

**1000W AC-DC Enclosed Power Supply (GRT-G1000P SERIES)**



**■ Features :**

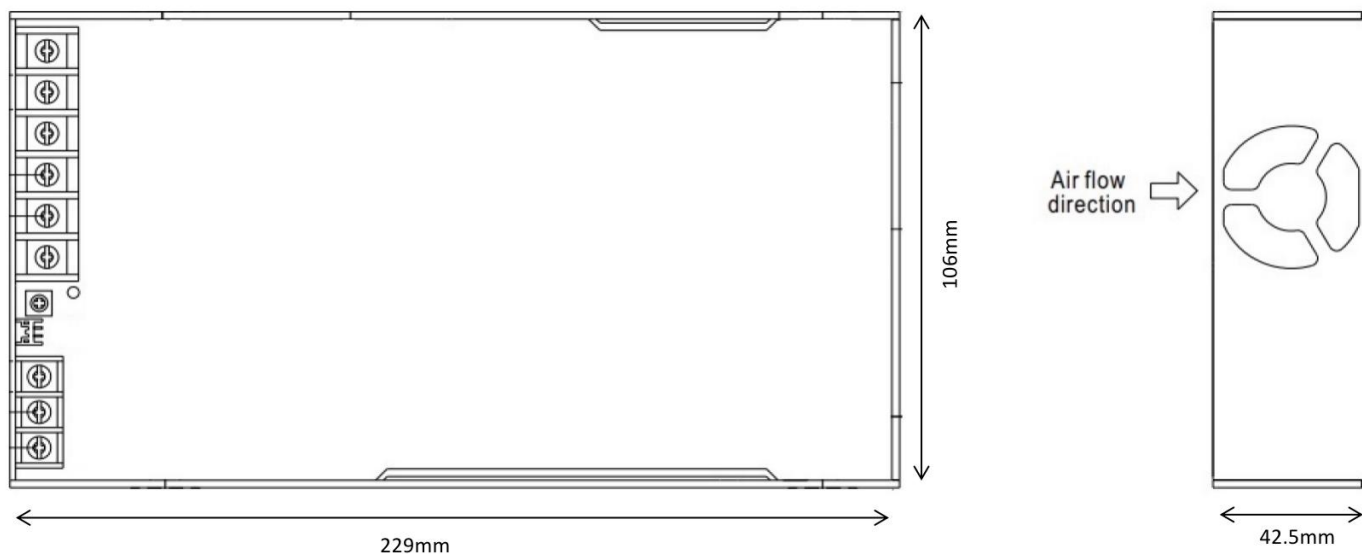
- Universal AC input / Full range(90~264VAC)
- Protections: Short circuit / Over current / Over voltage
- Built-in active PFC function
- Cooling by free air convection
- LED indicator for power on
- Fixed Output current level
- 100% full load burn-in test&High reliability
- Standby Power<0.5W,fully compliance with EU ERP& CoC version 5
- Suitable for all kinds of equipments
- 5 years warranty

**■ Specification**

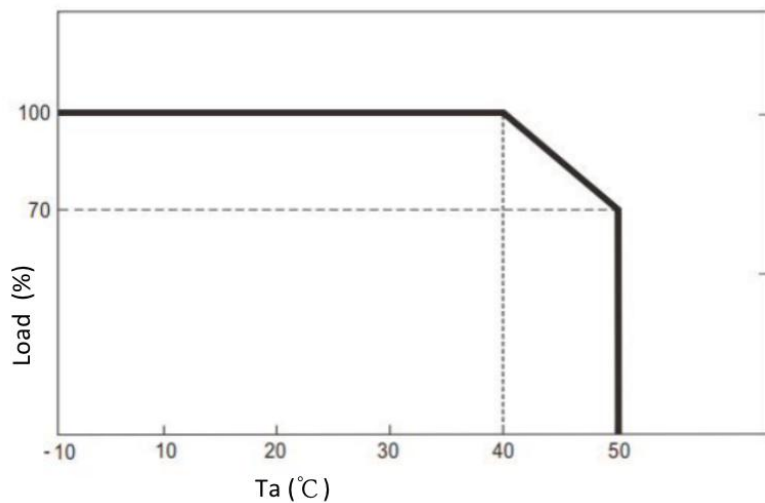
| MODEL               |                              | GRT-G1000P-5  | GRT-G1000P-12 | GRT-G1000P-24 | GRT-G1000P-36 | GRT-G1000P-48 |
|---------------------|------------------------------|---|---------------|---------------|---------------|---------------|
| OUTPUT              | DC VOLTAGE                   | 5V  | 12V           | 24V           | 36V           | 48V           |
|                     | RATED CURRENT                | 2000A   | 83.33A        | 41.67A        | 27.78A        | 20.83A        |
|                     | RATED POWER                  | 1000W   | 1000W         | 1000W         | 1000W         | 1000W         |
|                     | RIPPLE & NOISE (max.) Note.2 | 50mVp-p   | 150mVp-p      | 240mVp-p      | 240mVp-p      | 300mVp-p      |
|                     | VOLTAGEADJ. RANGE            | By built-in potentiometer, SVR  |               |               |               |               |
|                     |                              | 4.75 ~ 5.5V   | 12~14.4V      | 24~28.8V      | 36~43.2V      | 48~57.6V      |
|                     | VOLTAGE TOLERANCE Note.3     | ±2.0%   | ±1.0%         | ±1.0%         | ±1.0%         | ±1.0%         |
|                     | LINE REGULATION              | ±0.5%   | ±0.5%         | ±0.5%         | ±0.5%         | ±0.5%         |
|                     | LOAD REGULATION              | ±1.0%   | ±0.5%         | ±0.5%         | ±0.5%         | ±0.5%         |
|                     | SETUP, RISE TIME Note.4      | 1000ms, 50ms/230VAC      1000ms,50ms/115VAC at full load  |               |               |               |               |
| HOLD UP TIME (Typ.) | 12ms/230VAC                  | 12ms/115VAC   |               |               |               |               |
| INPUT               | VOLTAGE RANGE Note.4         | 90 ~ 264VAC   | 250 ~ 370VDC  |               |               |               |
|                     | FREQUENCY RANGE              | 47 ~ 63Hz   |               |               |               |               |
|                     | POWER FACTOR (Typ.) Note.4   | PF≥0.95/230VAC      PF≥0.99/115VAC at full load   |               |               |               |               |
|                     | EFFICIENCY (Typ.)            | 94%   |               | 95%           | 95.5%         | 96%           |
|                     | AC CURRENT (Typ.)            | 10.1A/115VAC  | 5.3A/230VAC   |               |               |               |
|                     | INRUSH CURRENT (Typ.)        | Cold start 20A/115VAC      40A/230VAC   |               |               |               |               |
| LEAKAGE CURRENT     | <0.75mA/ 240VAC              |   |               |               |               |               |
| PROTECTION          | OVERLOAD                     | 105~120% rated output power<br>Protection type: Constant current limiting with delay shutdown after 3 seconds, re-power on to recover |               |               |               |               |
|                     | SHORT CIRCUIT                | Protection type: Constant current limiting with delay shutdown after 3 seconds, re-power on to recover                                |               |               |               |               |
|                     | OVER VOLTAGE                 | 5.6 ~ 6.75V   | 14.5 ~ 16V    | 29 ~ 33V      | 43.5 ~ 49V    | 59 ~ 66V      |
|                     |                              |   |               |               |               |               |

|                                     |  |  |   |   |  |
|-------------------------------------|--|--|---|---|--|
|                                     |  | Protection type: Shut down O/P voltage, re-power on to recover   |   |   |  |
|                                     | <b>OVER TEMPERATURE</b>  | Protection type: Shut down O/P voltage, recovers automatically after temperature goes down               |   |   |  |
| <b>FUNCTION</b>                     | <b>OUTPUT VOLTAGE</b>  | Adjustment of output voltage is allowable to 50 ~ 120% of nominal output                                 |   |   |  |
|                                     | <b>OUTPUT CURRENT</b>  | Adjustment of constant current level is allowable to 20 ~ 100% of rated                                  |   |   |  |
| <b>ENVIRONMENT</b>                  | <b>WORKING TEMP.</b>   | -30 ~ +70°C (Refer to "Derating Curve")  |   |   |  |
|                                     | <b>WORKING HUMIDITY</b>  | 20 ~ 90% RH non-condensing   |   |   |  |
|                                     | <b>STORAGE TEMP., HUMIDITY</b>   | -40 ~ +85°C, 10 ~ 95% RH non-condensing  |   |   |  |
|                                     | <b>TEMP. COEFFICIENT</b>   | ±0.03%/°C (0 ~ 50°C)   |   |   |  |
|                                     | <b>VIBRATION</b>   | 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes   |   |   |  |
| <b>SAFETY &amp; EMC</b><br>(Note.6) | <b>SAFETY STANDARDS</b>  | UL62368-1, TUV BS EN/EN62368-1, EAC TP TC 004 approved; design refer to BS EN/EN61558-1, BS EN/EN60335-1 |   |   |  |
|                                     | <b>WITHSTAND VOLTAGE</b>   | I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P-FG: 1.25KVAC   |   |   |  |
|                                     | <b>ISOLATION RESISTANCE</b>  | I/P-O/P, I/P-FG,O/P-FG: 100M Ohms/500VDC/25°C / 70%RH  |   |   |  |
|                                     | <b>EMC EMISSION</b>  | <b>Parameter</b>   | <b>Standard</b>   | <b>Test Level / Note</b>                |  |
|                                     |  | Conducted  | BS EN/EN55032 (CISPR32)   | Class B                                 |  |
|                                     |  | Radiated   | BS EN/EN55032 (CISPR32)   | Class B                                 |  |
|                                     |  | Harmonic Current   | BS EN/EN61000-3-2   | ClassA                                  |  |
|                                     |  | Voltage Flicker  | BS EN/EN61000-3-3   | -----                                   |  |
|                                     | <b>EMC IMMUNITY</b>  | BS EN/EN55035, BS EN/EN61000-6-2   |   |   |  |
|                                     |  | <b>Parameter</b>   | <b>Standard</b>   | <b>Test Level / Note</b>                |  |
|                                     |  | ESD  | BS EN/EN61000-4-2   | Level 3, 8KV air ; Level 2, 4KV contact |  |
|                                     |  | Radiated   | BS EN/EN61000-4-3   | Level 3                                 |  |
|                                     |  | EFT / Burst  | BS EN/EN61000-4-4   | Level 3                                 |  |
| Surge                               |  | BS EN/EN61000-6-2  | 2KV/Line-Line 4KV/Line-Earth  |   |  |
| Conducted                           |  | BS EN/EN61000-4-6  | Level 3   |   |  |
| Magnetic Field                      |  | BS EN/EN61000-4-8  | Level 4   |   |  |
|                                     | Voltage Dips and Interruptions   | BS EN/EN61000-4-11   | >95% dip 0.5 periods, 30% dip 25 periods,>95% interruptions 250 periods |   |  |
| <b>OTHERS</b>                       | <b>MTBF</b>  | 662.3K hrs min. Telcordia SR-332 (Bellcore) ; 69.8K hrs min. MIL-HDBK-217F (25°C)                        |   |   |  |
|                                     | <b>DIMENSION</b>   | 229*106*42.5mm (L*W*H)   |   |   |  |
|                                     | <b>PACKING</b>   | 1.5kg ; 8pcs/14.9kg/0.74CUFT   |   |   |  |
| <b>NOTE</b>                         | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve and Static characteristics for more details.</p> <p>5. PV/PC functions when users do not use SVR.</p> <p>6. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="https://www.greatpwr.com">https://www.greatpwr.com</a>)</p> |  |   |   |  |

## ■ Dimension(mm)



■ **Derating Curve**



■ **Disclaimer**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.