























#### 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</li>
- 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 : <a href="https://www.meanwell.com/upload/pdf/DC\_plug.pdf">https://www.meanwell.com/upload/pdf/DC\_plug.pdf</a>)
- 3 years warranty

# Applications

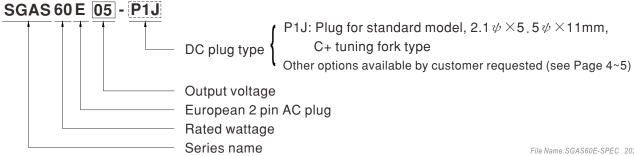
- · Consumer electronic devices
- Telecommunication devices
- · Office facilities
- · Industrial equipments
- · Power sourcing equipment of PoE

# 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  $\Pi$  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

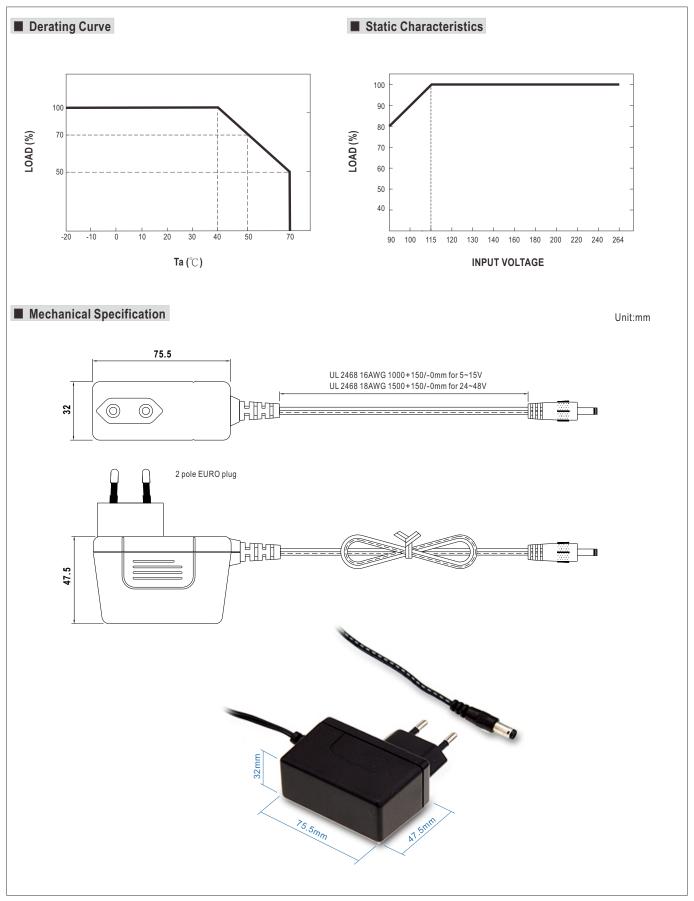




## **SPECIFICATION**

| ORDER NO.   |   | SGAS60E05-P1J   | SGAS60E12-P1J       | SGAS60E15-P1J                 | SGAS60E24-P1J  | SGAS60E48-P1J    |  |  |  |
|-------------|---|---|---------------------|-------------------------------|--|------------------|--|--|--|
|             | SAFETY MODEL NO.  | SGAS60E05   | SGAS60E12           | SGAS60E15                     | SGAS60E24  | SGAS60E48        |  |  |  |
|             | DC VOLTAGE Note.2   | 5V  | 12V                 | 15V                           | 24V  | 48V              |  |  |  |
|             | RATED CURRENT   | 6A  | 5A                  | 4A                            | 2.5A   | 1.25A            |  |  |  |
| ОИТРИТ      | 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.) Note.3  | 80mVp-p   | 80mVp-p             | 80mVp-p                       | 100mVp-p   | 120mVp-p         |  |  |  |
|             | VOLTAGE TOLERANCE Note.4  |   | ±3.0%               | ±3.0%                         | ±2.0%  | ±2.0%            |  |  |  |
|             |   | ±1.0%   | ±1.0%               | ±1.0%                         | ±1.0%  | ±1.0%            |  |  |  |
|             |   | ±5.0%   | ±3.0%               | ±3.0%                         | ±2.0%  | ±2.0%            |  |  |  |
|             | SETUP, RISE, HOLD UP TIME   |   |                     | oms, 10ms/115VAC at full lo   |  | = 2.070          |  |  |  |
|             |   | 90 ~ 264VAC 127 ~ 370VDC  |                     |                               |  |                  |  |  |  |
|             | FREQUENCY RANGE   | 47 ~ 63Hz   |                     |                               |  |                  |  |  |  |
|             | EFFICIENCY (Typ.)   | 85%   | 88%                 | 88%                           | 89%  | 90%              |  |  |  |
| INPUT       | AC CURRENT  |   | A / 230VAC          | 0070                          | 0070   |                  |  |  |  |
|             | INRUSH CURRENT (max.)   | Cold start 40A / 115VAC 80A / 230VAC  |                     |                               |  |                  |  |  |  |
|             | LEAKAGE CURRENT(max.)   |   |                     |                               |  |                  |  |  |  |
|             | LLANAGE CONNENT(IIIax.)   |   | 0.25mA / 240VAC     |                               |  |                  |  |  |  |
|             | OVERLOAD  | 110 ~ 200% rated output   | •                   | natically after fault conditi | on is removed  |                  |  |  |  |
| PROTECTION  |   | Protection type: Hiccup mode, recovers automatically after fault condition is removed   |                     |                               |  |                  |  |  |  |
|             | OVER VOLTAGE  | 110 ~ 140% rated output voltage   |                     |                               |  |                  |  |  |  |
|             | WORKING TEMP.   | Protection type: Clamp by zener diode, output short  -20 ~ +70°C (Refer to "Derating Curve")  |                     |                               |  |                  |  |  |  |
| -           | WORKING HUMIDITY  | 20% ~ 90% RH non-condensing   |                     |                               |  |                  |  |  |  |
| ENVIRONMENT | STORAGE TEMP., HUMIDITY   | -20 ~ +85°C, 10 ~ 95% R   |                     |                               |  |                  |  |  |  |
|             | TEMP. COEFFICIENT   | ±0.03% / °C (0 ~ 40°C)  |                     |                               |  |                  |  |  |  |
|             | VIBRATION   |   |                     | ı. each along X, Y, Z axes    |  |                  |  |  |  |
|             | SAFETY STANDARDS  | TUV BS EN/EN62368-1,  |                     |                               |  |                  |  |  |  |
|             | WITHSTAND VOLTAGE   | I/P-O/P:4242VDC   |                     | vou                           |  |                  |  |  |  |
|             | ISOLATION RESISTANCE  | I/P-O/P:100M Ohms / 50  | 0VDC / 25°C/ 70% RH |                               |  |                  |  |  |  |
|             | TOOL/ THOM TELESION AT OL   | Parameter   | Standard            |                               |  |                  |  |  |  |
|             | EMC EMISSION  | Conducted emission  |                     |                               |  |                  |  |  |  |
|             |   | 55 210 210 300 2 (0101 1102)  |                     |                               |  | 1 1 1 1          |  |  |  |
|             |   | Radiated emission BS EN/EN55032(  |                     | ,                             |  | Class B          |  |  |  |
| SAFETY &    |   | Harmonic current  | BS EN/EN6           | 000-3-2                       | Class A  |                  |  |  |  |
| EMC         |   | Voltage flicker   | BS EN/EN6           | 1000-3-3                      |  |                  |  |  |  |
| (Note. 8)   |   | Parameter Standard  |                     | Test Level /Note              |  |                  |  |  |  |
|             | EMC IMMUNITY  | ESD   | BS EN/EN61          | 000-4-2                       | Level 3, 8KV air; Level 2, 4KV contact                                       |                  |  |  |  |
|             |   | RF field susceptibility BS EN   |                     | 000-4-3                       | Level 2, 3V/m  |                  |  |  |  |
|             |   | FT bursts BS EN/EN61000-4   |                     |                               | -  | Level 2. 1KV     |  |  |  |
|             |   | Surge susceptibility  |                     | BS EN/EN61000-4-5             |  | Level 3, 1KV/L-N |  |  |  |
|             | Line immedii i  | . ,   |                     |                               | ·  |                  |  |  |  |
|             |   | Conducted susceptibility  |                     | BS EN/EN61000-4-6             |  | Level 2, 3V      |  |  |  |
|             |   | Magnetic field immunity   | BS EN/EN6           | 1000-4-8                      | Level 1, 1A/m  |                  |  |  |  |
|             |   | Voltage dips , interruption   | BS EN/EN6           | 1000-4-11                     | >95% dip 0. 5 periods, 30% dip 25 periods,<br>>95% interruptions 250 periods |                  |  |  |  |
|             | LIFE  | 3 years : 100% load 40°C, 12hours / day   |                     |                               |  |                  |  |  |  |
| OTHERS      | MTBF  | 400Khrs min. MIL-HDBK-217F(25°C)  |                     |                               |  |                  |  |  |  |
| OTHERS      | DIMENSION   | 75.5*32*47.5mm (L*W*H   | 1)                  |                               |  |                  |  |  |  |
|             | PACKING   | 208g; 60pcs / 13.5kg / CARTON   |                     |                               |  |                  |  |  |  |
| CONNECTOR   | PLUG  | See page 4~5; Other type available by customer requested  |                     |                               |  |                  |  |  |  |
| CONNECTOR   | CABLE   | See page 4~5; Other type available by customer requested  |                     |                               |  |                  |  |  |  |
| NOTE        | 2.DC voltage: The output volt<br>3.Ripple & noise are measure<br>4.Tolerance: includes set up t<br>5.Line regulation is measured<br>6.Load regulation is measure<br>7.Derating may be needed ur<br>8.The power supply is consid | iffied at 230VAC input, rated load, 25°C 70% RH ambient. voltage set at point measure by plug terminal & 50% load. sured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. up tolerance, line regulation, load regulation. ured from low line to high line at rated load. ured from 0% to 100% rated load d under low input voltage. Please check the derating curve for more details. usidered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the dance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." |                     |                               |  |                  |  |  |  |
|             | (as available on http://www.meanwell.com)  X Product Liability Disclaimer: For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx  |   |                     |                               |  |                  |  |  |  |







## ■ DC output plug

O Standard plug: P1J

Unit:mm

|  | P1J |          | Pin Assignment     |
|--|-----|----------|--------------------|
|  | 5.5 | 11±0.5mm | <b>⊕</b> -c*+*     |
|  |     |          | Outside ⊖—⊕ Inside |

- O 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: <a href="https://www.meanwell.com/upload/pdf/DC\_plug.pdf">https://www.meanwell.com/upload/pdf/DC\_plug.pdf</a>

Example quick adapter accessory:







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

| Tuning F     | Type No.                                | А          | В    | С    | Quick Adapter |                             |
|--------------|---|------------|------|------|---------------|-----------------------------|
| Tulling I    |   | OD         | ID   | L    | Accessory     |                             |
|              | (Straight)                              | P1I        | 5.5  | 2.1  | 9.5           |                             |
|              |   | P1L        | 5.5  | 2.5  | 9.5           |                             |
| _A_          |   | P1M        | 5.5  | 2.5  | 11.0          | Available                   |
| A A B        | C                                       | P1IR       | 5.5  | 2.1  | 9.5           |                             |
|              |   | P1JR       | 5.5  | 2.1  | 11.0          | (Current rating: 7.5A max.) |
|              | (Dight angled)                          | P1LR       | 5.5  | 2.5  | 9.5           |                             |
|              | (Right-angled)                          | P1MR       | 5.5  | 2.5  | 11.0          |                             |
| Barre        | Type No.                                | А          | В    | С    |               |                             |
| Built        | 1 | OD         | ID   | L    |               |                             |
|              | (Straight)                              | P2I        | 5.5  | 2.1  | 9.5           |                             |
|              |   | P2J        | 5.5  | 2.1  | 11.0          |                             |
| Δ            |   | P2L        | 5.5  | 2.5  | 9.5           | None                        |
| A A          |   | P2M        | 5.5  | 2.5  | 11.0          |                             |
| В            | (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         | Type No.                                | Α          | В    | С    |               |                             |
| LOOK         |   | OD         | ID   | L    |               |                             |
| , A ,        | Floating Locking C                      | P2S(S761K) | 5.53 | 2.03 | 12.06         | None                        |
|              |   | P2K(761K)  | 5.53 | 2.54 | 12.06         |                             |
| B            |   | P2C(S760K) | 5.53 | 2.03 | 9.52          |                             |
|              | SWITCHCRAFT original or equivalent      | P2D(760K)  | 5.53 | 2.54 | 9.52          |                             |
| Min. Pir     | Type No.                                | A          | В    | С    |               |                             |
| IVIIII. I II | 100,10                                  | . , , ,    | OD   | ID   | L             |                             |
| .A.          | EIAJ equivalent                         | P3A        | 2.35 | 0.7  | 11.0          | Available                   |
| A A          |   | P3B        | 4.0  | 1.7  | 11.0          | (Current rating: 5A max.)   |
|              |   | P3C        | 4.75 | 1.7  | 11.0          |                             |
|              |   |            |      |      |               |                             |



|   |             | A                      | В   | С             | D          | Quick Adapter               |  |
|---|-------------|------------------------|-----|---------------|------------|-----------------------------|--|
| Center Pin Style  | Type No.    | OD                     | ID  | L             | Center Pin | Accessory                   |  |
| ,_A_, C .   | P4A         | 5.5                    | 3.4 | 11.0          | 1.0        |                             |  |
|   | P4B         | 6.5                    | 4.4 | 11.0          | 1.4        | Available                   |  |
|   | P4C         | 7.4                    | 5.1 | 11.0          | 0.6        | (Current rating: 7.5A max.) |  |
| EIAJ equivalent   |             |                        |     | Assignment    |            |                             |  |
| Min. DIN 3 Pin with Lock (male)   | Type No.    | PIN No                 |     |               | t          |                             |  |
|   | R6B         | 1                      |     | +Vo           |            | Available                   |  |
|   |             | 2                      |     | -Vo           |            | (Current rating: 7.5A max.) |  |
| KYCON KPPX-3P equivalent  |             | 3                      |     | +Vo           |            |                             |  |
|   |             | Pin Assignment         |     |               |            |                             |  |
| Min. DIN 4 Pin with Lock (male)   | Type No.    | PIN No                 |     | Output        |            |                             |  |
| Topo Topo   | R7B         | 1                      |     | +Vo           |            | Available                   |  |
| 2 3 IIIII   |             | 2                      |     | -Vo           |            | (Current rating: 7.5A max.) |  |
| KYCON KPPX-4P equivalent  |             | 3                      |     | -Vo           |            |                             |  |
| TOOM IN THE SQUITAL ONLY  |             | 4                      |     | +Vo           |            |                             |  |
| Min. DIN 4 Pin with Lock (female)   | Type No.    | Pin Assignment         |     |               |            |                             |  |
| ,   | R7BF        | PIN No                 |     | Outpur<br>+Vo |            |                             |  |
|   |             | 2                      |     | -Vo           |            | None                        |  |
| 23 [000000]<br>14 [0101010]   |             | 3                      |     | -Vo           |            | -                           |  |
| KYCON KPJX-CM-4S equivalent   |             | 4                      |     | +Vo           |            |                             |  |
| Ctringed and timed lands  | Tue a Ma    | Pin Assignment         |     |               |            |                             |  |
| Stripped and tinned leads   | Type No.    | PIN No                 |     | Outpu         | t          |                             |  |
| 1   | by customer | 1<br>(Ribbed<br>White) | or  | +Vo           |            | None                        |  |
| Length of Land L1 by request  (MW's standard length, L: 25 mm, L1: 10 mm) | by customer | 2<br>(Letter<br>Black) |     | -Vo           |            |                             |  |

## ■ Installation Manual

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