



(Cable connection)



(USB connection)



■ Features

- Ultra slim
- Universal AC input / Full range
- 2 pole EURO plug, Class II power unit
- No load power consumption <0.075W
- **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
- 3 years warranty

■ Applications

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

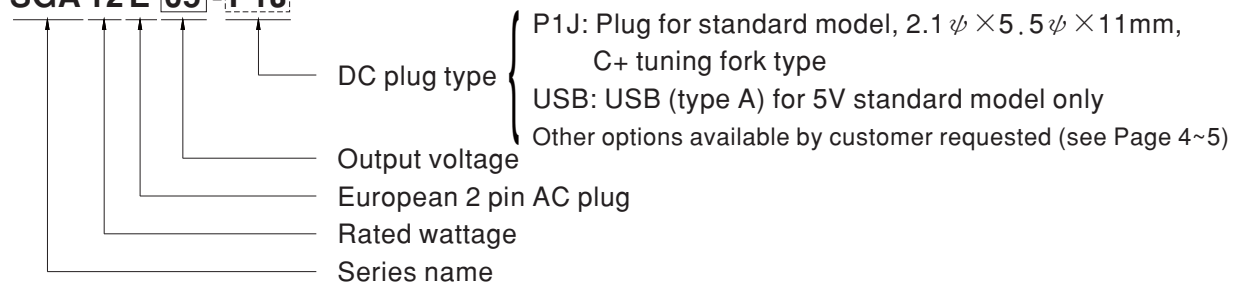
■ Description

SGA12E is a 12W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA12E 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 86% and the extremely low no-load power consumption below 0.075W, SGA12E is compliant with EU ErP and 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 12 E 05 - P1J





12W AC-DC High Reliability Slim Wall-mounted Adaptor

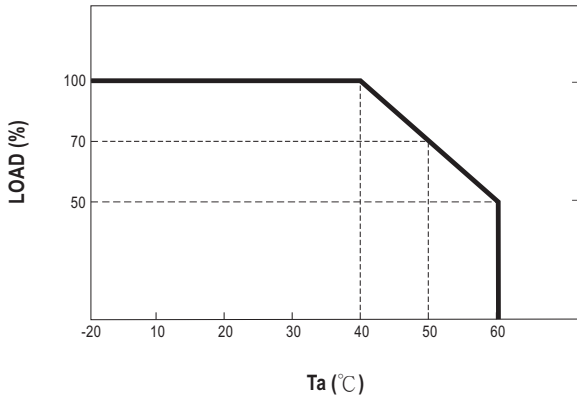
SGA12E series

SPECIFICATION

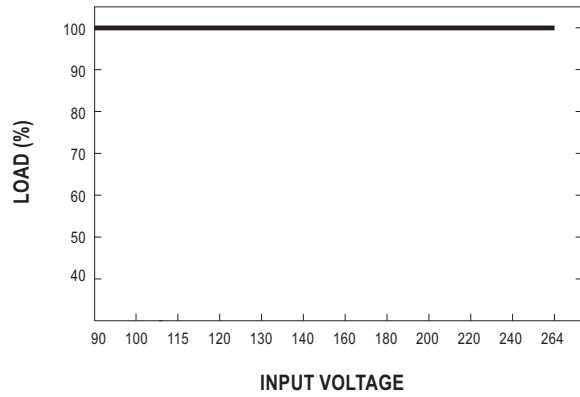
| ORDER NO. | | SGA12E05- <input type="checkbox"/> <input type="checkbox"/> =P1J, USB | SGA12E07-P1J | SGA12E09-P1J | SGA12E12-P1J | SGA12E15-P1J | SGA12E18-P1J | SGA12E24-P1J | SGA12E48-P1J | |
|-----------------------------|--|---|------------------|----------------|--------------|--------------|--|--|--------------|--|
| OUTPUT | SAFETY MODEL NO. | SGA12E05 | SGA12E07 | SGA12E09 | SGA12E12 | SGA12E15 | SGA12E18 | SGA12E24 | SGA12E48 | |
| | DC VOLTAGE Note.2 | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 48V | |
| | RATED CURRENT | 2.4A | 1.6A | 1.33A | 1A | 0.8A | 0.666A | 0.5A | 0.25A | |
| | CURRENT RANGE | 0 ~ 2.4A | 0 ~ 1.6A | 0 ~ 1.33A | 0 ~ 1A | 0 ~ 0.8A | 0 ~ 0.666A | 0 ~ 0.5A | 0 ~ 0.25A | |
| | RATED POWER (max.) | 12W | 12W | 12W | 12W | 12W | 12W | 12W | 12W | |
| | RIPPLE & NOISE (max.) Note.3 | 50mVp-p | 50mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 100mVp-p | 100mVp-p | |
| | VOLTAGE TOLERANCE Note.4 | ± 5.0% | ± 5.0% | ± 5.0% | ± 3.0% | ± 3.0% | ± 3.0% | ± 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% | ± 3.0% | ± 2.0% | ± 2.0% | |
| SETUP, RISE, HOLD UP TIME | 1300ms, 50ms, 12ms/230VAC 1300ms, 50ms, 12ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 80% | 83% | 83% | 83% | 84.5% | 85% | 85% | 86% | |
| | AC CURRENT | 0.5A / 115VAC | | 0.25A / 230VAC | | | | | | |
| | INRUSH CURRENT (max.) | Cold start 30A / 115VAC | | 60A / 230VAC | | | | | | |
| | LEAKAGE CURRENT(max.) | 0.25mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 110 ~ 200% rated output power | | | | | | 150 ~ 250% 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 ~ +60°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. 7) | SAFETY STANDARDS | TUV EN60950-1 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, 8hours / day | | | | | | | | |
| | MTBF | 265Khrs min. MIL-HDBK-217F(25°C) | | | | | | | | |
| | DIMENSION | 62.2*27.4*39.7mm (L*W*H) | | | | | | | | |
| | PACKING | 100g ; 90pcs / 10kg / CARTON for cable connection ; 59.5g ; 90pcs / 8kg / CARTON for USB connection | | | | | | | | |
| 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.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



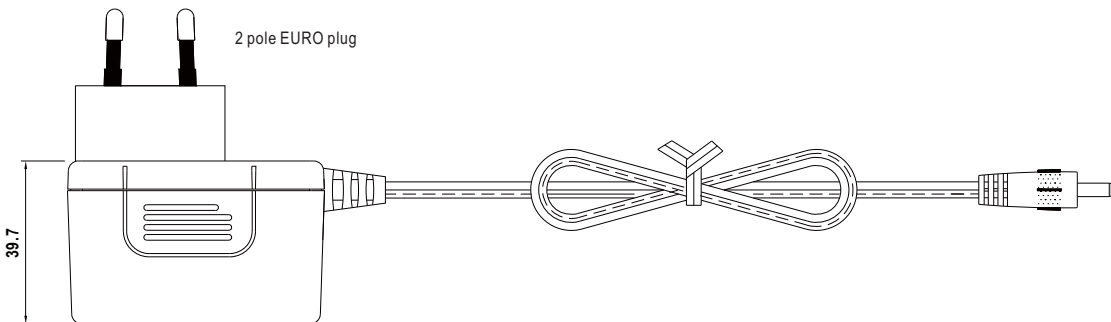
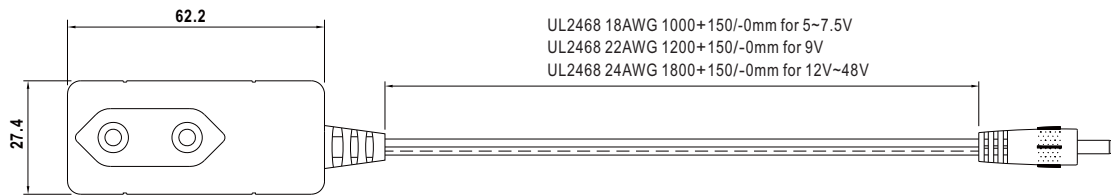
■ Static Characteristics



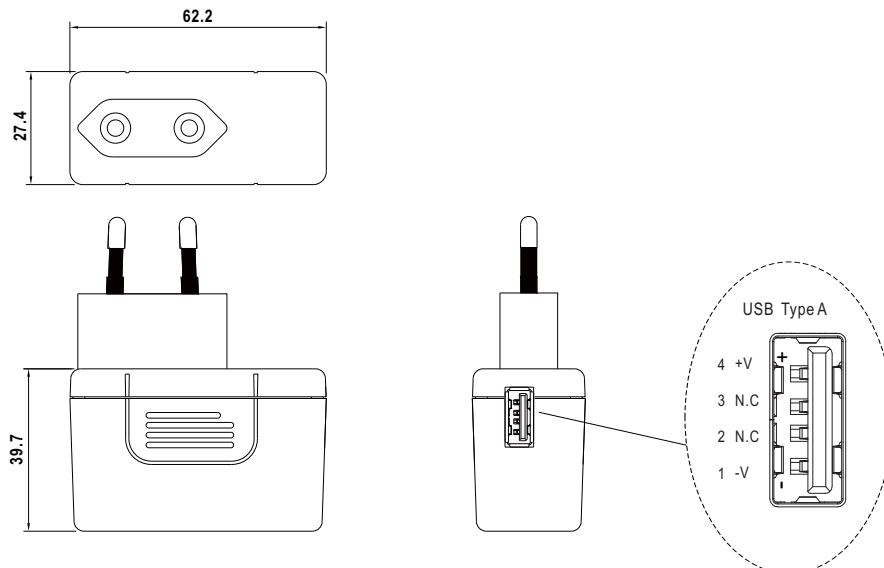
■ Mechanical Specification

Unit:mm

※ Cable Connection



※ USB Connection




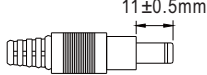







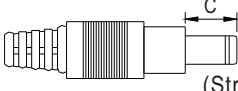
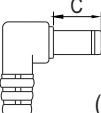


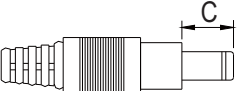
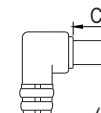


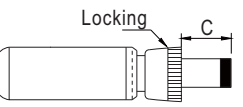


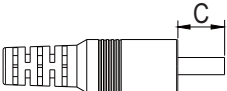
■ DC output plug

☉ Standard plug: P1J

Unit:mm

| P1J | | Pin Assignment |
|---|---|--|
|  |  |  |
|  | | Outside  Inside |

☉ Optional DC plug:

| Tuning Fork Style | | Type No. | A | B | C | |
|---|---|---|------------|------|------|-------|
| | | | OD | ID | L | |
|  |  |  | P1I | 5.5 | 2.1 | 9.5 |
| | | (Straight) | P1L | 5.5 | 2.5 | 9.5 |
| |  | (Right-angled) | 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 | B | C | |
| | | | OD | ID | L | |
|  |  |  | P2I | 5.5 | 2.1 | 9.5 |
| | | (Straight) | P2J | 5.5 | 2.1 | 11.0 |
| |  | P2L | 5.5 | 2.5 | 9.5 | |
| | | (Right-angled) | 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 | B | C | |
| | | | OD | ID | L | |
|  |  |  | P2S(S761K) | 5.53 | 2.03 | 12.06 |
| | | Locking | P2K(761K) | 5.53 | 2.54 | 12.06 |
| | | SWITCHCRAFT original or equivalent | 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 | |
|  |  |  | P3A | 2.35 | 0.7 | 11.0 |
| | | EIAJ equivalent | P3B | 4.0 | 1.7 | 11.0 |
| | | P3C | 4.75 | 1.7 | 11.0 | |



12W AC-DC High Reliability Slim Wall-mounted Adaptor

SGA12E series

| Center Pin Style | Type No. | A | B | C | D |
|---|-------------|----------------|--------|------|------------|
| | | OD | ID | L | Center Pin |
| | 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 | | | |
| | 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 (MW's standard length, L: <u>25</u> mm, L1: <u>10</u> mm)</p> | by customer | PIN No. | Output | | |
| | | 1 (Ribbed) | +Vo | | |
| | | 2 (Letter) | -Vo | | |

■ Installation Manual

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