



## ■ 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
- 3 years warranty

## ■ Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

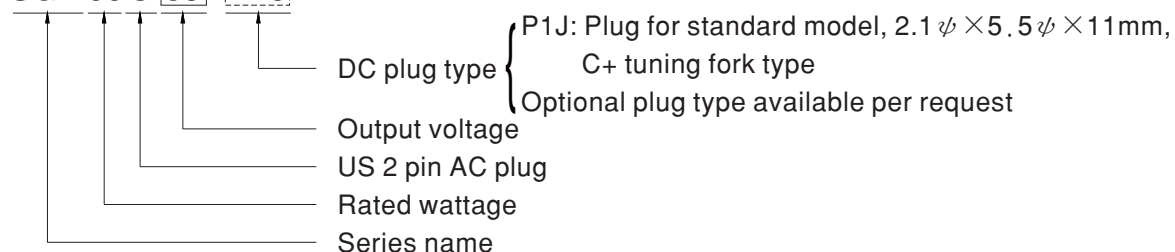
## ■ Description

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 91% 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**

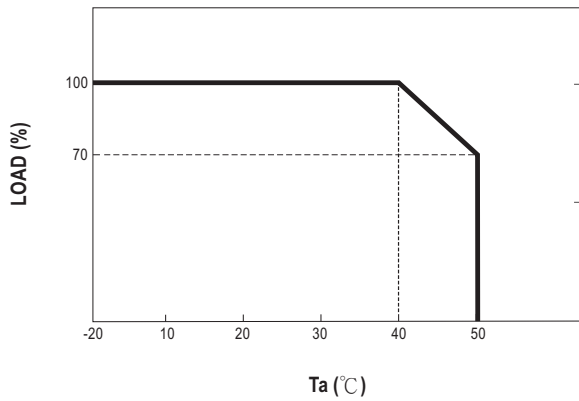




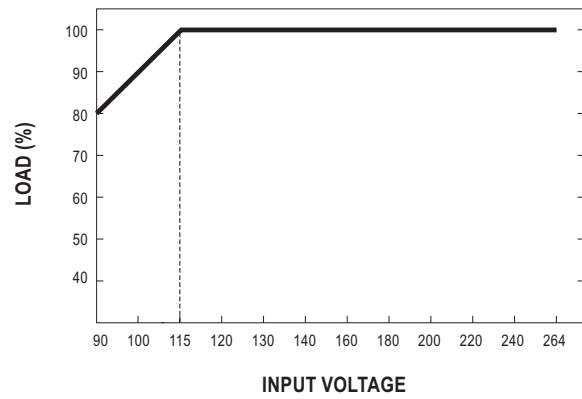
**SPECIFICATION**

ORDER NO.	SGA60U05-P1J	SGA60U07-P1J	SGA60U09-P1J	SGA60U12-P1J	SGA60U15-P1J	SGA60U18-P1J	SGA60U24-P1J	SGA60U48-P1J		
OUTPUT	<b>SAFETY MODEL NO.</b>	SGA60U05	SGA60U07	SGA60U09	SGA60U12	SGA60U15	SGA60U18	SGA60U24	SGA60U48	
	<b>DC VOLTAGE</b> <small>Note.2</small>	5V	7.5V	9V	12V	15V	18V	24V	48V	
	<b>RATED CURRENT</b>	6A	6A	5.5A	5A	4A	3.33A	2.5A	1.25A	
	<b>CURRENT RANGE</b>	0 ~ 6A	0 ~ 6A	0 ~ 5.5A	0 ~ 5A	0 ~ 4A	0 ~ 3.33A	0 ~ 2.5A	0 ~ 1.25A	
	<b>RATED POWER (max.)</b>	30W	45W	49.5W	60W	60W	60W	60W	60W	
	<b>RIPPLE &amp; NOISE (max.)</b> <small>Note.3</small>	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p	
	<b>VOLTAGE TOLERANCE</b> <small>Note.4</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	<b>LINE REGULATION</b> <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	
	<b>LOAD REGULATION</b> <small>Note.6</small>	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%	
	<b>SETUP, RISE, HOLD UP TIME</b>	500ms, 50ms, 12ms/230VAC      500ms, 50ms, 12ms/115VAC at full load								
INPUT	<b>VOLTAGE RANGE</b> <small>Note.7</small>	90 ~ 264VAC								
	<b>FREQUENCY RANGE</b>	47 ~ 63Hz								
	<b>EFFICIENCY (Typ.)</b>	84%	86%	87%	88%	87%	88%	88%	91%	
	<b>AC CURRENT</b>	1.5A / 115VAC      0.75A / 230VAC								
	<b>INRUSH CURRENT (max.)</b>	Cold start 40A / 115VAC      80A / 230VAC								
	<b>LEAKAGE CURRENT(max.)</b>	0.25mA / 240VAC								
PROTECTION	<b>OVERLOAD</b>	110 ~ 200% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	<b>OVER VOLTAGE</b>	110 ~ 140% rated output voltage Protection type : Clamp by zener diode, output short								
ENVIRONMENT	<b>WORKING TEMP.</b>	-20 ~ +50°C (Refer to "Derating Curve")								
	<b>WORKING HUMIDITY</b>	20% ~ 90% RH non-condensing								
	<b>STORAGE TEMP., HUMIDITY</b>	-20 ~ +85°C, 10 ~ 95% RH non-condensing								
	<b>TEMP. COEFFICIENT</b>	±0.03% / °C (0 ~ 40°C)								
	<b>VIBRATION</b>	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC <small>(Note. 8)</small>	<b>SAFETY STANDARDS</b>	UL60950-1, CSA C22.2 approved								
	<b>WITHSTAND VOLTAGE</b>	I/P-O/P:4242VDC								
	<b>ISOLATION RESISTANCE</b>	I/P-O/P:100M Ohms / 500VDC / 25°C / 70% RH								
	<b>EMC EMISSION</b>	<b>Parameter</b>	<b>Standard</b>						<b>Test Level / Note</b>	
		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	<b>LIFE</b>	3 years : 100% load 40°C, 12hours / day								
	<b>MTBF</b>	400Khrs min. MIL-HDBK-217F(25°C)								
	<b>DIMENSION</b>	93.5*35*51.5mm (L*W*H)								
	<b>PACKING</b>	250g ; 60pcs / 17kg / CARTON								
CONNECTOR	<b>PLUG</b>	See page 4~5 ; Other type available by customer requested								
	<b>CABLE</b>	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 0.1µf &amp; 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.Derating may be needed under low input voltages. Please check the static characteristics for more details.</p> <p>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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</p>									

### Derating Curve

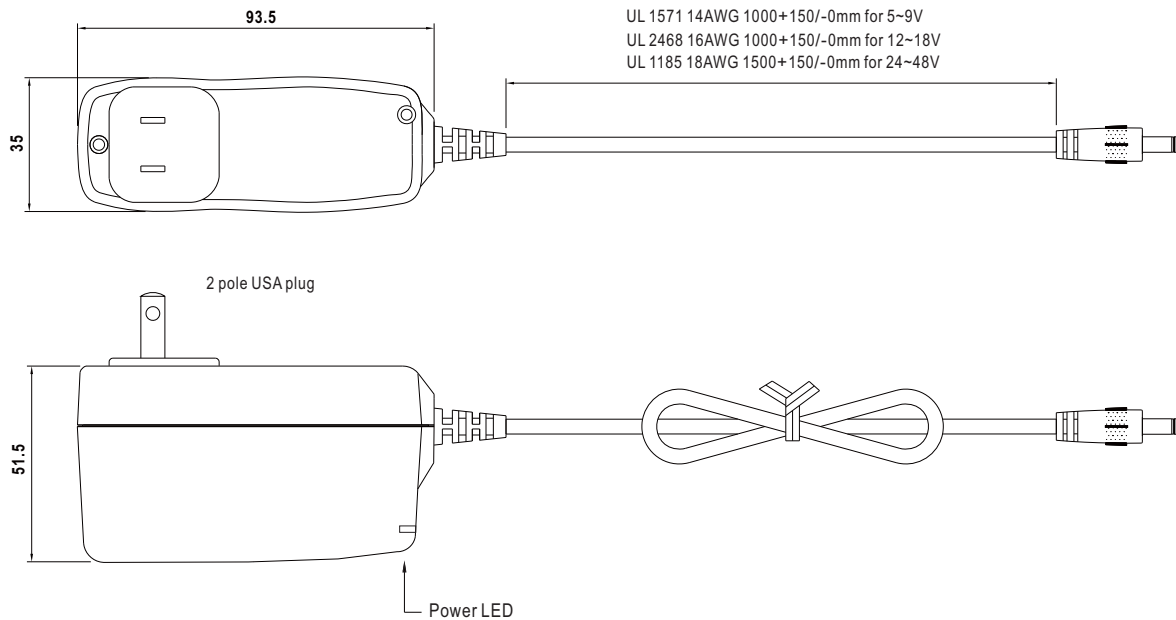


### Static Characteristics



### Mechanical Specification

Unit:mm



### DC output plug

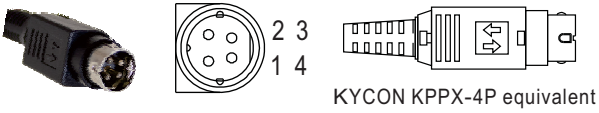
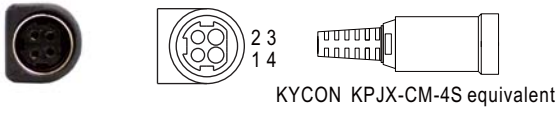

Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	Outside ⊖ ⊕ Inside

◎ Optional DC plug:

Tuning Fork Style		Type No.	A	B	C	
			OD	ID	L	
 	 (Straight)	P1I	5.5	2.1	9.5	
		P1L	5.5	2.5	9.5	
		P1M	5.5	2.5	11.0	
	 (Right-angled)	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	
			OD	ID	L	
 	 (Straight)	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	
	 (Right-angled)	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	
			OD	ID	L	
  Locking 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	B	C	
			OD	ID	L	
  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
			OD	ID	L	Center Pin
  EIAJ equivalent	P4A	5.5	3.4	11.0	1.0	
	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			
	R6B	2	-Vo			
	R6B	3	+Vo			

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

■ **Installation Manual**

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