



## Features

- Ultra slim and compact size
- Universal AC input / Full range
- 2 pole EURO plug, Class II power unit
- No load power consumption < 0.15W
- **Energy efficiency Level VI**
- Comply with EU ErP and meet CoC version 5
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 7.5V /9V/ 18V models available (by request)
- [Various DC plug quick adapter accessory available \(Plug kit sold sperately, please refer to : https://www.meanwell.com/upload/pdf/DC\\_plug.pdf\)](https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 3 years warranty

## Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments
- Power sourcing equipment of PoE

## GTIN CODE

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

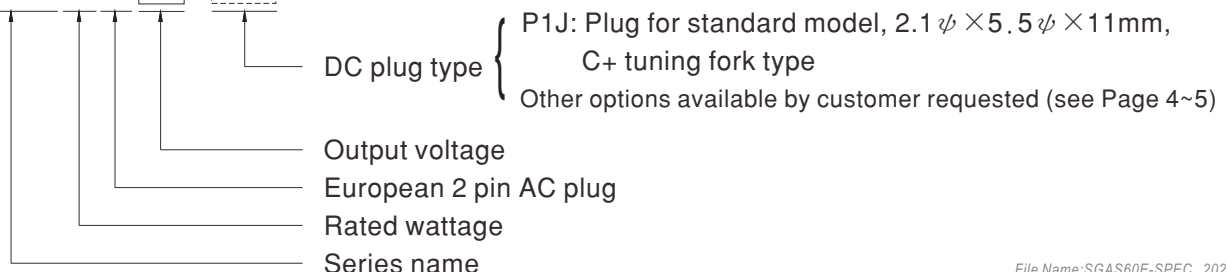
## Description

SGAS60E is a 60W compact size wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGAS60E 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 90% and the extremely low no-load power consumption below 0.15W, SGAS60E is compliant with EU ErP and 5~48V 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

**SGAS 60 E 05 - P1J**

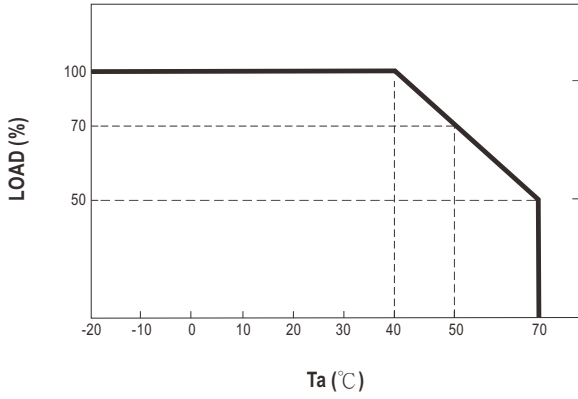




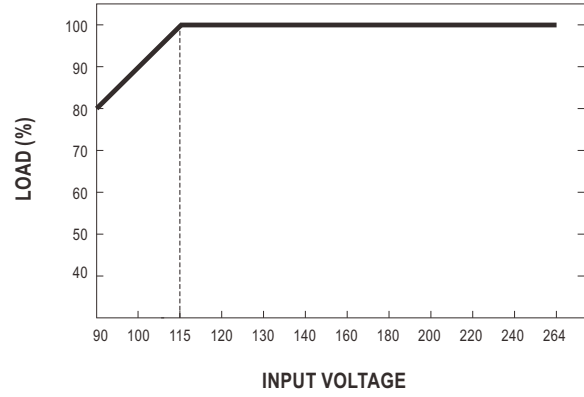
**SPECIFICATION**

| ORDER NO.   | SGAS60E05-P1J  | SGAS60E12-P1J   | SGAS60E15-P1J          | SGAS60E24-P1J                          | SGAS60E48-P1J |           |
|---|--|---|------------------------|--|---------------|-----------|
| OUTPUT  | SAFETY MODEL NO.   | SGAS60E05   | SGAS60E12              | SGAS60E15                              | SGAS60E24     | SGAS60E48 |
|   | DC VOLTAGE <span style="float:right">Note.2</span>   | 5V  | 12V                    | 15V                                    | 24V           | 48V       |
|   | RATED CURRENT  | 6A  | 5A                     | 4A                                     | 2.5A          | 1.25A     |
|   | CURRENT RANGE  | 0 ~ 6A  | 0 ~ 5A                 | 0 ~ 4A                                 | 0 ~ 2.5A      | 0 ~ 1.25A |
|   | RATED POWER (max.)   | 30W   | 60W                    | 60W                                    | 60W           | 60W       |
|   | RIPPLE & NOISE (max.) <span style="float:right">Note.3</span>  | 80mVp-p   | 80mVp-p                | 80mVp-p                                | 100mVp-p      | 120mVp-p  |
|   | VOLTAGE TOLERANCE <span style="float:right">Note.4</span>  | ± 5.0%  | ± 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%    |
| LOAD REGULATION <span style="float:right">Note.6</span> | ± 5.0%   | ± 3.0%  | ± 3.0%                 | ± 2.0%                                 | ± 2.0%        |           |
| SETUP, RISE, HOLD UP TIME                               | 2500ms, 50ms, 10ms/230VAC      2500ms, 50ms, 10ms/115VAC at full load  |   |                        |  |               |           |
| INPUT   | VOLTAGE RANGE <span style="float:right">Note.7</span>  | 90 ~ 264VAC    127 ~ 370VDC   |                        |  |               |           |
|   | FREQUENCY RANGE  | 47 ~ 63Hz   |                        |  |               |           |
|   | EFFICIENCY (Typ.)  | 85%   | 88%                    | 88%                                    | 89%           | 90%       |
|   | 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<br>Protection type : Hiccup mode, recovers automatically after fault condition is removed |                        |  |               |           |
|   | OVER VOLTAGE   | 110 ~ 140% rated output voltage<br>Protection type : Clamp by zener diode, output short                                 |                        |  |               |           |
| ENVIRONMENT   | WORKING TEMP.  | -20 ~ +70°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 BS EN/EN62368-1, 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  | BS EN/EN55032(CISPR32) | Class B                                |               |           |
|   |  | Radiated emission   | BS EN/EN55032(CISPR32) | Class B                                |               |           |
|   |  | Harmonic current  | BS EN/EN61000-3-2      | Class A                                |               |           |
|   | Voltage flicker  | BS EN/EN61000-3-3   | -----                  |  |               |           |
|   | EMC IMMUNITY   | Parameter   | Standard               | Test Level /Note                       |               |           |
|   |  | ESD   | BS EN/EN61000-4-2      | Level 3, 8KV air; Level 2, 4KV contact |               |           |
| RF field susceptibility                                 |  | BS EN/EN61000-4-3   | Level 2, 3V/m          |  |               |           |
| EFT bursts  |  | BS EN/EN61000-4-4   | Level 2, 1KV           |  |               |           |
| Surge susceptibility                                    |  | BS EN/EN61000-4-5   | Level 3, 1KV/L-N       |  |               |           |
| Conducted susceptibility                                |  | BS EN/EN61000-4-6   | Level 2, 3V            |  |               |           |
| Magnetic field immunity                                 |  | BS EN/EN61000-4-8   | Level 1, 1A/m          |  |               |           |
| Voltage dips , interruption                             | BS EN/EN61000-4-11   | >95% dip 0. 5 periods, 30% dip 25 periods,<br>>95% interruptions 250 periods  |                        |  |               |           |
| OTHERS  | LIFE   | 3 years : 100% load 40°C, 12hours / day   |                        |  |               |           |
|   | MTBF   | 400Khrs min. MIL-HDBK-217F(25°C)  |                        |  |               |           |
|   | DIMENSION  | 75.5*32*47.5mm (L*W*H)  |                        |  |               |           |
|   | PACKING  | 208g ; 60pcs / 13.5kg / 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 &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 0% to 100% rated load</p> <p>7.Derating may be needed under low input voltage. Please check the derating curve 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> <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

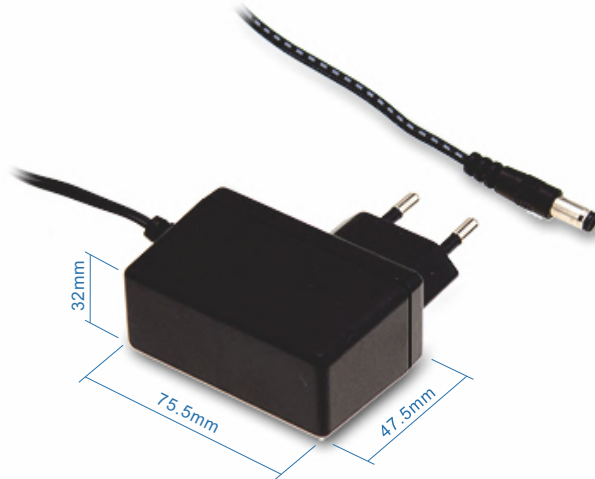
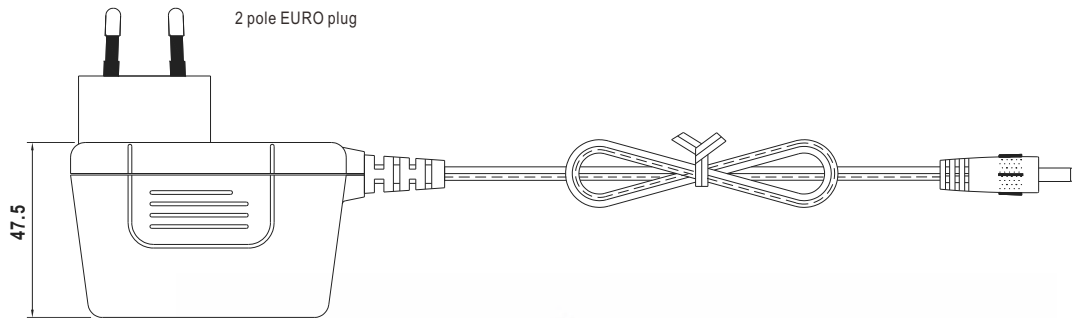
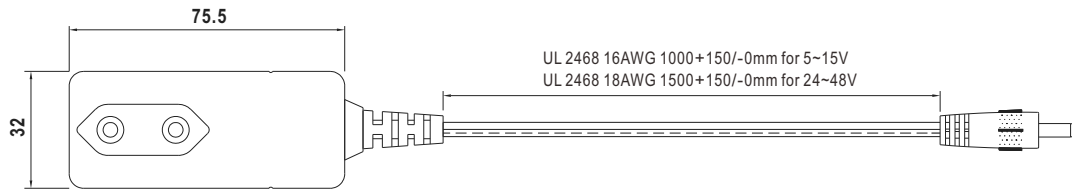


### Static Characteristics



### Mechanical Specification

Unit:mm



**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](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 (Straight)      | 5.5  | 2.1  | 9.5   | Available<br>(Current rating: 7.5A max.) |
|  | P1L (Straight)      | 5.5  | 2.5  | 9.5   |  |
|  | P1M (Straight)      | 5.5  | 2.5  | 11.0  |  |
|  | P1IR (Right-angled) | 5.5  | 2.1  | 9.5   |  |
|  | P1JR (Right-angled) | 5.5  | 2.1  | 11.0  |  |
|  | P1LR (Right-angled) | 5.5  | 2.5  | 9.5   |  |
| P1MR (Right-angled)  | 5.5                 | 2.5  | 11.0 |       |  |
| Barrel Style   | Type No.            | A    | B    | C     | Quick Adapter Accessory                  |
|  |                     | OD   | ID   | L     |  |
|  | P2I (Straight)      | 5.5  | 2.1  | 9.5   | None                                     |
|  | P2J (Straight)      | 5.5  | 2.1  | 11.0  |  |
|  | P2L (Straight)      | 5.5  | 2.5  | 9.5   |  |
|  | P2M (Straight)      | 5.5  | 2.5  | 11.0  |  |
|  | P2IR (Right-angled) | 5.5  | 2.1  | 9.5   |  |
|  | P2JR (Right-angled) | 5.5  | 2.1  | 11.0  |  |
|  | P2LR (Right-angled) | 5.5  | 2.5  | 9.5   |  |
|  | P2MR (Right-angled) | 5.5  | 2.5  | 11.0  |  |
| Lock Style   | Type No.            | A    | B    | C     | Quick Adapter Accessory                  |
|  |                     | OD   | ID   | L     |  |
| <p>Floating Locking<br/>SWITCHCRAFT original or equivalent</p> | 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    | B    | C     | Quick Adapter Accessory                  |
|  |                     | OD   | ID   | L     |  |
| <p>EIAJ equivalent</p>   | P3A                 | 2.35 | 0.7  | 11.0  | Available<br>(Current rating: 5A max.)   |
|  | 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<br>(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<br/>(MW's standard length, L: 25 mm, L1: 10 mm)</p> | by customer | PIN No.                | Output |      |            |  |
|   |             | 1<br>(Ribbed or White) | +Vo    |      |            |  |
|   |             | 2<br>(Letter or Black) | -Vo    |      |            |  |

### ■ Installation Manual

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