



## Features

- **Global certificates**
- 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 and NRCAN
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- -30~+70°C wide range working temperature
- LED indicator for power on
- Various DC plug quick adapter accessory available  
(Plug kit sold separately, 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

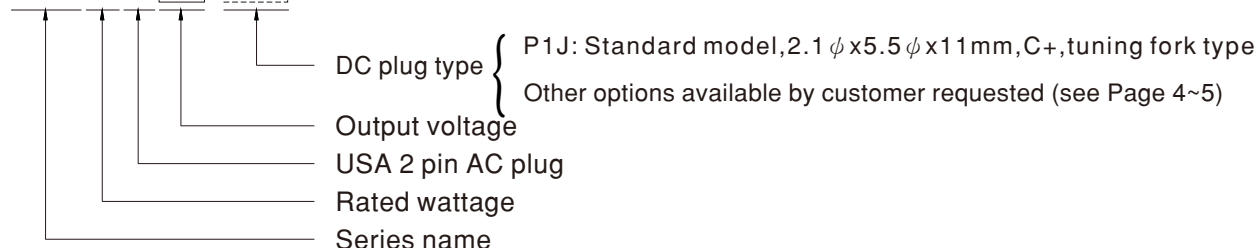
- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

## Description

GST18U is a highly reliable, 18W wall-mounted style single-output green adaptor series. This product is a class II power unit (no FG), equipped with a 2-Pin standard USA 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, GST18U is compliant with USA EISA 2007/DoE and Canada NRCAN. 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. GST18U is certified for the international safety regulations.

## Model Encoding

**GST 18 U 05 - P1J**

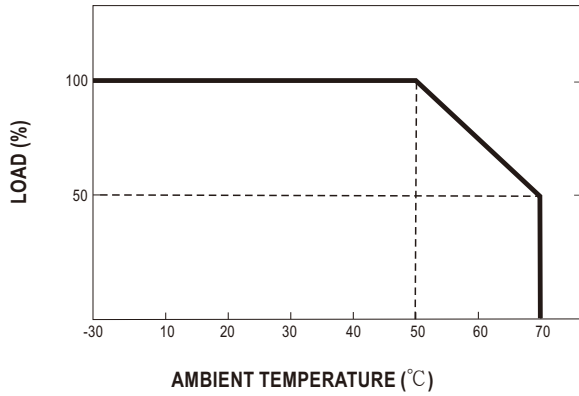




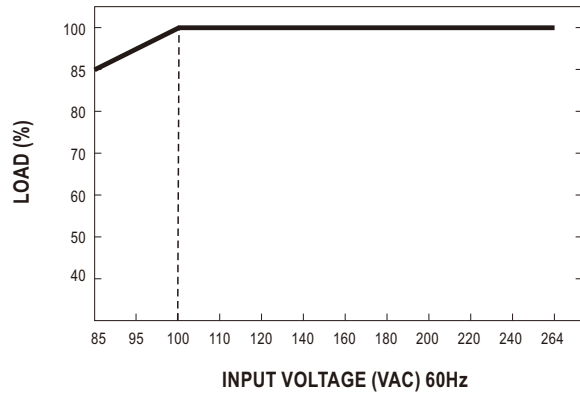
## SPECIFICATION

| ORDER NO.                 |   | GST18U05-P1J  | GST18U07-P1J   | GST18U09-P1J | GST18U12-P1J | GST18U15-P1J | GST18U18-P1J | GST18U24-P1J | GST18U28-P1J      | GST18U48-P1J |  |
|---------------------------|---|---|--|--------------|--------------|--------------|--------------|--------------|-------------------|--------------|--|
| OUTPUT                    | SAFETY MODEL NO.  | GST18U05  | GST18U07   | GST18U09     | GST18U12     | GST18U15     | GST18U18     | GST18U24     | GST18U28          | GST18U48     |  |
|                           | DC VOLTAGE <span>Note.2</span>  | 5V  | 7.5V   | 9V           | 12V          | 15V          | 18V          | 24V          | 28V               | 48V          |  |
|                           | RATED CURRENT   | 3.0A  | 2.0A   | 2.0A         | 1.50A        | 1.20A        | 1.0A         | 0.75A        | 0.64A             | 0.375A       |  |
|                           | CURRENT RANGE   | 0 ~ 3.0A  | 0 ~ 2.0A   | 0 ~2.0A      | 0 ~ 1.50A    | 0 ~ 1.20A    | 0 ~ 1.0A     | 0 ~ 0.75A    | 0 ~ 0.64A         | 0 ~ 0.375A   |  |
|                           | RATED POWER (max.)  | 15W   | 15W  | 18W          | 18W          | 18W          | 18W          | 18W          | 18W               | 18W          |  |
|                           | RIPPLE & NOISE (max.) <span>Note.3</span>   | 80mVp-p   | 80mVp-p  | 80mVp-p      | 80mVp-p      | 100mVp-p     | 150mVp-p     | 150mVp-p     | 150mVp-p          | 150mVp-p     |  |
|                           | VOLTAGE TOLERANCE <span>Note.4</span>   | ± 5.0%  | ± 5.0%   | ± 5.0%       | ± 3.0%       | ± 3.0%       | ± 3.0%       | ± 2.0%       | ± 2.0%            | ± 2.0%       |  |
|                           | LINE REGULATION <span>Note.5</span>   | ± 1.0%  | ± 1.0%   | ± 1.0%       | ± 1.0%       | ± 1.0%       | ± 1.0%       | ± 1.0%       | ± 1.0%            | ± 1.0%       |  |
|                           | LOAD REGULATION <span>Note.6</span>   | ± 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 <span>Note.7</span>   | 85 ~ 264VAC   |  |              |              |              |              |              |                   |              |  |
|                           | FREQUENCY RANGE   | 47 ~ 63Hz   |  |              |              |              |              |              |                   |              |  |
|                           | EFFICIENCY (Typ.)   | 81%   | 85%  | 85%          | 86%          | 87%          | 88%          | 88%          | 88.5%             | 89%          |  |
|                           | AC CURRENT  | 0.5A / 115VAC      0.3A / 230VAC  |  |              |              |              |              |              |                   |              |  |
|                           | INRUSH CURRENT (max.)   | Cold start 35A / 115VAC      65A / 230VAC   |  |              |              |              |              |              |                   |              |  |
|                           | LEAKAGE CURRENT(max.)   | 0.25mA / 240VAC   |  |              |              |              |              |              |                   |              |  |
| PROTECTION                | OVERLOAD  | 110 ~ 150% 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.   | -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% / °C (0 ~ 50℃)  |  |              |              |              |              |              |                   |              |  |
|                           | VIBRATION   | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes   |  |              |              |              |              |              |                   |              |  |
| SAFETY & EMC<br>(Note. 8) | SAFETY STANDARDS  | UL62368-1, CSA C22.2 No.62368-1, BSMI CNS14336-1, EAC TP TC 004 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  | FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)<br>CNS13438, EAC TP TC 020 |              |              |              |              |              | Class B           |              |  |
|                           |   | Radiated emission   | FCC PART 15 / CISPR22, CAN ICES-3(B)/NMB-3(B)<br>CNS13438, EAC TP TC 020 |              |              |              |              |              | Class B           |              |  |
| OTHERS                    | MTBF  | 500Khrs min. MIL-HDBK-217F(25℃)   |  |              |              |              |              |              |                   |              |  |
|                           | DIMENSION   | 79*54*33mm (L*W*H)  |  |              |              |              |              |              |                   |              |  |
|                           | PACKING   | 198g; 60pcs/12.9Kg/1.15CUFT   |  |              |              |              |              |              |                   |              |  |
| CONNECTOR                 | PLUG  | See page 4~5 ; Other type available by customer requested   |  |              |              |              |              |              |                   |              |  |
|                           | CABLE   | See page 4~5 ; Other type available by customer requested   |  |              |              |              |              |              |                   |              |  |
| NOTE                      | <div>1.All parameters are specified at 115VAC input, rated load, 25℃ 70% RH ambient.</div> <div>2.DC voltage: The output voltage set at point measure by plug terminal &amp; 50% load.</div> <div>3.Ripple &amp; noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1μf &amp; 47μf capacitor.</div> <div>4.Tolerance: includes set up tolerance, line regulation, load regulation.</div> <div>5.Line regulation is measured from low line to high line at rated load.</div> <div>6.Load regulation is measured from 10% to 100% rated load.</div> <div>7.Derating may be needed under low input voltage. Please check the derating curve for more details.</div> <div>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.”<br/>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</div> <div>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a></div> |   |  |              |              |              |              |              |                   |              |  |

## Derating Curve

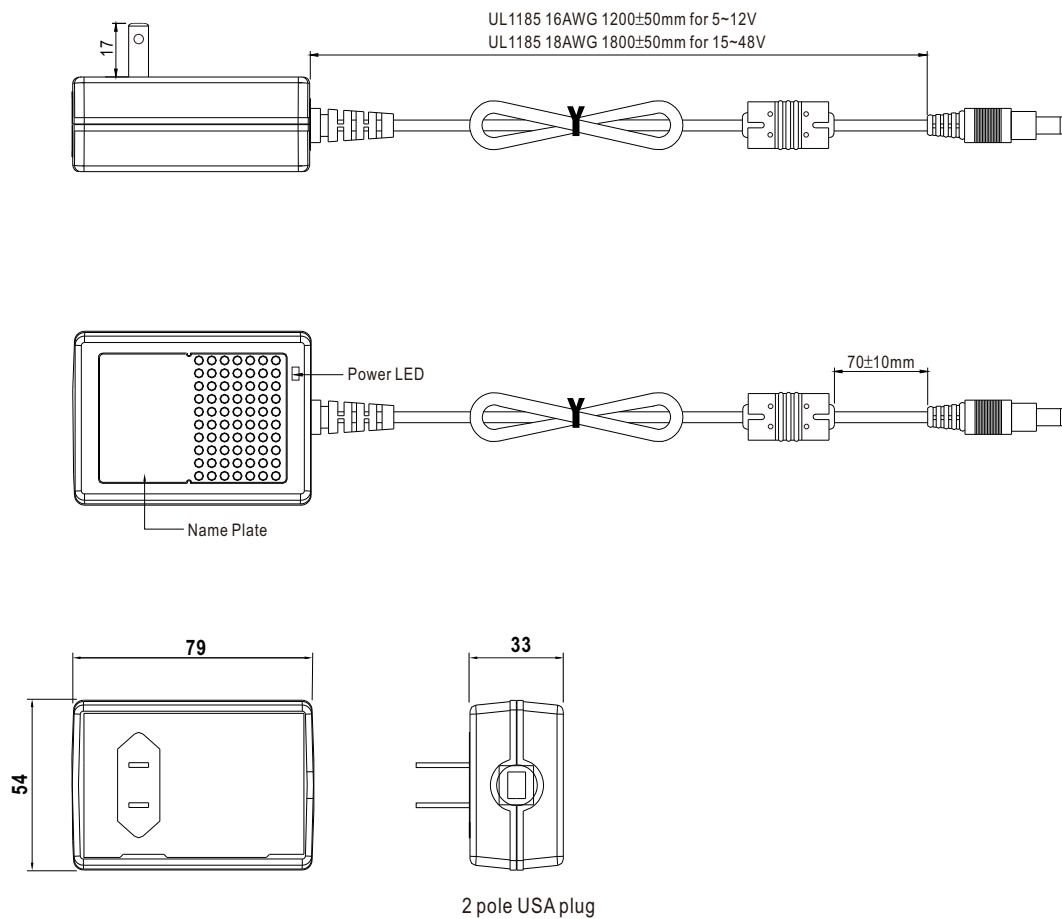


## Static Characteristics



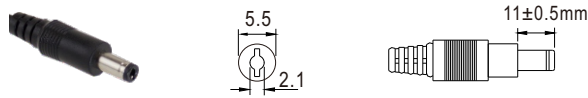


## Mechanical Specification

Unit:mm



### DC output plug

Standard plug: P1J

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

DC plug changeable through:



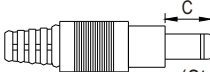
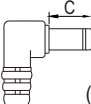


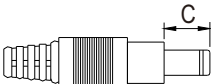
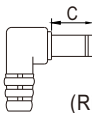


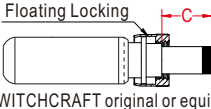
- Customization of the standard part with an optional DC plug according to the table (MOQ applicable)
- Quick adapter accessory (sold separately without MOQ)






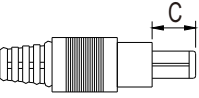


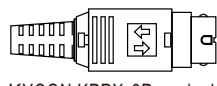


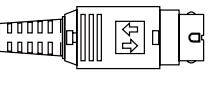


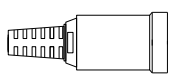




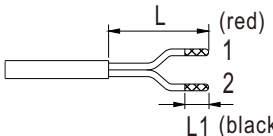
Please refer to below table and online selection guide : [https://www.meanwell.com/upload/pdf/DC\\_plug.pdf](https://www.meanwell.com/upload/pdf/DC_plug.pdf)

Example quick adapter accessory:



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

| Tuning Fork Style  |   | Type No.   | A<br>OD | B<br>ID | C<br>L | Quick Adapter<br>Accessory               |
|--|---|------------|---------|---------|--------|--|
| <br> | <br>(Straight)   | P1I        | 5.5     | 2.1     | 9.5    | Available<br>(Current rating: 7.5A max.) |
|  |   | P1L        | 5.5     | 2.5     | 9.5    |  |
|  |   | P1M        | 5.5     | 2.5     | 11.0   |  |
|  | <br>(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 | None                                     |
| <br> | <br>(Straight)   | P2I        | 5.5     | 2.1     | 9.5    |  |
|  |   | P2J        | 5.5     | 2.1     | 11.0   |  |
|  |   | P2L        | 5.5     | 2.5     | 9.5    |  |
|  | <br>(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<br>OD | B<br>ID | C<br>L | None                                     |
| <br> | <br>Floating Locking<br>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<br>OD        | B<br>ID | C<br>L                                   | Quick Adapter<br>Accessory             |  |
|--|-------------|----------------|---------|--|--|--|
| <br><br><br>EIAJ equivalent                   | 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<br>OD        | B<br>ID | C<br>L                                   | D<br>Center Pin                        | Available<br>(Current rating: 7.5A max.) |
| <br><br><br>EIAJ equivalent                   | 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 |         | Available<br>(Current rating: 7.5A max.) |  |  |
| <br><br><br>KYCON KPPX-3P equivalent          | R6B         | PIN No.        | Output  |  |  |  |
|  |             | 1              | +Vo     |  |  |  |
|  |             | 2              | -Vo     |  |  |  |
|  |             | 3              | +Vo     |  |  |  |
| Min. DIN 4 Pin with Lock (male)  | Type No.    | Pin Assignment |         | Available<br>(Current rating: 7.5A max.) |  |  |
| <br><br><br>KYCON KPPX-4P equivalent    | R7B         | PIN No.        | Output  |  |  |  |
|  |             | 1              | +Vo     |  |  |  |
|  |             | 2              | -Vo     |  |  |  |
|  |             | 3              | -Vo     |  |  |  |
|  |             | 4              | +Vo     |  |  |  |
| Min. DIN 4 Pin with Lock (female)  | Type No.    | Pin Assignment |         | None                                     |  |  |
| <br><br><br>KYCON KPJX-CM-4S equivalent | R7BF        | PIN No.        | Output  |  |  |  |
|  |             | 1              | +Vo     |  |  |  |
|  |             | 2              | -Vo     |  |  |  |
|  |             | 3              | -Vo     |  |  |  |
|  |             | 4              | +Vo     |  |  |  |
| DIN 5 Pin (male)   | Type No.    | Pin Assignment |         | Available<br>(Current rating: 7.5A max.) |  |  |
| <br><br>                                | R1B         | PIN No.        | Output  |  |  |  |
|  |             | 1              | -Vo     |  |  |  |
|  |             | 2              | -Vo     |  |  |  |
|  |             | 3              | +Vo     |  |  |  |
|  |             | 4              | -Vo     |  |  |  |
|  |             | 5              | +Vo     |  |  |  |
| Stripped and tinned leads  | Type No.    | Pin Assignment |         | None                                     |  |  |
| <br><br>Length of Land L1 by request<br>(MW's standard length, L: <u>25</u> mm, L1: <u>5</u> mm)                           | by customer | PIN No.        | Output  |  |  |  |
|  |             | 1              | +Vo     |  |  |  |
|  |             | 2              | -Vo     |  |  |  |

# Installation Manual

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