60W AC-DC High Reliability Slim Wall-mounted Adaptor SGA60U series

User's Manual

Video



UL62368-1 IEC62368-1 TPTC004

ECO Household Automate Industrial Security Network Telecom

Features

- Ultra slim
- Universal AC input / Full range
- 2 pole USA plug, Class Ⅱ power unit
- No load power consumption <0.075W for 5~7.5V
  <0.15W for 9 ~48V
- **Energy efficiency Level** Ⅵ
- Comply with EISA 2007/DoE
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- LED indicator for power on
- 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

SGA60U is a 60W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA60U 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 89.5% and the extremely low no-load power consumption below 0.075W for 5~7.5V, below 0.15W for 9 ~48V, SGA60U 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 60 U 05 - P1J

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

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60W AC-DC High Reliability Slim Wall-mounted Adaptor SGA60U series

SPECIFICATION

ORDER NO.		SGA60U05-P1J	SGA60U07-P1J	SGA60U09-P1J	SGA60U12-P1J	SGA60U15-P1J	SGA60U18-P1J	SGA60U24-P1J	SGA60U48-P1J
OUTPUT	SAFETY MODEL NO.	SGA60U05	SGA60U07	SGA60U09	SGA60U12	SGA60U15	SGA60U18	SGA60U24	SGA60U48
	DC VOLTAGE Note.2	5V	7.5V	9V	12V	15V	18V	24V	48V
	RATED CURRENT	6A	6A	5.5A	5A	4A	3.33A	2.5A	1.25A
	CURRENT RANGE	0 ~ 6A	0 ~ 6A	0 ~ 5.5A	0 ~ 5A	0 ~ 4A	0 ~ 3.33A	0 ~ 2.5A	0 ~ 1.25A
	RATED POWER (max.)	30W	45W	50W	60W	60W	60W	60W	60W
	RIPPLE & NOISE (max.) Note.3	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p
	VOLTAGE TOLERANCE Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±2.0%	±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%	±2.0%	±2.0%	±2.0%
	SETUP, RISE, HOLD UP TIME	2500ms, 50ms, 10ms/230VAC		2500ms, 50ms, 10ms/115VAC at full load					
INPUT	VOLTAGE RANGE Note.7	90 ~ 264VAC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY (Typ.)	83.5%	85%	86.5%	87.5%	87%	88%	88%	89.5%
	AC CURRENT	1.5A / 115VAC		0.75A / 230VAC					
	INRUSH CURRENT (max.)	Cold start 40A / 115VAC		80A / 230VAC					
	LEAKAGE CURRENT(max.)	0.25mA / 240VAC							
PROTECTION	OVERLOAD	110 ~ 200% 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 ~ +50℃ (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% / ℃ (0 ~ 40℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC (Note. 8)	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℃, 12hours / day							
	MTBF	400Khrs min. MIL-HDBK-217F(25℃)							
	DIMENSION	93.5*35*51.5mm (L*W*H)							
	PACKING	250g ; 60pcs / 17kg / CARTON							
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 115VAC 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

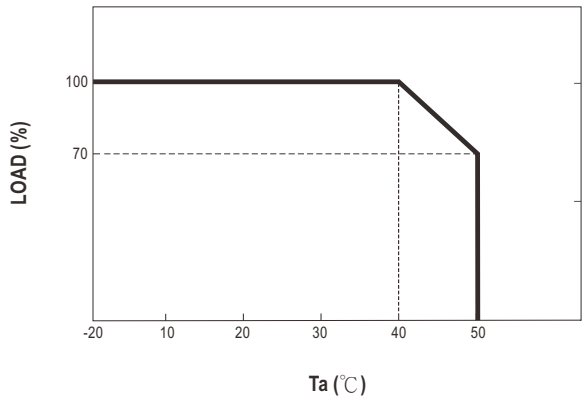
7.Derating may be needed under low input voltage. Please check the derating curve for more details.

8.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)

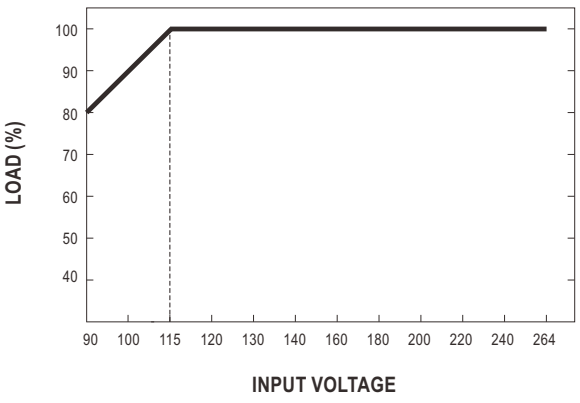
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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■ Derating Curve

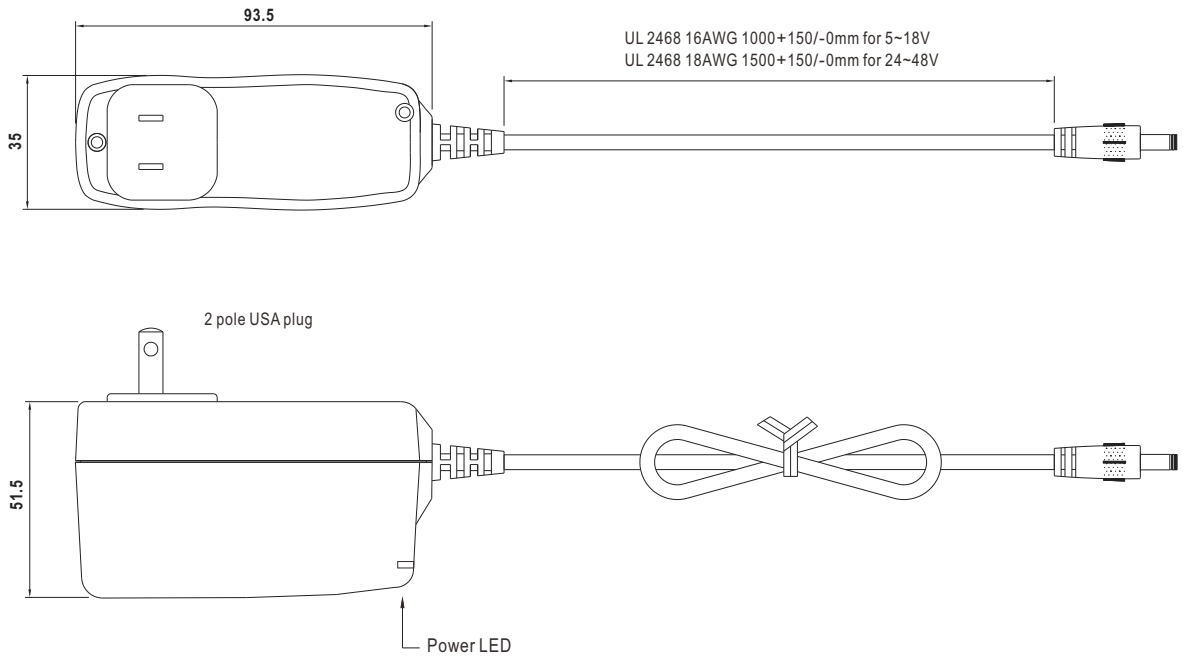


■ Static Characteristics



■ Mechanical Specification

Unit:mm

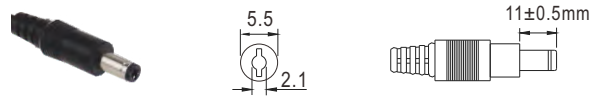


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■ DC output plug

◎ 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)

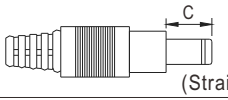
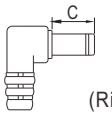
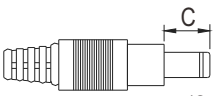
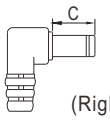
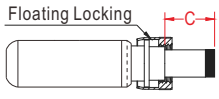
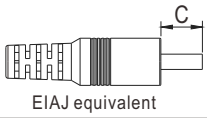
(2) Quick adapter accessory (sold separately without MOQ)

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

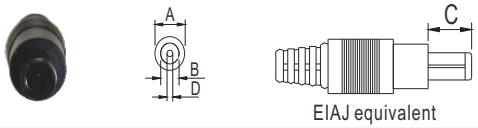
Example quick adapter accessory:

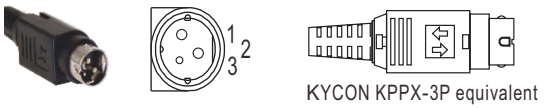


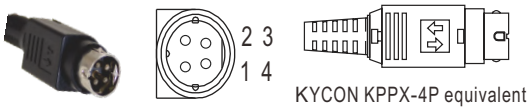
◎ Optional DC plug: (Available in customized cable or quick adapter)

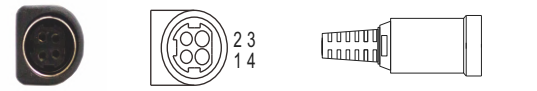
Tuning Fork Style	Type No.	A OD	B ID	C L	Quick Adapter Accessory
  (Straight)  (Right-angled)	P1I	5.5	2.1	9.5	Available (Current rating: 7.5A max.)
	P1L	5.5	2.5	9.5	
	P1M	5.5	2.5	11.0	
	P1IR	5.5	2.1	9.5	
	P1JR	5.5	2.1	11.0	
	P1LR	5.5	2.5	9.5	
	P1MR	5.5	2.5	11.0	
Barrel Style	Type No.	A OD	B ID	C L	
  (Straight)  (Right-angled)	P2I	5.5	2.1	9.5	None
	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	
  SWITCHCRAFT original or equivalent	P2S(S761K)	5.53	2.03	12.06	None
	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	
  EIAJ equivalent	P3A	2.35	0.7	11.0	Available (Current rating: 5A max.)
	P3B	4.0	1.7	11.0	
	P3C	4.75	1.7	11.0	

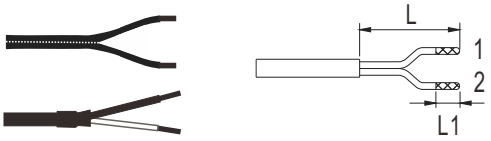
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Center Pin Style	Type No.	A OD	B ID	C L	D Center Pin	Quick Adapter Accessory
 EIAJ equivalent	P4A	5.5	3.4	11.0	1.0	Available (Current rating: 7.5A max.)
	P4B	6.5	4.4	11.0	1.4	
	P4C	7.4	5.1	11.0	0.6	

Min. DIN 3 Pin with Lock (male)	Type No.	Pin Assignment	
		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	
		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	
		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	
		PIN No.	Output
 Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 10 mm)	by customer	1 (Ribbed or White)	+Vo
		2 (Letter or Black)	-Vo

Quick Adapter Accessory: None

■ Installation Manual

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

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