



■ 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

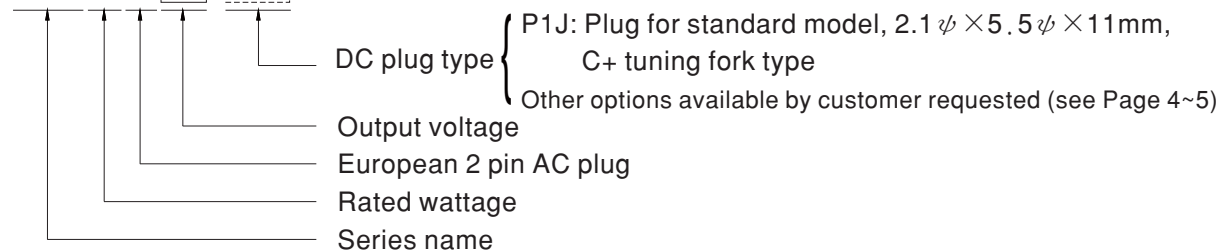
■ Description

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

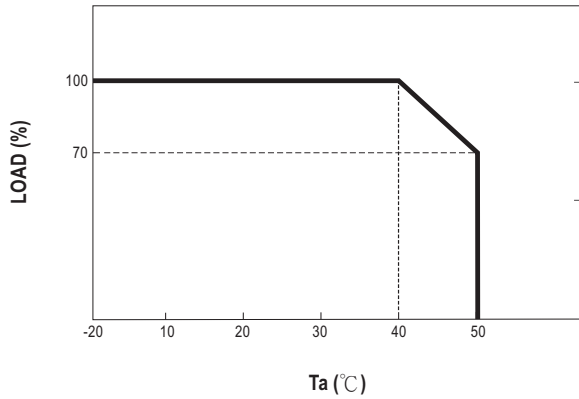




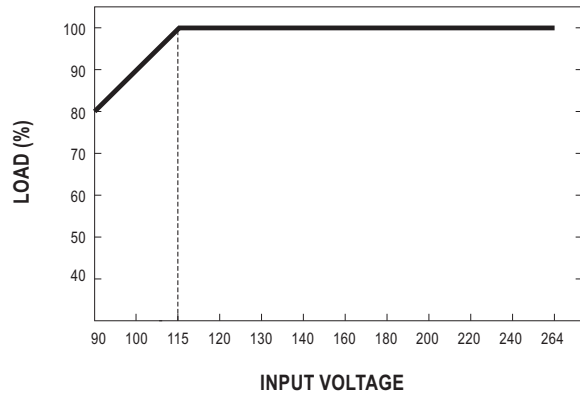
SPECIFICATION

| ORDER NO. | SGA60E05-P1J | SGA60E07-P1J | SGA60E09-P1J | SGA60E12-P1J | SGA60E15-P1J | SGA60E18-P1J | SGA60E24-P1J | SGA60E48-P1J | | |
|----------------------------------|---|---|------------------|--------------|--------------|--------------|--------------|--|--|--|
| OUTPUT | SAFETY MODEL NO. | SGA60E05 | SGA60E07 | SGA60E09 | SGA60E12 | SGA60E15 | SGA60E18 | SGA60E24 | SGA60E48 | |
| | 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 | 49.5W | 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 | 500ms, 50ms, 12ms/230VAC 500ms, 50ms, 12ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.7 | 90 ~ 264VAC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 84% | 86% | 87% | 88% | 87% | 88% | 88% | 91% | |
| | 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°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. 8) | SAFETY STANDARDS | TUV EN60950-1, 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 | |
| | | Conducted emission | EN55032(CISPR32) | | | | | | Class B | |
| | | Radiated emission | EN55032(CISPR32) | | | | | | Class B | |
| | | Harmonic current | EN61000-3-2 | | | | | | Class A | |
| | | Voltage flicker | EN61000-3-3 | | | | | | ----- | |
| | EMC IMMUNITY | Parameter | Standard | | | | | | Test Level / Note | |
| | | 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 | LIFE | 3 years : 100% load 40°C, 12hours / day | | | | | | | | |
| | MTBF | 400Khrs min. MIL-HDBK-217F(25°C) | | | | | | | | |
| | 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 | <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 & 50% load.</p> <p>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf & 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 http://www.meanwell.com)</p> | | | | | | | | | |

Derating Curve

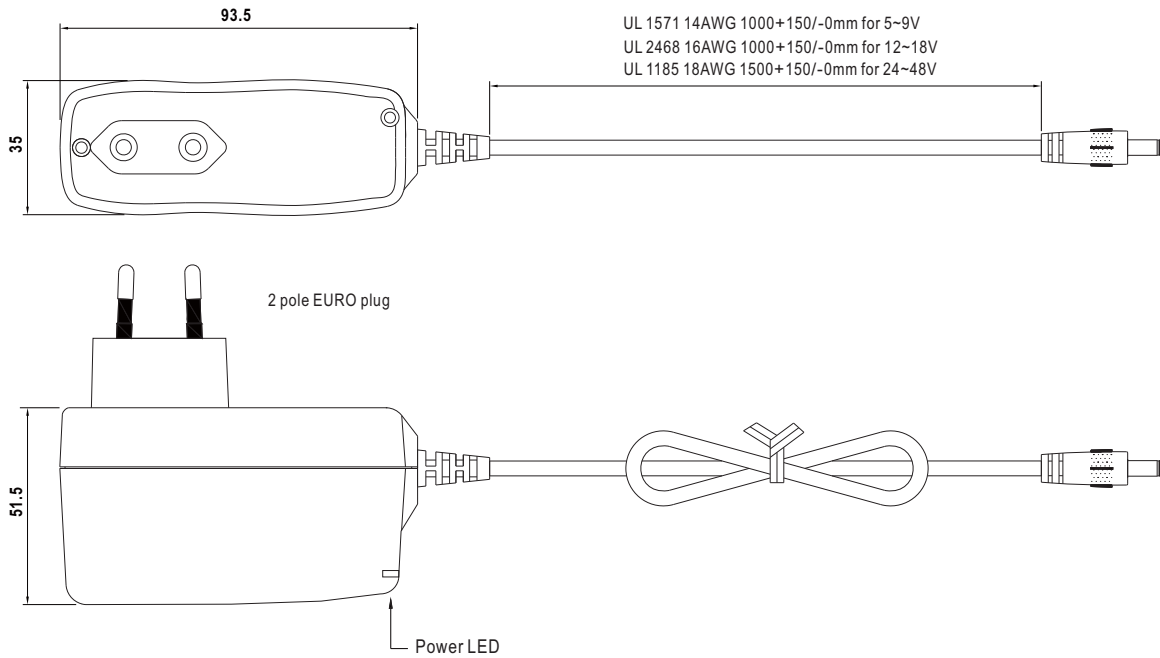


Static Characteristics



Mechanical Specification

Unit:mm





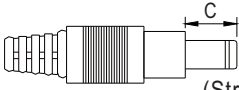
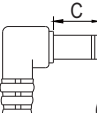

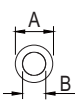

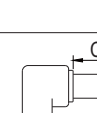


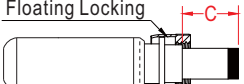


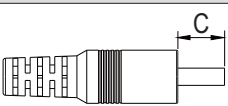

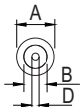
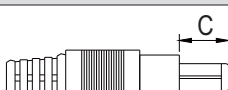

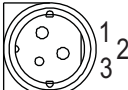
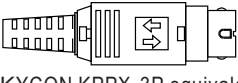
DC output plug

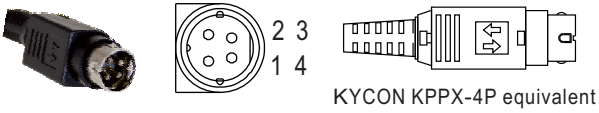


Standard plug: P1J

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 | |
|    Floating 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 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 | | PIN No. | Output | | | |
| | 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>