

( 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](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

## GTIN CODE

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

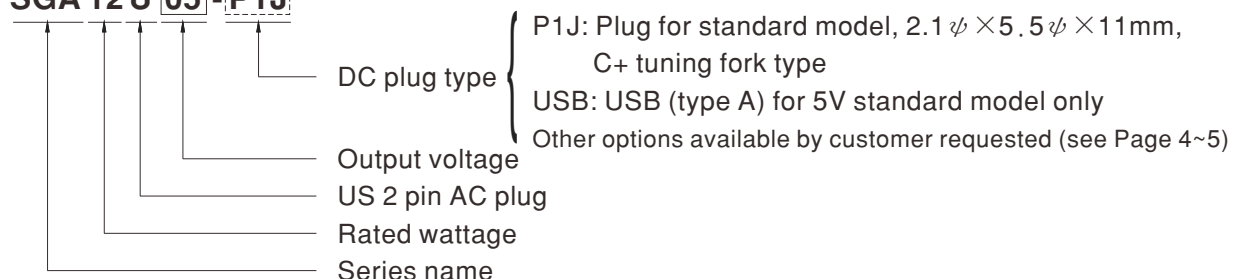
## Description

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**

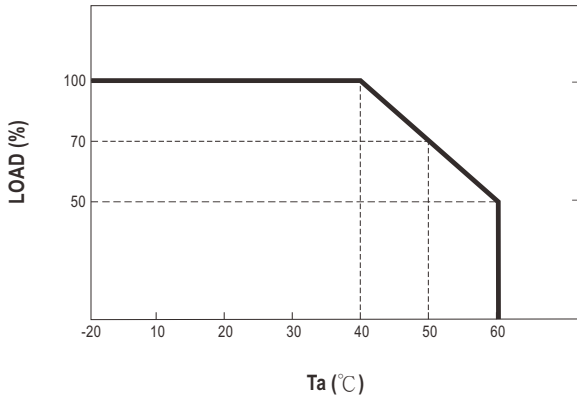




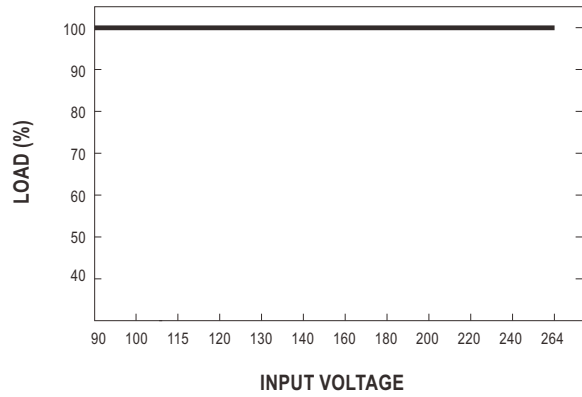
**SPECIFICATION**

ORDER NO.		SGA12U05-□ □=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 <span style="float:right">Note.2</span>	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.) <span style="float:right">Note.3</span>	50mVp-p	50mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	100mVp-p	
	VOLTAGE TOLERANCE <span style="float:right">Note.4</span>	± 5.0%	± 5.0%	± 5.0%	± 3.0%	± 3.0%	± 3.0%	± 2.0%	± 2.0%	
	LINE REGULATION <span style="float:right">Note.5</span>	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	LOAD REGULATION <span style="float:right">Note.6</span>	± 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	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°C / 70% RH								
	EMC EMISSION	Parameter		Standard				Test Level / Note		
OTHERS	LIFE	3 years : 100% load 40°C, 8hours / day								
	MTBF	265Khrs min. MIL-HDBK-217F(25°C)								
	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	<p>1.All parameters are specified at 115VAC input, rated load, 25°C 70% RH ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</p> <p>3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf &amp; 47uf 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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p> <p>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></p>									

### Derating Curve



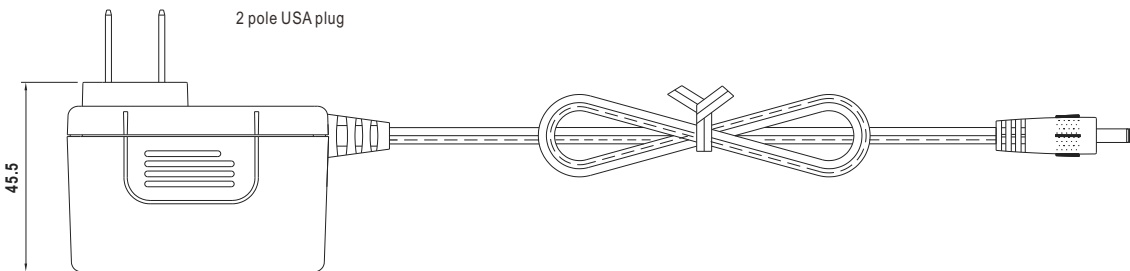
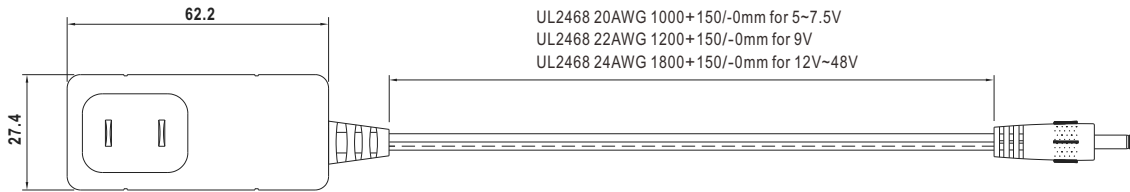
### Static Characteristics



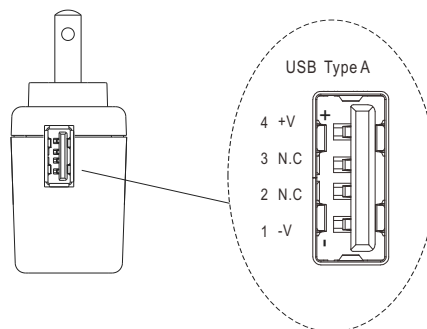
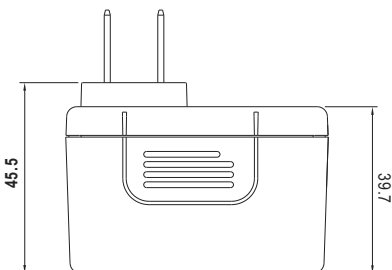
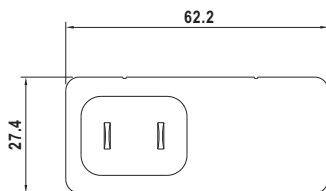
### Mechanical Specification

Unit:mm

#### ※ Cable Connection



#### ※ USB Connection



**DC output plug**

Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	Outside  Inside

DC plug changeable through:

- 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](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			

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				
	Min. DIN 4 Pin with Lock (male)	Type No.	Pin Assignment				
		R7B	PIN No.	Output			
1			+Vo				
2			-Vo				
3			-Vo				
		4	+Vo				
	Min. DIN 4 Pin with Lock (female)	Type No.	Pin Assignment				
		R7BF	PIN No.	Output			
			1	+Vo			
2			-Vo				
3			-Vo				
		4	+Vo				
	Stripped and tinned leads	Type No.	Pin Assignment				
	<p>Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 10 mm)</p>	by customer	PIN No.	Output			
			1 (Ribbed)	+Vo			
		2 (Letter)	-Vo				

### ■ Installation Manual

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