



**■ Features**

- Ultra slim
- Universal AC input / Full range
- 2 pole EURO plug, Class II power unit
- No load power consumption < 0.075W for 5~7.5V  
<0.15W for 9 ~48V
- **Energy efficiency Level VI ( except 5V for Level V )**
- Comply with EU ErP and 9~48V meet CoC version 5
- 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

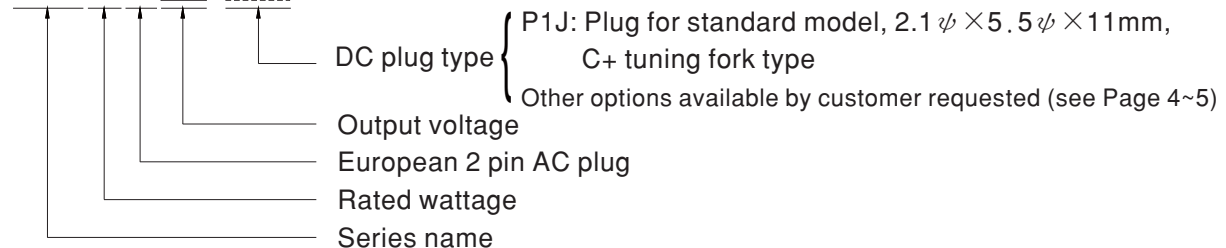
**■ Description**

SGA60E is a 60W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA60E 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 91% and the extremely low no-load power consumption below 0.075W for 5~7.5V, below 0.15W for 9 ~48V, SGA60E is compliant with EU ErP and 9~48V 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 60 E 05 -P1J**

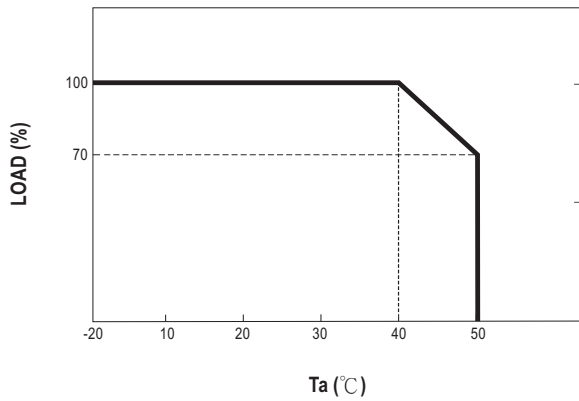




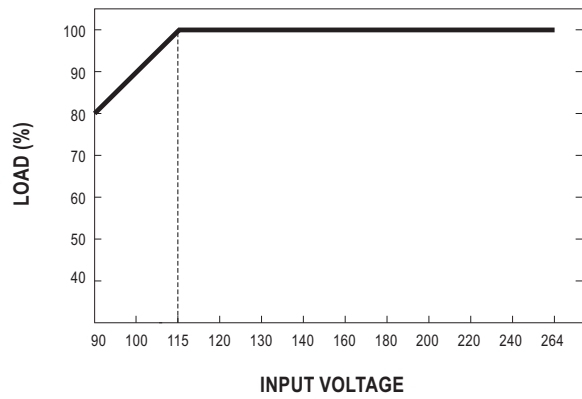
**SPECIFICATION**

ORDER NO.	SGA60E05-P1J	SGA60E07-P1J	SGA60E09-P1J	SGA60E12-P1J	SGA60E15-P1J	SGA60E18-P1J	SGA60E24-P1J	SGA60E48-P1J			
OUTPUT	<b>SAFETY MODEL NO.</b>	SGA60E05	SGA60E07	SGA60E09	SGA60E12	SGA60E15	SGA60E18	SGA60E24	SGA60E48		
	<b>DC VOLTAGE</b> Note.2	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> Note.3	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	80mVp-p	100mVp-p	120mVp-p		
	<b>VOLTAGE TOLERANCE</b> Note.4	±5.0%	±5.0%	±5.0%	±3.0%	±3.0%	±2.0%	±2.0%	±2.0%		
	<b>LINE REGULATION</b> Note.5	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	<b>LOAD REGULATION</b> Note.6	±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> Note.7	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									
	<b>WORKING TEMP.</b>	-20 ~ +50°C (Refer to "Derating Curve")									
ENVIRONMENT	<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 (Note. 8)	<b>SAFETY STANDARDS</b>	TUV EN60950-1, EAC TP TC 004 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	EN55032(CISPR32)						Class B		
		Radiated emission	EN55032(CISPR32)						Class B		
		Harmonic current	EN61000-3-2						Class A		
		Voltage flicker	EN61000-3-3						-----		
<b>EMC IMMUNITY</b>		<b>Parameter</b>	<b>Standard</b>						<b>Test Level / Note</b>		
		ESD	EN61000-4-2						Level 3, 8KV air; Level 2, 4KV contact		
		RF field susceptibility	EN61000-4-3						Level 2, 3V/m		
		EFT bursts	EN61000-4-4						Level 2, 1KV		
		Surge susceptibility	EN61000-4-5						Level 3, 1KV/L-N		
	Conducted susceptibility	EN61000-4-6						Level 2, 3V			
	Magnetic field immunity	EN61000-4-8						Level 1, 1A/m			
	Voltage dips , interruption	EN61000-4-11						>95% dip 0. 5 periods, 30% dip 25 periods, >95% interruptions 250 periods			
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 230VAC 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

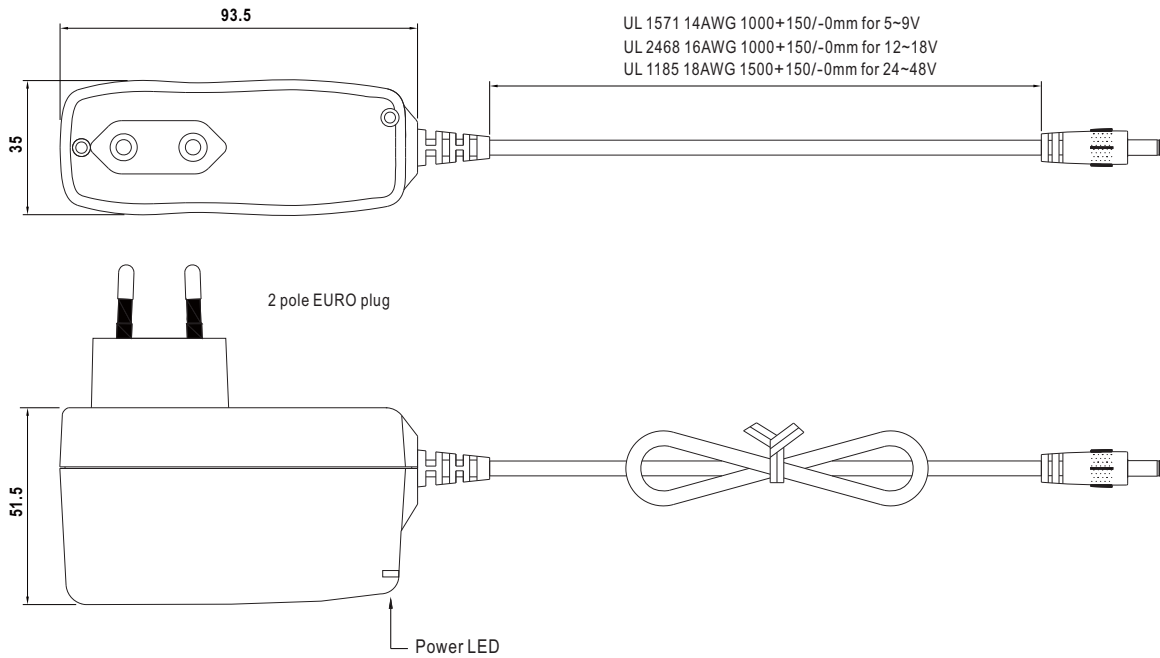


### Static Characteristics



### Mechanical Specification

Unit:mm





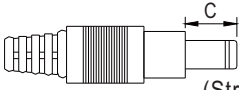
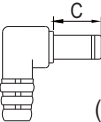

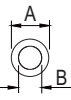
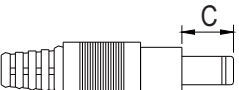
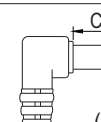


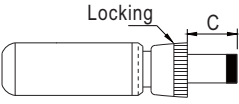


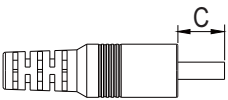

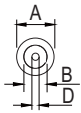
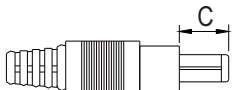

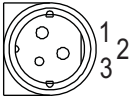
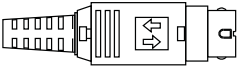
### DC output plug

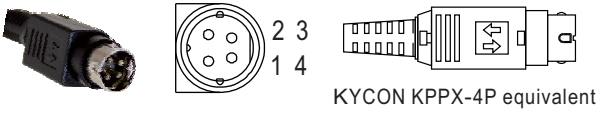


Standard plug: P1J

Unit:mm

P1J	Pin Assignment
	Outside  Inside

◎ Optional DC plug:

Tuning Fork Style		Type No.	A OD	B ID	C L	
   (Straight)	 (Right-angled)	P1I	5.5	2.1	9.5	
		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	
		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		
	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		
	P3B	4.0	1.7	11.0		
	P3C	4.75	1.7	11.0		
Center Pin Style		Type No.	A OD	B ID	C L	D 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			
   KYCON KPPX-3P equivalent	R6B	PIN No.	Output			
	1	+Vo				
	2	-Vo				
	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>