

(Cable connection)



(USB connection)



■ Features

- Ultra slim
- Universal AC input / Full range
- 2 pole USA plug, Class II power unit
- No load power consumption < 0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE
- 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 equipm
- Power sourcing equipment of PoEents

■ Description

SGA12U is a 12W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA12U is a class II power unit (no FG) equipped with the standard 2-Pin U.S. 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, SGA12U is compliant with the latest U.S. energy regulation EISA 2007/DoE(Level VI). 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 U 05 -P1J

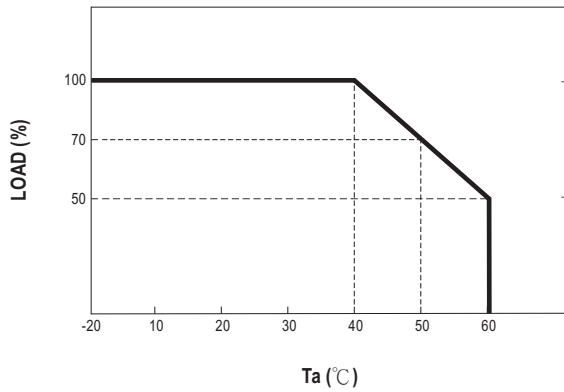
- Series name
- Rated wattage
- US 2 pin AC plug
- Output voltage
- DC plug type {
 - P1J: Plug for standard model, 2.1 ψ \times 5.5 ψ \times 11mm, C+ tuning fork type
 - USB: USB (type A) for 5V standard model only
 - Other options available by customer requested (see Page 4~5)

SPECIFICATION

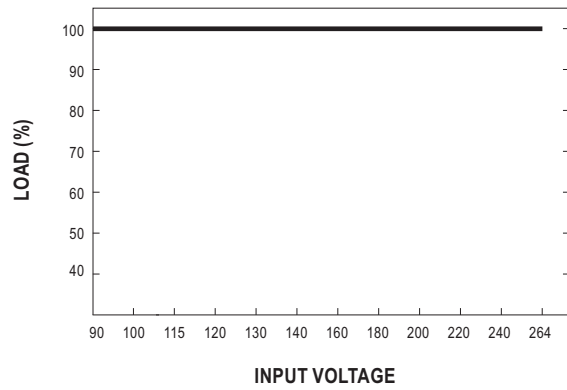
ORDER NO.		SGA12U05- <div><div></div></div> =P1J, USB	SGA12U07-P1J	SGA12U09-P1J	SGA12U12-P1J	SGA12U15-P1J	SGA12U18-P1J	SGA12U24-P1J	SGA12U48-P1J
OUTPUT	SAFETY MODEL NO.	SGA12U05	SGA12U07	SGA12U09	SGA12U12	SGA12U15	SGA12U18	SGA12U24	SGA12U48
	DC VOLTAGE <div>Note.2</div>	5V	7.5V	9V	12V	15V	18V	24V	48V
	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.) <div>Note.3</div>	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p
	VOLTAGE TOLERANCE <div>Note.4</div>	± 5.0%	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%
	LINE REGULATION <div>Note.5</div>	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	LOAD REGULATION <div>Note.6</div>	± 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							
ENVIRONMENT		Protection type : Clamp by zener diode, output short							
	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 <div>(Note. 7)</div>	SAFETY STANDARDS	UL62368-1, CSA C22.2 NO. 62368-1, 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	FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)					Class B	
		Radiated emission	FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)					Class B	
OTHERS	LIFE	3 years : 100% load 40℃, 8hours / day							
	MTBF	265Khrs min. MIL-HDBK-217F(25℃)							
	DIMENSION	62.2*27.4*45.5mm (L*W*H)							
	PACKING	109g ; 110pcs / 13kg / CARTON for cable connection ; 56.2g ; 90pcs / 7.5kg / 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	<div>1.All parameters are specified at 115VAC input, rated load, 25℃ 70% RH ambient.</div> <div>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.</div> <div>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.</div> <div>4.Tolerance: includes set up tolerance, line regulation, load regulation.</div> <div>5.Line regulation is measured from low line to high line at rated load.</div> <div>6.Load regulation is measured from 10% to 100% rated load</div> <div>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.”</div> <div>(as available on http://www.meanwell.com)</div> <div>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</div>								

File Name:SGA12U-SPEC 2020-10-30

Derating Curve



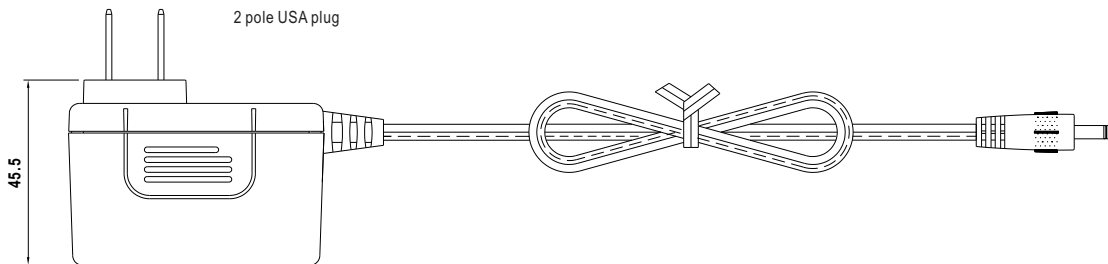
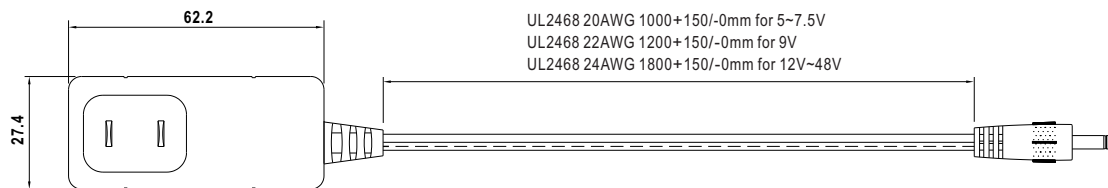
Static Characteristics



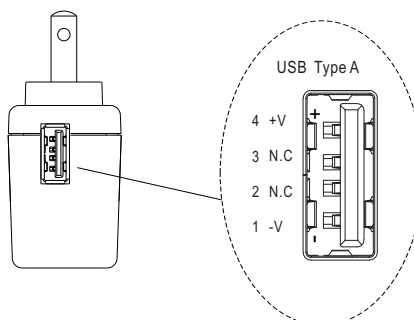
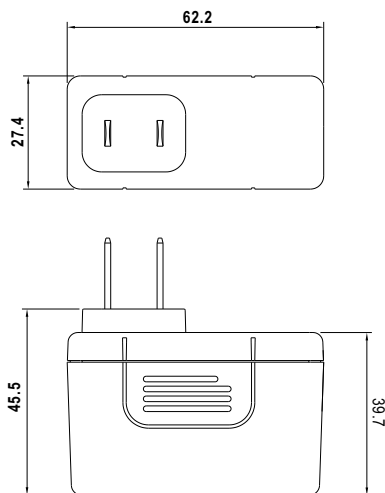
Mechanical Specification

Unit:mm

※ Cable Connection



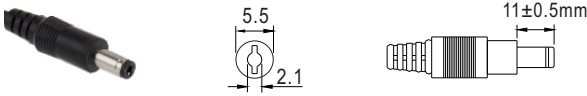


※ USB Connection



■ DC output plug

◎ Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	
	Outside  Inside

◎ DC plug changeable through:



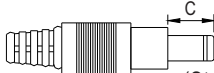
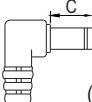


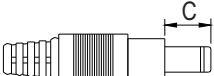
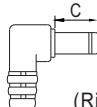


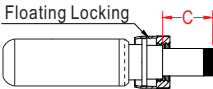



- (1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- (2) Quick adapter accessory (sold separately without MOQ)



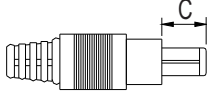

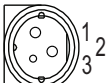
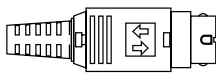

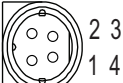
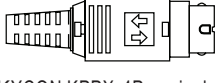


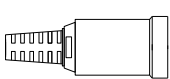

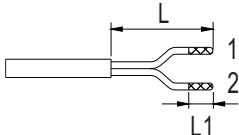
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

Example quick adapter accessory:



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

Tuning Fork Style		Type No.	A 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	C L	None
 	 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	C L	Available (Current rating: 5A max.)
 	 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: <u>25</u> mm, L1: <u>10</u> mm)	by customer	1 (Ribbed)		+Vo		
		2 (Letter)		-Vo		