## ■ Features

- Ultra-slim design, easy to mount and install.
- Max output 1200W, high efficiency, low heat generation.
- Wide range AC input: 90-264Vac.
- Built-in active PFC (Power Factor Correction) function.
- Reserved interfaces for RS485 and CAN communication.
- Multiple protection functions: Shorted / OVP / OLP/ OTP.

## ■ Applications

- EV, AGV, Robots and Drones
- Industrial devices
- Information devices
- Home appliances

## ■ Model Part Number :

**G1300-XXXYYY**

- Output current, range 10A~40A，yyy=360 means 36.0A
- Output voltage, range 20V~99V，xxx=240 means 24.0V
- Serial name

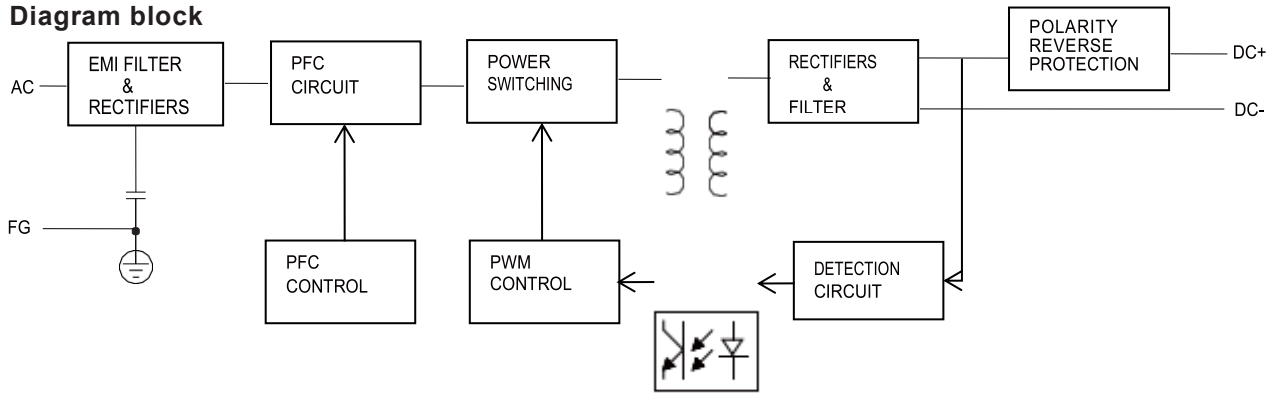
## SPECIFICATION (Only the adopted models are listed in table, for other output please reach our sales )

| Model part number (P/N) | | G1300-240400 | G1300-360330 | G1300-420300 | G1300-480250 | G1300-600200 |
|---|---|---|---|---|---|---|
| OUTPUT | Rating output voltage | 24V±5% | 36V±5% | 42V±5% | 48V±5% | 60V±5% |
| | Output current range | 0-40A | 0-33A | 0-30A | 0-25A | 0-20A |
| | Max. power @AC120V~240V | 1000W | 1200W | 1200W | 1200W | 1200W |
| | Line regulation | 1% | | | | |
| | Load regulation | 3% | | | | |
| | Soft start time | 2000mS (Input:115VAC Output:Full load) | | | | |
| | Rise-up time | 30mS (Input:115VAC Output:Full load) | | | | |
| | Hold-on time | 15mS (Input:115VAC Output:Full load) | | | | |
| | Voltage ripple (RMS) | <output voltage*1% (20MHz， AC coupling mode, connected in parallel with 0.1uf ceramic capacitor and 47uf electrolytic capacitor) | | | | |
| | LED display | Bi-color, Green means normal running, RED means heavy load, RED FLASHING MEANS ERRORS | | | | |
| INPUT | Rated input voltage | 100 - 240VAC 50 / 60Hz | | | | |
| | Input voltage range | Note.4 | | | | |
| | Power factor (Typ.) | PF>0. 96 @Full load | | | | |
| | Input current (Typ.) | 14A@100VAC | | | | |
| | Inrush current (Typ.) | Cold start 75A @230VAC | | | | |
| | Standby input power | < 4W | | | | |
| | Efficiency (Typ.) | 93% | 94% | 94% | 94% | 94% |
| PROTECTION | Short circuit Note.5 | Protection type : Shut down output | | | | |
| | Over voltage | >4.35V*N | | | | |
| | Reverse polarity | By internal relay | | | | |
| | Over temperature | Shut down output, recovers automatically after temperature goes down | | | | |
| ENVIRONMENT | Working temperature | -10 - +40℃ (Refer to " Derating Curve") | | | | |
| | Working humidity | 0 - 90% RH | | | | |
| | Storage temperature, humidity | -40 - +70℃, 0 - 95% RH | | | | |
| | Cooling | Fan convection | | | | |
| | Vibration resistance | 10 - 50Hz, 2G 10min. 1cycle, 60min. each along X, Y, Z axes | | | | |
| SAFETY & EMC (Note.6) | Max. temperature rise | < 40℃ | | | | |
| | Hi-Pot Insulation | i/p to o/p: 3000V (1 min) | | | | |
| | Safety standards | IEC62368 | | | | |
| | EMC emission | Parameter | 标准 | | | 等级 |
| | | Conducted | EN55032 FCC PART15 | | | Class B |
| | | Radiated | EN55032 FCC PART15 | | | Class B |
| | | Harmonic Current | EN61000-3-2 | | | ..... |
| | | Voltage Flicker | EN61000-3-3 | | | ..... |
| | EMC immunity | EN61000-4-2，EN61000-4-3，EN61000-4-4，EN61000-4-5，EN61000-4-6，EN61000-4-8，EN61000-4-11 | | | | |
| Others | MTBF | 30000H | | | | |
| | Size | 280*145*47.7mm(L*W*H) | | | | |
| | Weight | 1800g | | | | |

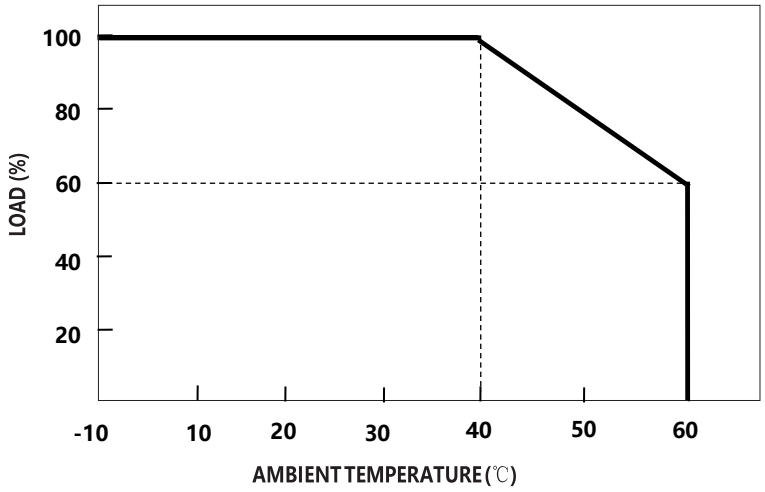
**Notes**

1. Modification for charger specification may be required for different battery specification. Please contact battery vendor or Green digital power for details.
2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature.
3. This is general suggested. Please consult your battery manufacturer about maximum charging current limitation.
4. Derating is needed at AC100~120V input or above 40℃ ambient. Please check the derating curve for more details.
5. This protection mechanism is specified for the case the short circuit occurs after the charger is turned on.
6. The battery charger 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 "EM I testing of component power supplies."

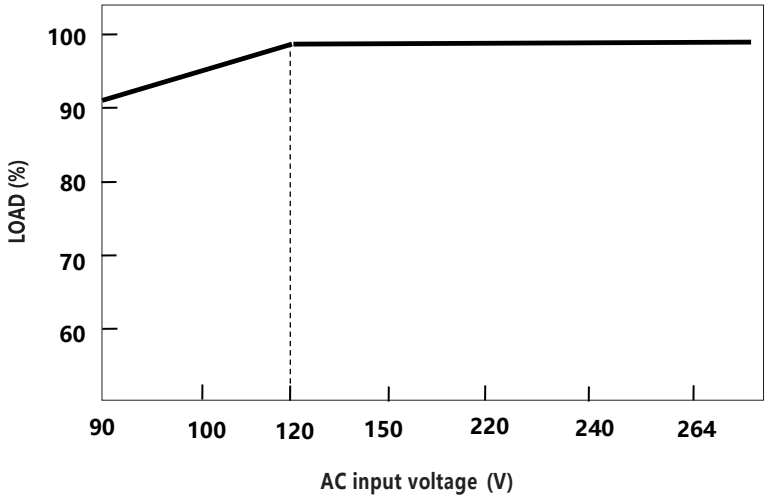
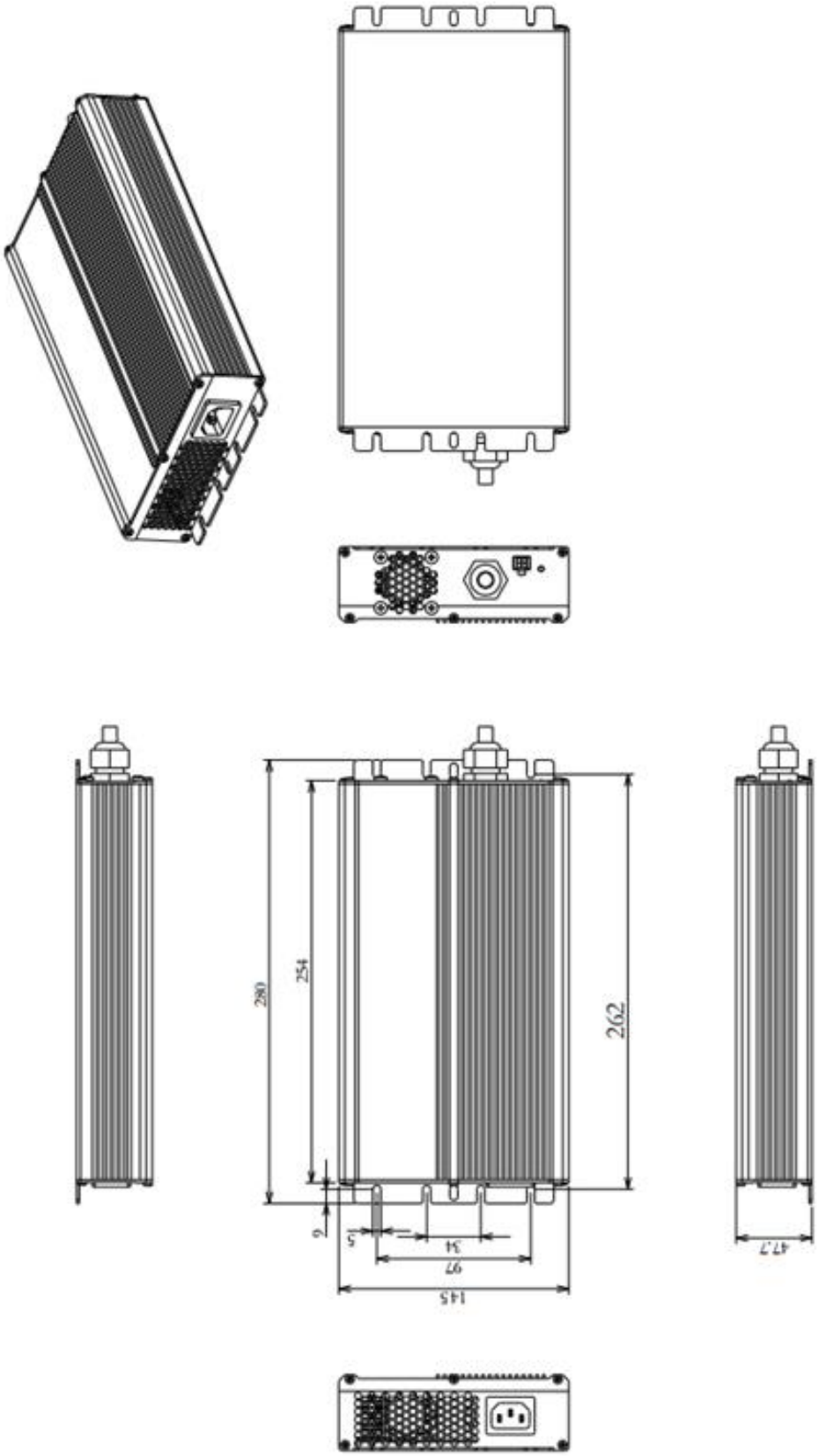
## Diagram block




## Temperature derating curve




## AC input derating curve



## ■ Mechanical specification