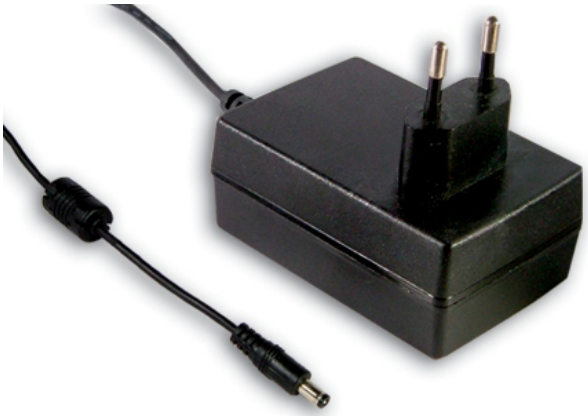
# 25W AC-DC Reliable Green Industrial Adaptor GST25E series



EN62368-1 MS IEC60950-1 (optional) IEC62368-1 TPTC004 Energy Verified Rendement Énergétique Vérifié

ECO Household Automate Industrial Security Network Telecom

## Features

- **Global certificates**
- 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 CoC Version 5
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- -30~+70℃ wide range working temperature
- LED indicator for power on
- Various DC plug quick adapter accessory available
  (Plug kit sold sperately, please refer to : https://www.meanwell.com/upload/pdf/DC_plug.pdf )
- 3 years warranty

## Applications

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

## Description

GST25E is a highly reliable, 25W wall-mounted style single-output green adaptor series. This product is a class II power unit (no FG), equipped with a 2-Pin standard European AC power plug, adopting the input range from 85VAC to 264VAC. The entire series supplies different models with output voltages ranging between 5VDC and 48VDC that can satisfy the demands for various types of consumer electronic devices. With the efficiency up to 89% and the extremely low no-load power consumption below 0.075W, GST25E is compliant with EU ErP, and Code of Conduct(CoC) Version 5 . The supreme feature allows the adaptor to save the energy when it is either under the operating mode or the standby mode. The entire series utilizes the 94V-0 flame retardant plastic case, providing the double insulation that effectively prevents electrical shock.GST25E is certified for the international safety regulations.

## Model Encoding

**GST 25 E 05 - P1J**

- DC plug type
  - P1J: Standard model,2.1φx5.5φx11mm,C+,tuning fork type
  - Other options available by customer requested (see Page 4~5)
- Output voltage
- European 2 pin AC plug
- Rated wattage
- Series name

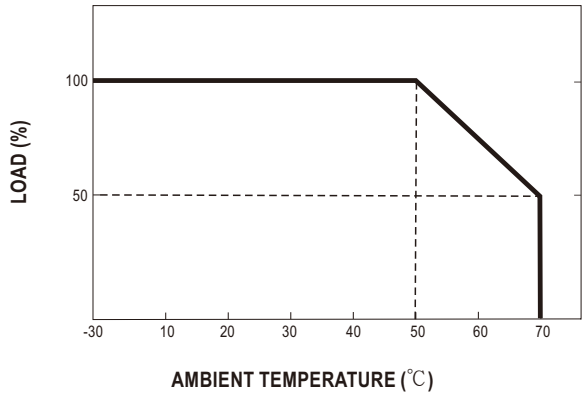
## SPECIFICATION

| ORDER NO. | | GST25E05-P1J | GST25E07-P1J | GST25E09-P1J | GST25E12-P1J | GST25E15-P1J | GST25E18-P1J | GST25E24-P1J | GST25E28-P1J | GST25E48-P1J |
|---|---|---|---|---|---|---|---|---|---|---|
| OUTPUT | SAFETY MODEL NO. | GST25E05 | GST25E07 | GST25E09 | GST25E12 | GST25E15 | GST25E18 | GST25E24 | GST25E28 | GST25E48 |
| | DC VOLTAGE Note.2 | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 28V | 48V |
| | RATED CURRENT | 4.0A | 2.93A | 2.55A | 2.08A | 1.66A | 1.38A | 1.04A | 0.89A | 0.52A |
| | CURRENT RANGE | 0 ~ 4.0A | 0 ~ 2.93A | 0 ~ 2.55A | 0 ~ 2.08A | 0 ~ 1.66A | 0 ~ 1.38A | 0 ~ 1.04A | 0 ~ 0.89A | 0 ~ 0.52A |
| | RATED POWER (max.) | 20W | 22W | 23W | 25W | 25W | 25W | 25W | 25W | 25W |
| | RIPPLE & NOISE (max.) Note.3 | 80mVp-p | 80mVp-p | 80mVp-p | 80mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 150mVp-p |
| | VOLTAGE TOLERANCE Note.4 | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±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% | ±1.0% |
| | LOAD REGULATION Note.6 | ±5.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.0% | ±2.0% | ±2.0% |
| | SETUP, RISE, HOLD UP TIME | 1000ms, 30ms, 50ms/230VAC 1500ms, 30ms, 15ms/115VAC at full load | | | | | | | | |
| INPUT | VOLTAGE RANGE Note.7 | 85 ~ 264VAC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 81.5% | 84.5% | 85% | 86.5% | 87% | 87% | 88% | 88% | 89% |
| | AC CURRENT | 0.6A / 115VAC 0.35A / 230VAC | | | | | | | | |
| | INRUSH CURRENT (max.) | Cold start 35A / 115VAC 65A / 230VAC | | | | | | | | |
| | LEAKAGE CURRENT(max.) | 0.25mA / 240VAC | | | | | | | | |
| PROTECTION | OVERLOAD | 110 ~ 150% 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 | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | -30 ~ +70℃ (Refer to "Derating Curve") | | | | | | | | |
| | WORKING HUMIDITY | 20% ~ 90% RH non-condensing | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -40 ~ +85℃, 10 ~ 95% RH non-condensing | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03% / ℃ (0 ~ 50℃) | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | |
| SAFETY & EMC (Note. 9) | SAFETY STANDARDS Note. 8 | TUV EN62368-1, EAC TP TC 004 approved; SIRIM MS IEC60950-1 (optional) approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:4242VDC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P:100M Ohms / 500VDC / 25℃/ 70% RH | | | | | | | | |
| | EMC EMISSION | **Parameter** | **Standard** | **Test Level / Note** | | | | | | |
| | | Conducted emission | EN55032(CISPR32), EAC TP TC 020 | Class B | | | | | | |
| | | Radiated emission | EN55032(CISPR32), EAC TP TC 020 | 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 4, 2KV/Line-Line | | | | | | |
| | | Conducted susceptibility | EN61000-4-6 | Level 2, 3V | | | | | | |
| | | Magnetic field immunity | EN61000-4-8 | Level 2, 3A/m | | | | | | |
| | | Voltage dips , interruption | EN61000-4-11 | ＞95% dip 0. 5 periods, 30% dip 25 periods, ＞95% interruptions 250 periods | | | | | | |
| OTHERS | MTBF | 500Khrs min. MIL-HDBK-217F(25℃) | | | | | | | | |
| | DIMENSION | 79*54*33mm (L*W*H) | | | | | | | | |
| | PACKING | 202.5g; 60pcs/13.2Kg/1.22CUFT | | | | | | | | |
| CONNECTOR | PLUG | See page 4~5 ; Other type available by customer requested | | | | | | | | |
| | CABLE | See page 4~5 ; Other type available by customer requested | | | | | | | | |

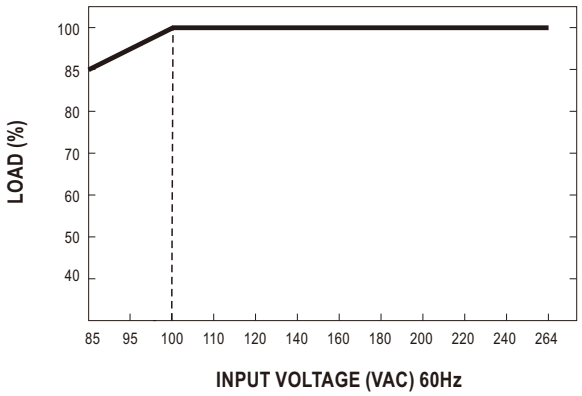
**NOTE**

1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.
2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.
3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μf & 47μf capacitor.
4.Tolerance: includes set up tolerance, line regulation, load regulation.
5.Line regulation is measured from low line to high line at rated load.
6.Load regulation is measured from 10% to 100% rated load.
7.Derating may be needed under low input voltage. Please check the derating curve for more details.
8.The demand for Malaysia safety is processed with the order no. GST25E □-SIRIM by request. Please contact MEAN WELL for details.
9.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)

## ■ Derating Curve

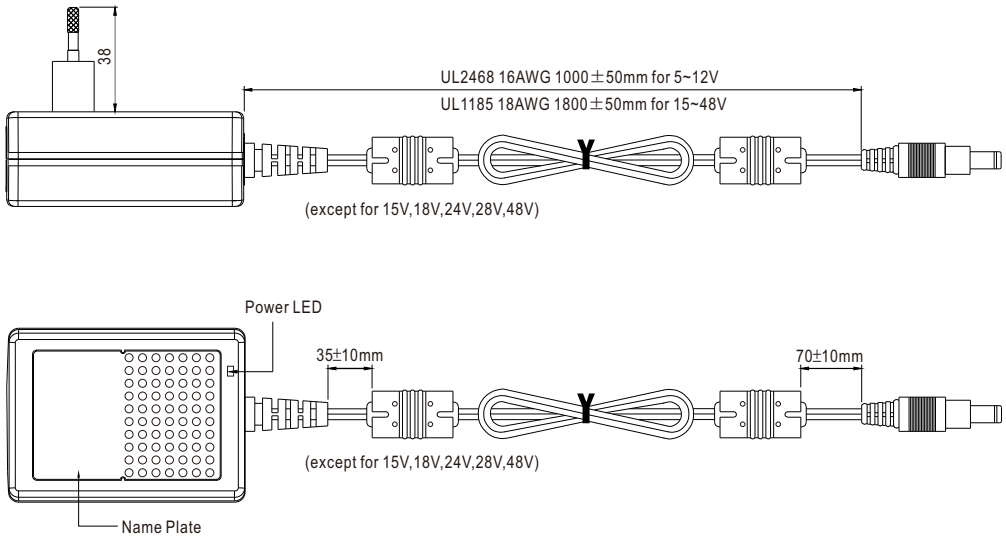


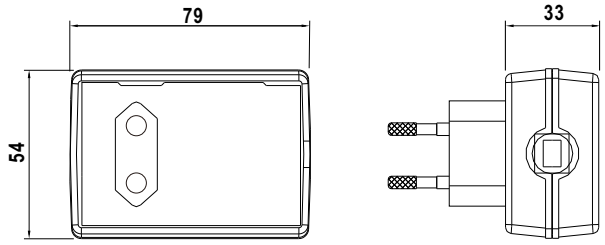

## ■ Static Characteristics




## ■ Mechanical Specification

Unit:mm

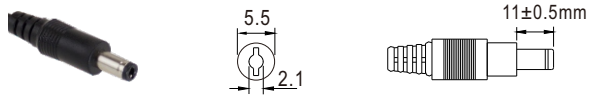
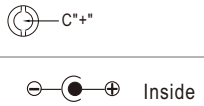



2 pole EURO plug

## ■ DC output plug

◎ Standard plug: P1J

| P1J | Pin Assignment |
|---|---|
|  |  |

◎ DC plug changeable through:

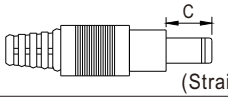
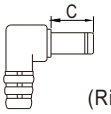
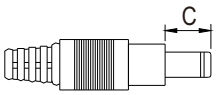
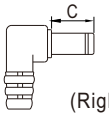
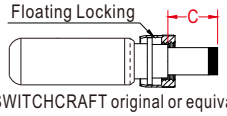
(1) Customization of the standard part with an optional DC plug according to the table (MOQ applicable)

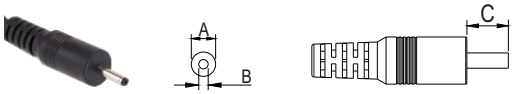
(2) Quick adapter accessory (sold separately without MOQ)

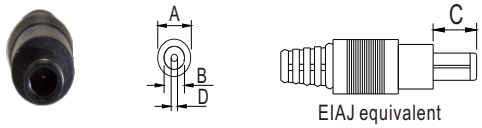
Please refer to below table and online selection guide : https://www.meanwell.com/upload/pdf/DC_plug.pdf

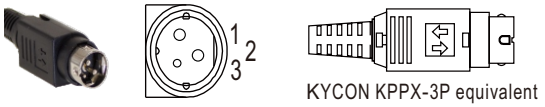
Example quick adapter accessory:

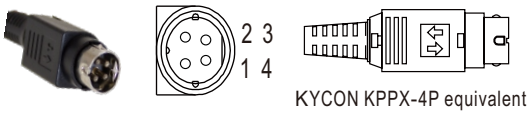
◎ Optional DC plug: (Available in customized cable or quick adapter)

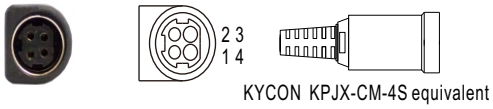
| Tuning Fork Style | | Type No. | A<br>OD | B<br>ID | C<br>L | Quick Adapter Accessory |
|---|---|---|---|---|---|---|
| |  (Straight) | P1I | 5.5 | 2.1 | 9.5 | Available (Current rating: 7.5A max.) |
| | | P1L | 5.5 | 2.5 | 9.5 | |
| | | P1M | 5.5 | 2.5 | 11.0 | |
| |  (Right-angled) | P1IR | 5.5 | 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<br>OD | B<br>ID | C<br>L | |
| |  (Straight) | P2I | 5.5 | 2.1 | 9.5 | None |
| | | P2J | 5.5 | 2.1 | 11.0 | |
| | | P2L | 5.5 | 2.5 | 9.5 | |
| | | P2M | 5.5 | 2.5 | 11.0 | |
| |  (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 Style** | | Type No. | A<br>OD | B<br>ID | C<br>L | |
| |  SWITCHCRAFT original or equivalent | 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 OD | B ID | C L | Quick Adapter Accessory |
|---|---|---|---|---|---|
|   EIAJ equivalent | P3A | 2.35 | 0.7 | 11.0 | Available (Current rating: 5A max.) |
| | 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 | 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 | | |
|---|---|---|---|---|
| | | PIN No. | Output | |
|   KYCON KPPX-3P equivalent | R6B | 1 | +Vo | Available (Current rating: 7.5A max.) |
| | | 2 | -Vo | |
| | | 3 | +Vo | |

| Min. DIN 4 Pin with Lock (male) | Type No. | Pin Assignment | | |
|---|---|---|---|---|
| | | PIN No. | Output | |
|   KYCON KPPX-4P equivalent | R7B | 1 | +Vo | Available (Current rating: 7.5A max.) |
| | | 2 | -Vo | |
| | | 3 | -Vo | |
| | | 4 | +Vo | |

| Min. DIN 4 Pin with Lock (female) | Type No. | Pin Assignment | | |
|---|---|---|---|---|
| | | PIN No. | Output | |
|   KYCON KPJX-CM-4S equivalent | R7BF | 1 | +Vo | None |
| | | 2 | -Vo | |
| | | 3 | -Vo | |
| | | 4 | +Vo | |

| DIN 5 Pin (male) | Type No. | Pin Assignment | | |
|---|---|---|---|---|
| | | PIN No. | Output | |
| | R1B | 1 | -Vo | Available (Current rating: 7.5A max.) |
| | | 2 | -Vo | |
| | | 3 | +Vo | |
| | | 4 | -Vo | |
| | | 5 | +Vo | |

| Stripped and tinned leads | Type No. | Pin Assignment | | |
|---|---|---|---|---|
| | | PIN No. | Output | |
| Length of Land L1 by request (MW's standard length, L: 25 mm, L1: 5 mm) | by customer | 1 | +Vo | None |
| | | 2 | -Vo | |

## ■ Installation Manual

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

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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