
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION	Parameter	Standard					Test Level / Note			
		Conducted emission	EN55032(CISPR32)					Class B			
		Radiated emission	EN55032(CISPR32)					Class B			
		Harmonic current	EN61000-3-2					Class A			
	EMC IMMUNITY	Parameter	Standard					Test Level / Note			
		ESD	EN61000-4-2					Level 3, 8KV air; Level 2, 4KV contact			
		RF field susceptibility	EN61000-4-3					Level 2, 3V/m			
		EFT bursts	EN61000-4-4					Level 2, 1KV			
		Surge susceptibility	EN61000-4-5					Level 3, 1KV/L-N			
		Conducted susceptibility	EN61000-4-6					Level 2, 3V			
Magnetic field immunity		EN61000-4-8					Level 1, 1A/m				
Voltage dips , interruption		EN61000-4-11					>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods				
OTHERS	LIFE	3 years : 100% load 40°C, 8hours / day									
	MTBF	265Khrs min. MIL-HDBK-217F(25°C)									
	DIMENSION	62.2*27.4*39.7mm (L*W*H)									
	PACKING	100g / 90pcs / 10kg / CARTON for cable connection ; 59.5g / 90pcs / 8kg / CARTON for USB connection									
CONNECTOR	PLUG	See page 4~5 ; Other type available by customer requested									
	CABLE	See page 4~5 ; Other type available by customer requested									
NOTE	1.All parameters are specified at 230VAC input, rated load, 25°C 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 10% to 100% rated load 7.The power supply is considered as an independent unit, but the final equipment still need to re-confirm 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."										

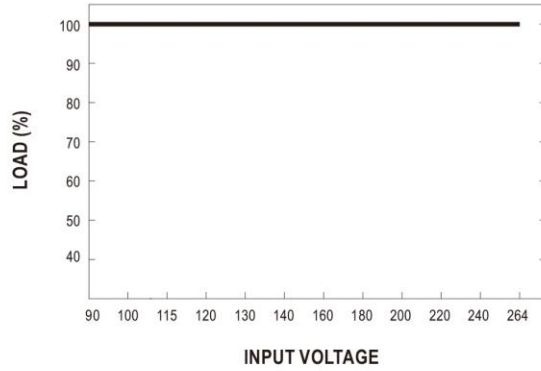


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Derating Curve



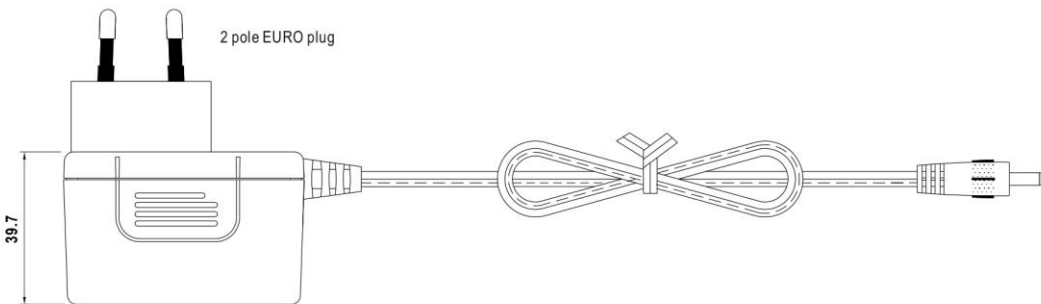
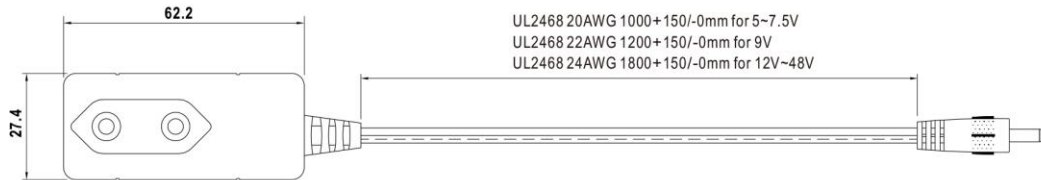
Static Characteristics



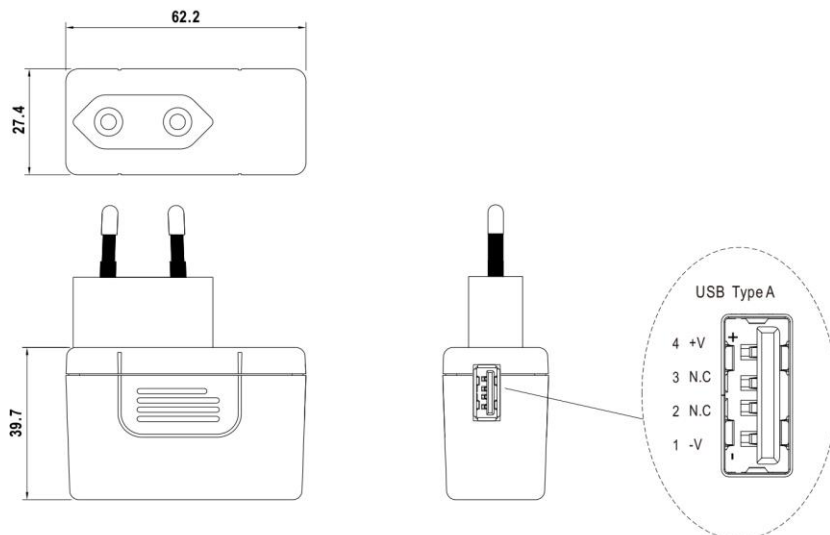
Mechanical Specification

Unit:mm

※ Cable Connection



※ USB Connection





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■ DC output plug

◎ Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	Outside Inside

◎ 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)

Example quick adapter accessory:



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

Tuning Fork Style		Type No.	A OD	B ID	C L	Quick Adapter Accessory
		P1I	5.5	2.1	9.5	
		P1L	5.5	2.5	9.5	
		P1M	5.5	2.5	11.0	
		P1IR	5.5	2.1	9.5	
		P1JR	5.5	2.1	11.0	
		P1LR	5.5	2.5	9.5	
		P1MR	5.5	2.5	11.0	
Barrel Style		Type No.	A OD	B ID	C L	None
		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	
		P2LR	5.5	2.5	9.5	
		P2MR	5.5	2.5	11.0	
Lock Style		Type No.	A OD	B ID	C L	None
		P2S(S761K)	5.53	2.03	12.06	
		P2K(761K)	5.53	2.54	12.06	
		P2C(S760K)	5.53	2.03	9.52	
		P2D(760K)	5.53	2.54	9.52	
		SWITCHCRAFT original or equivalent				
Min. Pin Style		Type No.	A OD	B ID	C L	Available (Current rating: 5A max.)
		P3A	2.35	0.7	11.0	
		P3B	4.0	1.7	11.0	
		P3C	4.75	1.7	11.0	
		EIAJ equivalent				

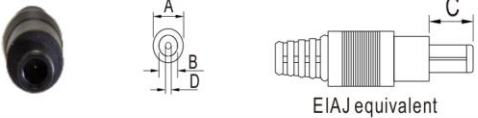
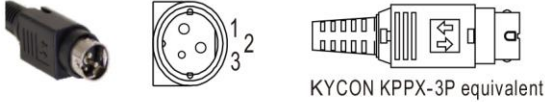

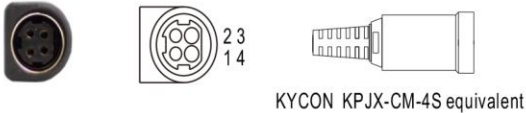
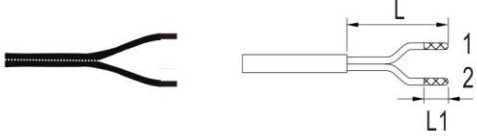


E-Star Power Development Co., Ltd. (E-STAR)

1F., No.40, Juren Ln., Sec. 2, Sanmin Rd., Banciao Dist., New Taipei City 22069, Taiwan (R.O.C.)

Phone : 886-2-2957 5580 Fax : 886-2-2957 7473

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Center Pin Style	Type No.	A	B	C	D	Quick Adapter Accessory
		OD	ID	L	Center Pin	
	P4A	5.5	3.4	11.0	1.0	Available (Current rating: 7.5A max.)
	P4B	6.5	4.4	11.0	1.4	
	P4C	7.4	5.1	11.0	0.6	
Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment				
	R6B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	+Vo			
		Pin Assignment				
		PIN No.	Output			
	R7B	1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment				
	R7BF	PIN No.	Output	None		
		1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
		Pin Assignment				
Stripped and tinned leads	Type No.	PIN No.	Output			
 <p>Length of Land L1 by request (MW's standard length, L: <u>25</u>_mm, L1: <u>10</u>_mm)</p>	by customer	1 (Ribbed)	+Vo	None		
		2 (Letter)	-Vo			