



(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](#)
(Plug kit sold separately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 3 years warranty

■ Applications

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

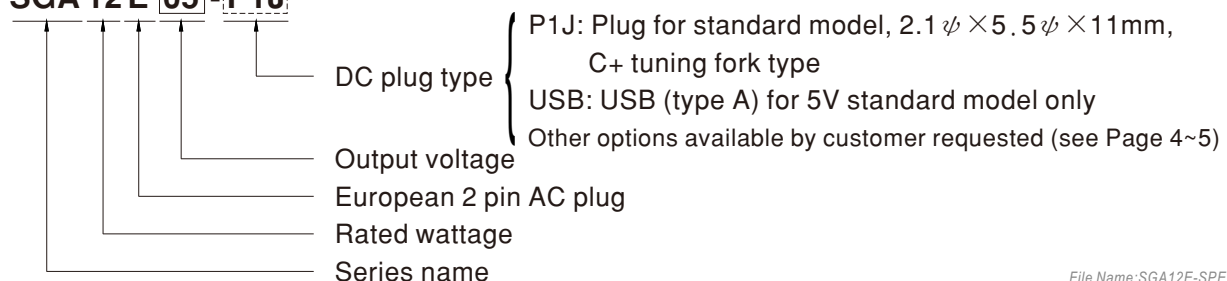
■ Description

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

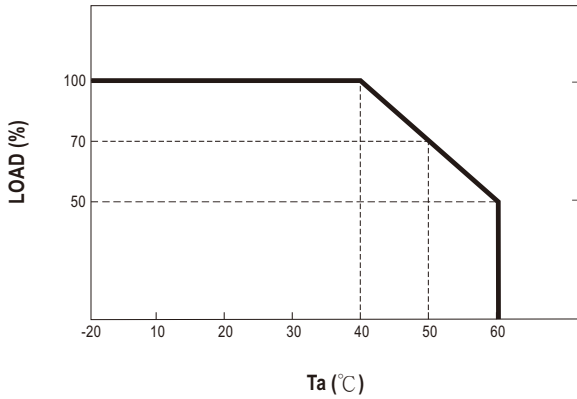




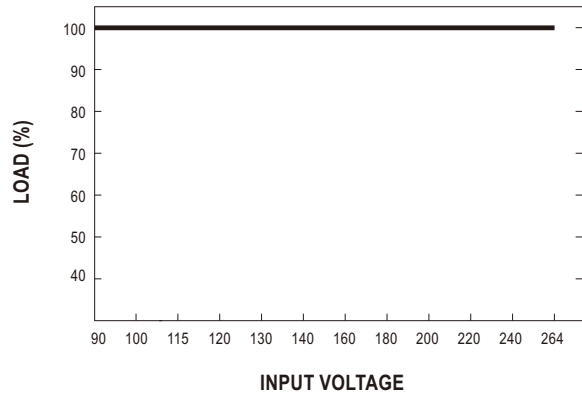
SPECIFICATION

ORDER NO.		SGA12E05- <input type="checkbox"/> <input type="checkbox"/> =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 Note.2	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.) Note.3	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	
	VOLTAGE TOLERANCE Note.4	± 5.0%	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%	
	LINE REGULATION Note.5	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LOAD REGULATION Note.6	± 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		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	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		
		Voltage flicker	EN61000-3-3					-----		
	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	<p>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.</p> <p>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 47µf capacitor.</p> <p>4.Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5.Line regulation is measured from low line to high line at rated load.</p> <p>6.Load regulation is measured from 10% to 100% rated load</p> <p>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." (as available on http://www.meanwell.com)</p>									

Derating Curve



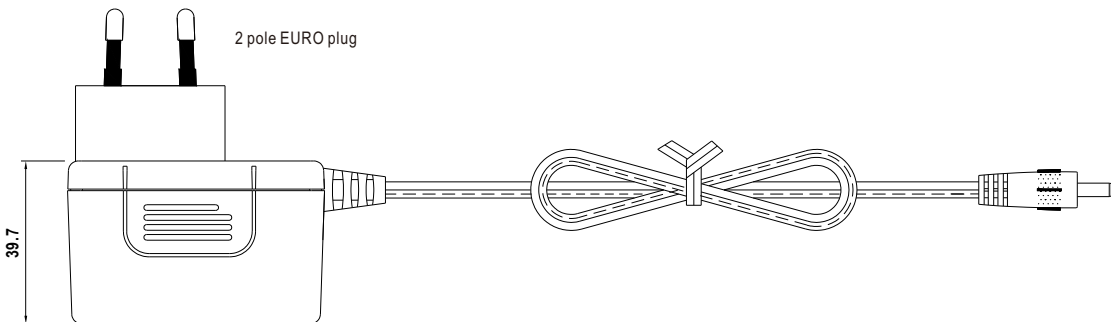
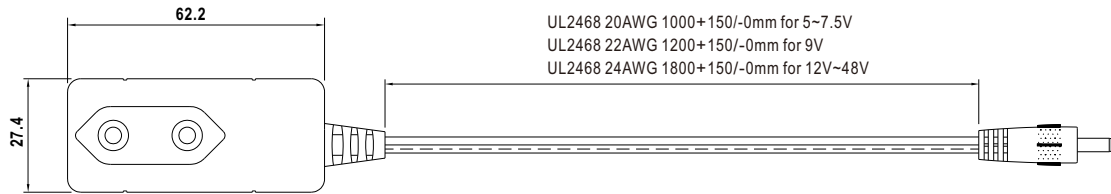
Static Characteristics



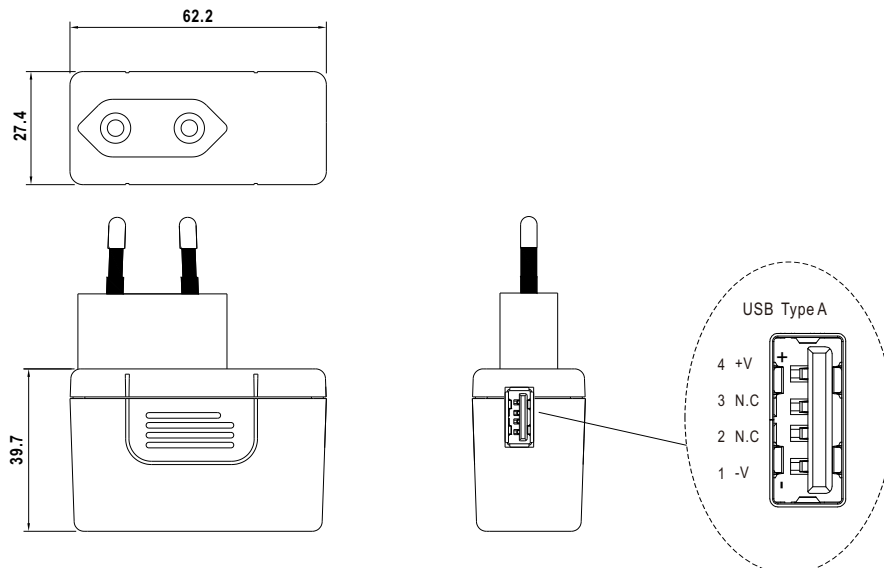
Mechanical Specification

Unit:mm

※ Cable Connection



※ USB Connection



■ 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)

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	Available (Current rating: 7.5A max.)		
		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	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			
		P2LR	5.5	2.5	9.5			
		P2MR	5.5	2.5	11.0			
		Lock Style		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			
		P2D(760K)	5.53	2.54	9.52			
		SWITCHCRAFT original or equivalent						
Min. Pin Style		Type No.	A	B	C	Available (Current rating: 5A max.)		
			OD	ID	L			
		P3A	2.35	0.7	11.0			
		P3B	4.0	1.7	11.0			
		P3C	4.75	1.7	11.0			
		EIAJ equivalent						

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			
	R7B	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
	R7BF	PIN No.	Output			
		1	+Vo			
		2	-Vo			
		3	-Vo			
	by customer	PIN No.	Output			
		1 (Ribbed)	+Vo			
		2 (Letter)	-Vo			
		Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 10 mm)				

Installation Manual

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