

(Cable connection)



(USB connection)



Features

- Ultra slim
- Universal AC input / Full range
- 2 pole USA plug, Class II power unit
- No load power consumption < 0.075W
- **Energy efficiency Level VI**
- Comply with EISA 2007/DoE
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 54V model available for PoE (optional)
- [Various DC plug quick adapter accessory available](#)
(Plug kit sold separately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf)
- 3 years warranty

Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipm
- Power sourcing equipment of PoEents

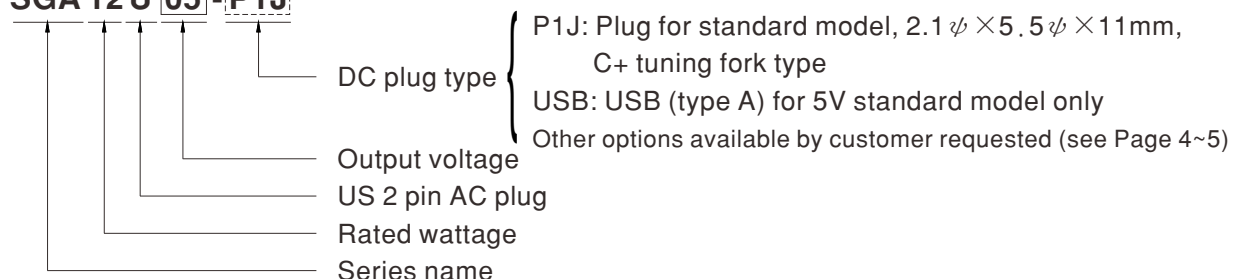
Description

SGA12U is a 12W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA12U is a class II power unit (no FG) equipped with the standard 2-Pin U.S. 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, SGA12U is compliant with the latest U.S. energy regulation EISA 2007/DoE (Level VI). 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 U 05 - P1J

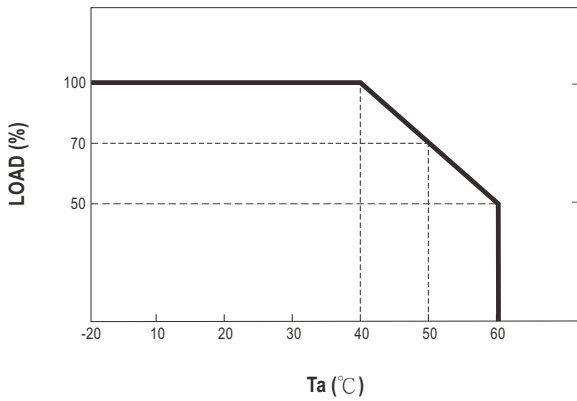




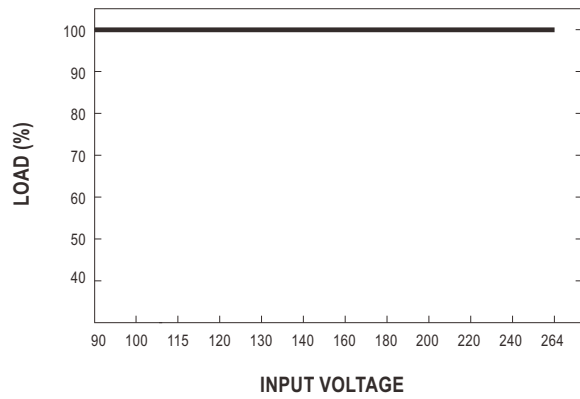
SPECIFICATION

| ORDER NO. | | SGA12U05- <input type="checkbox"/> <input type="checkbox"/> =P1J, USB | SGA12U07-P1J | SGA12U09-P1J | SGA12U12-P1J | SGA12U15-P1J | SGA12U18-P1J | SGA12U24-P1J | SGA12U48-P1J | |
|---------------------------|--|--|------------------|---------------|--------------|--------------|---|-------------------------------|--------------|--------------------------|
| OUTPUT | SAFETY MODEL NO. | SGA12U05 | SGA12U07 | SGA12U09 | SGA12U12 | SGA12U15 | SGA12U18 | SGA12U24 | SGA12U48 | |
| | DC VOLTAGE Note.2 | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 48V | |
| | RATED CURRENT | 2.4A | 1.6A | 1.33A | 1A | 0.8A | 0.66A | 0.5A | 0.25A | |
| | CURRENT RANGE | 0 ~ 2.4A | 0 ~ 1.6A | 0 ~ 1.33A | 0 ~ 1A | 0 ~ 0.8A | 0 ~ 0.66A | 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 | 1500ms, 50ms, 10ms/230VAC 1500ms, 50ms, 10ms/115VAC at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 80% | 83% | 82.5% | 83% | 83% | 83.5% | 84% | 86% | |
| | AC CURRENT | 0.4A / 115VAC | | 0.2A / 230VAC | | | | | | |
| | INRUSH CURRENT (max.) | Cold start 30A / 115VAC | | 60A / 230VAC | | | | | | |
| | LEAKAGE CURRENT(max.) | 0.25mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 110 ~ 200% rated output power | | | | | | 120 ~ 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 | UL62368-1, CSA C22.2 NO. 62368-1, 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 | | | | | FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) | | Class B | |
| | | Radiated emission | | | | | FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B) | | Class B | |
| OTHERS | LIFE | 3 years : 100% load 40°C, 8hours / day | | | | | | | | |
| | MTBF | 265Khrs min. MIL-HDBK-217F(25°C) | | | | | | | | |
| | DIMENSION | 62.2*27.4*45.5mm (L*W*H) | | | | | | | | |
| | PACKING | 109g ; 110pcs / 13kg / CARTON for cable connection ; 56.2g ; 90pcs / 7.5kg / 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 115VAC 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 0.1uf & 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 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> <p>※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx</p> | | | | | | | | | |

Derating Curve



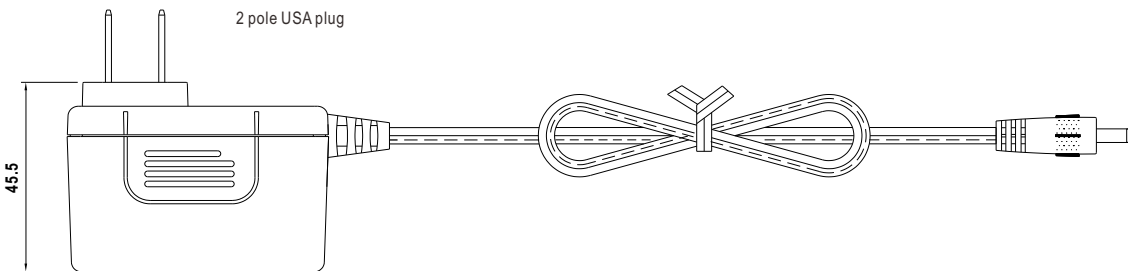
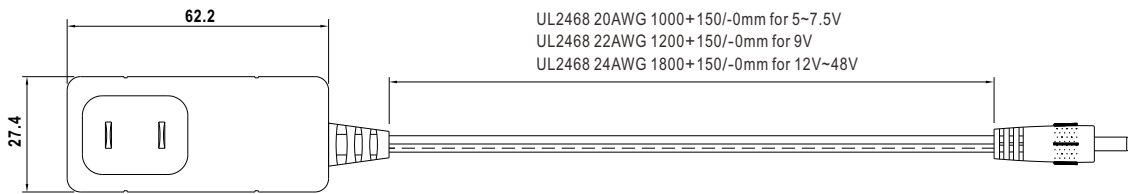
Static Characteristics



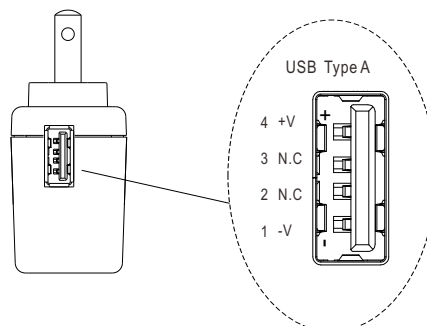
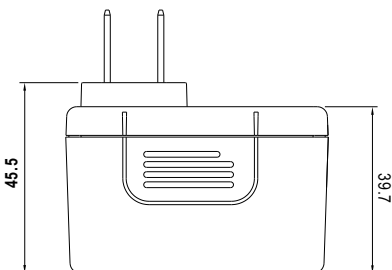
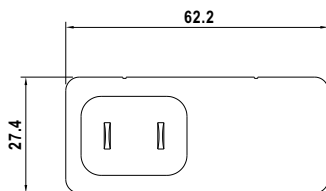
Mechanical Specification

Unit:mm

※ Cable Connection



※ USB Connection



DC output plug

☉ Standard plug: P1J

Unit:mm

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

☉ 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

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 | |
| | | (Straight) | | | | Available (Current rating: 7.5A max.) |
| | | 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 | B | C | None |
| | | | OD | ID | L | |
| | | (Straight) | | | | |
| | | 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 | B |
| | | | OD | ID | 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 | B | C | Available (Current rating: 5A max.) |
| | | | OD | ID | 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 | B | C | D | Quick Adapter Accessory | | |
|---------------------------------|----------|---|-------------|----------------|------------|--|--|--|
| | | OD | ID | L | Center Pin | | | |
| | P4A | 5.5 | 3.4 | 11.0 | 1.0 | Available (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 (MW's standard length, L: 25 mm, L1: 10 mm)</p> | by customer | PIN No. | Output | | | |
| | | | | 1 (Ribbed) | +Vo | | | |
| | | 2 (Letter) | -Vo | | | | | |

■ Installation Manual

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