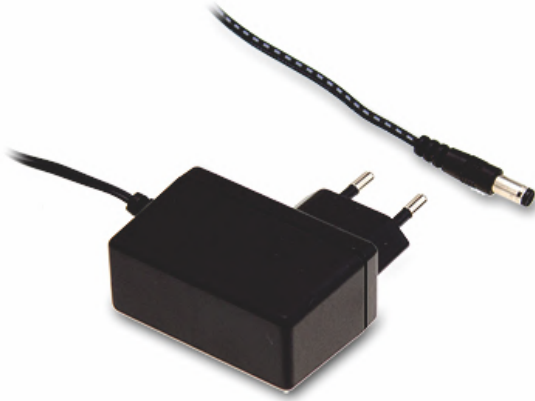




(Cable connection)



(USB connection)

User's Manual



Video



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 sperately, 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

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

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

DC plug type

Output voltage

European 2 pin AC plug

Rated wattage

Series name

P1J: Plug for standard model, 2.1 ψ $\times$ 5.5 ψ $\times$ 11mm,
C+ tuning fork type

USB: USB (type A) for 5V standard model only

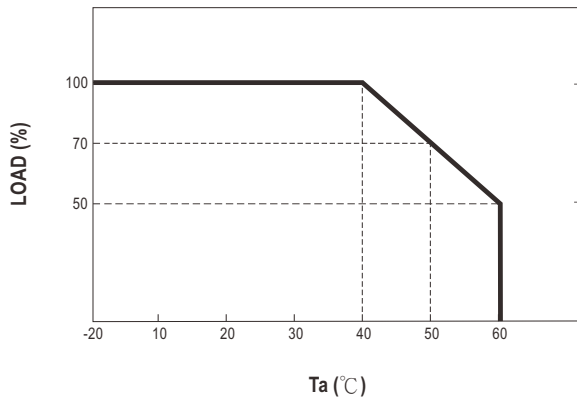
Other options available by customer requested (see Page 4~5)



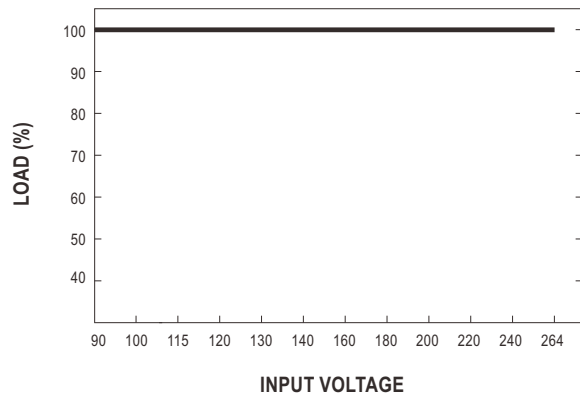
SPECIFICATION

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 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℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	20% ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH non-condensing							
	TEMP. COEFFICIENT	± 0.03% / °C (0 ~ 40℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC (Note. 7)	SAFETY STANDARDS	TUV BS EN/EN62368-1, EAC TP TC 004 approved							
	WITHSTAND VOLTAGE	I/P-O/P:4242VDC							
	ISOLATION RESISTANCE	I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH							
	EMC EMISSION	Parameter	Standard				Test Level / Note		
		Conducted emission	BS EN/EN55032(CISPR32)				Class B		
		Radiated emission	BS EN/EN55032(CISPR32)				Class B		
		Harmonic current	BS EN/EN61000-3-2				Class A		
		Voltage flicker	BS EN/EN61000-3-3				-----		
	EMC IMMUNITY	Parameter	Standard				Test Level /Note		
		ESD	BS EN/EN61000-4-2				Level 3, 8KV air; Level 2, 4KV 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/L-N		
Conducted susceptibility		BS EN/EN61000-4-6				Level 2, 3V			
Magnetic field immunity		BS EN/EN61000-4-8				Level 1, 1A/m			
Voltage dips , interruption		BS EN/EN61000-4-11				> 95% dip 0. 5 periods, 30% dip 25 periods, > 95% interruptions 250 periods			
OTHERS	LIFE	3 years : 100% load 40℃, 8hours / day							
	MTBF	265Khrs min. MIL-HDBK-217F(25℃)							
	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℃ 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." (as available on http://www.meanwell.com) ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx								

Derating Curve



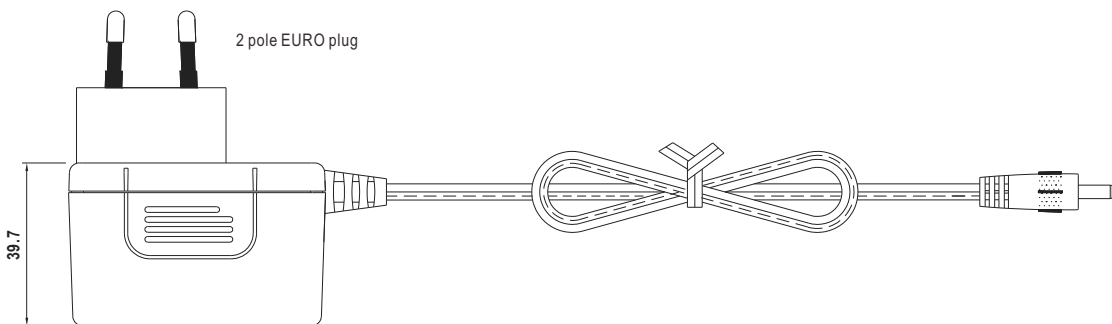
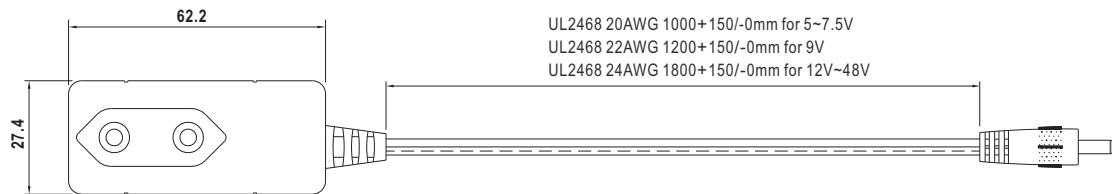
Static Characteristics



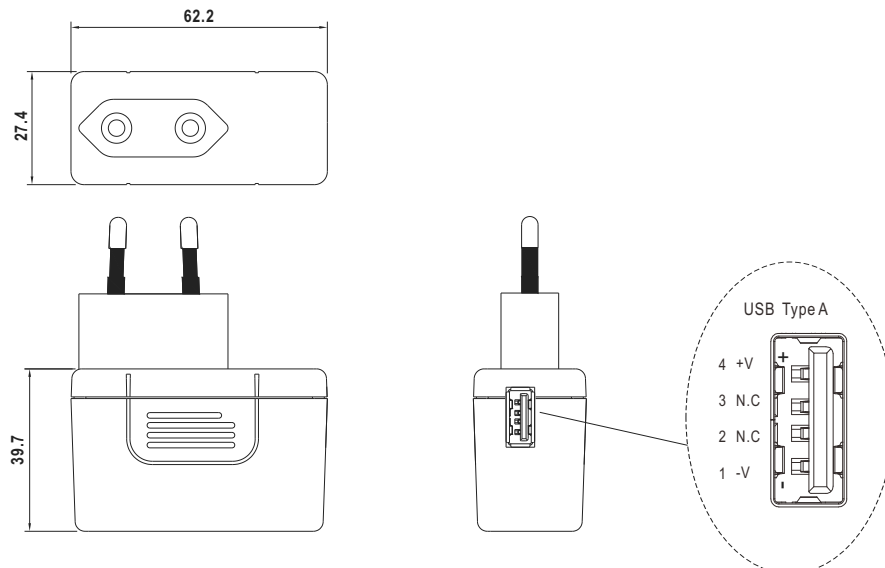
Mechanical Specification

Unit:mm

※ Cable Connection



※ USB Connection



DC output plug

Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	Outside Inside

DC plug changeable through:

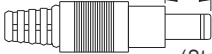
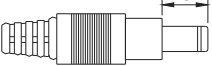
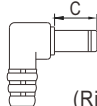
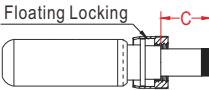
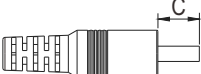
- Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- Quick adapter accessory (sold separately without MOQ)

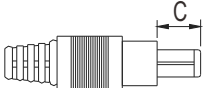
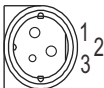
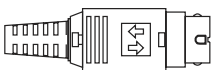
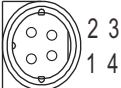
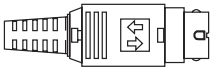
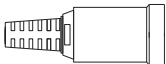
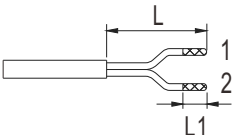
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:



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

Tuning Fork Style		Type No.	A OD	B ID	C L	Quick Adapter Accessory
 	 (Straight)	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
		P1L	5.5	2.5	9.5	
	 (Right-angled)	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
 	 (Straight)	P2I	5.5	2.1	9.5	
		P2J	5.5	2.1	11.0	
	 (Right-angled)	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
 	 SWITCHCRAFT original or equivalent	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	
		Min. Pin Style		Type No.	A OD	B ID
 	 EIAJ equivalent	P3A	2.35	0.7	11.0	
		P3B	4.0	1.7	11.0	
		P3C	4.75	1.7	11.0	

Center Pin Style	Type No.	A	B	C	D	Quick Adapter Accessory
		OD	ID	L	Center Pin	
   EIAJ equivalent	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				Available (Current rating: 7.5A max.)
		PIN No.	Output			
   KYCON KPPX-3P equivalent	R6B	1	+Vo			
		2	-Vo			
		3	+Vo			
Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment				Available (Current rating: 7.5A max.)
		PIN No.	Output			
   KYCON KPPX-4P equivalent	R7B	1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment				None
		PIN No.	Output			
   KYCON KPJX-CM-4S equivalent	R7BF	1	+Vo			
		2	-Vo			
		3	-Vo			
		4	+Vo			
Stripped and tinned leads	Type No.	Pin Assignment				None
		PIN No.	Output			
  Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 10 mm)	by customer	1 (Ribbed)	+Vo			
		2 (Letter)	-Vo			

Installation Manual

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