



■ Features

- Charger for lithium batteries (Li-ion,LiFePO4and lithium manganese) and Lead-Acid batteries
- Built- in 4 stage charging curve(For Lithium batteries) and 3 stage charging curve(For Lead-Acid batteries)
- Universal AC input / Full range(90-264V~)
- Built- in active PFC function
- Protection: Short circuit / Over voltage /Over temperature /Battery over voltage / Battery reverse polarity protection
- 1 years warranty

■ Applications

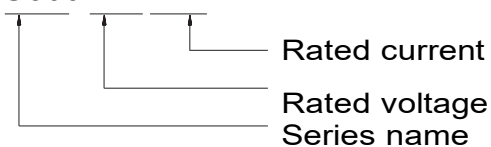
- Radio system backup solution
- Electric scooter charger
- Surveillance system
- Electric motorcycle\Electric sweeper

■ Description

G300 is a single output 300W AC/DC desktop type charger with 4 and 3 stage charging curve, suitable for lithium battery (lithium ion, lithium iron phosphate, lithium manganese) and lead-acid battery (colloid battery, liquid battery, AGM battery). When charging, the LED can indicate the battery capacity when charging.

■ Mode Encoding

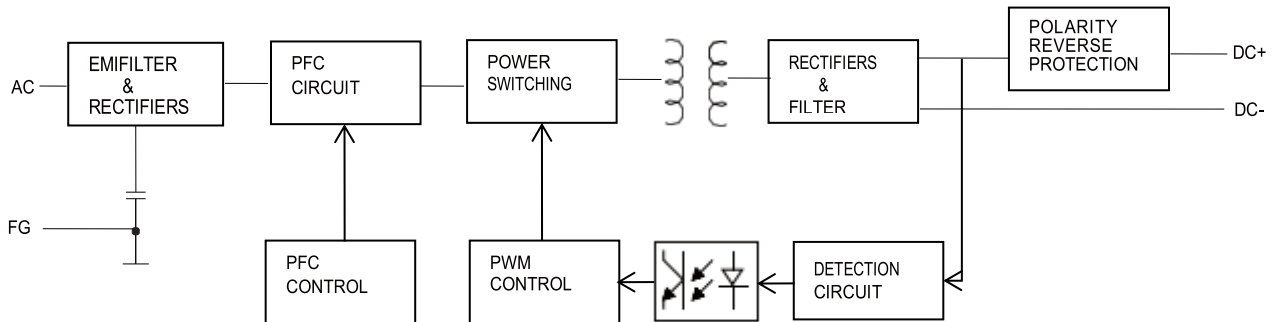
G300-XXXYYY



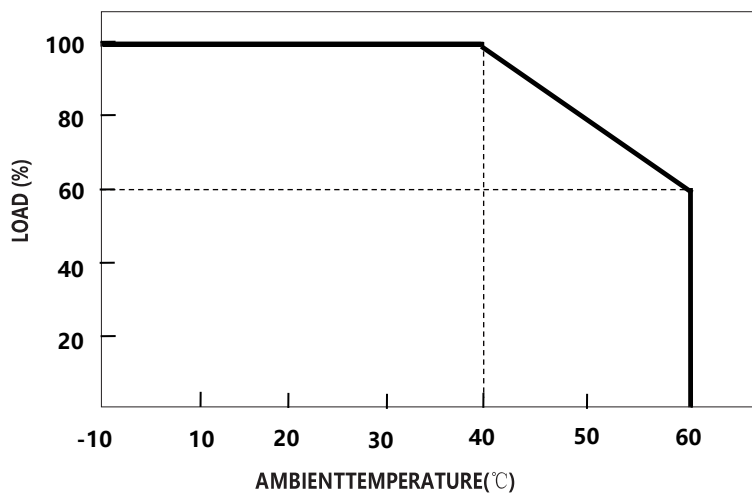
SPECIFICATION (Lead-Acid battery charger)

| MODEL | | G300-148180 | G300-296100 | G300-444067 | G300-588050 |
|---------------------|---|--|--------------------|-------------|-------------------|
| OUTPUT | Charge voltage (High voltage) | 14.8V±1% | 29.6V±1% | 44.4V±1% | 58.8V±1% |
| | Charge voltage range | 10.0-14.8V | 20.0-29.6V | 30.0-44.4V | 40.0-58.8V |
| | Float charge (Low voltage) | 13.8V±1% | 27.6V±1% | 41.4V±1% | 55.2V±1% |
| | Charge current | 18.0A±7% | 10.0A±7% | 6.7A±7% | 5A±7% |
| | Charge-end current | ≤3.6A ±20% | ≤2A ±20% | ≤1.34A ±20% | ≤1A ±20% |
| | Rated power | 266.4W | 296W | 297.48W | 294W |
| | Recommended battery capacity Note.3 | 90 - 200Ah | 50 - 150Ah | 35 - 100Ah | 25 - 80Ah |
| | Leakage current from battery (Typ.) | ≤1mA | | | |
| CHARGING LED | Red LED flashing | 2Hz Error | | | |
| | Green LED flashing | Idle | | | |
| | Red LED on | Charging | | | |
| | Green LED on | Full | | | |
| INPUT | Rated input voltage | 100 - 240VAC 50 / 60Hz | | | |
| | Input voltage range Note.4 | 90 - 264VAC | | | |
| | Power factor (Typ.) | PF>0.98@Full load, Input:115VAC ; PF>0.94 @Full load, Input:230VAC | | | |
| | Input current (Typ.) | 4.5A@100VAC | | | |
| | Inrush current (Typ.) | Cold start75A @230VAC | | | |
| | Standby input power | <1W | | | |
| | Efficiency (Typ.) | 94% | 95% | 95% | 95% |
| PROTECTION | Short circuit Note.5 | Protection type : Shut down output | | | |
| | Over voltage | Protection type : Shut down output | | | |
| | Reverse polarity | Protection type : Shut down output | | | |
| | Over temperature | - | | | |
| ENVIRONMENT | Working temperature | -10 - +40℃ (Refer to " Derating Curve") | | | |
| | Working humidity | 0 - 90% RH | | | |
| | Storage temperature, humidity | -40 - +70℃, 0- 95% RH | | | |
| | Cooling | Natural convection | | | |
| | Vibration resistance | 10-50Hz,2G10min.1cycle,60min.eachalongX,Y,Zaxes | | | |
| SAFETY& EMC(Note.6) | Max. temperature rise | < 40℃ on casing | | | |
| | Hi-Pot Insulation | i/p to o/p: 3000V (1 min) | | | |
| | Safety approval | CB/CE/FCC/CCC/cTUVus | | | |
| | EMC Emission | Parameter | Standard | | Test Level I Note |
| | | 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 | | | |
| | Dimension | 220*105*43mm (L*W*H) | | | |
| | Weight | 1300g | | | |
| NOTE | 1.Modification for charger specification may be required for different battery specification. Please contact battery vendor and 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 Green suggested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation. 4.Derating may be needed under low input voltages. 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. | | | | |

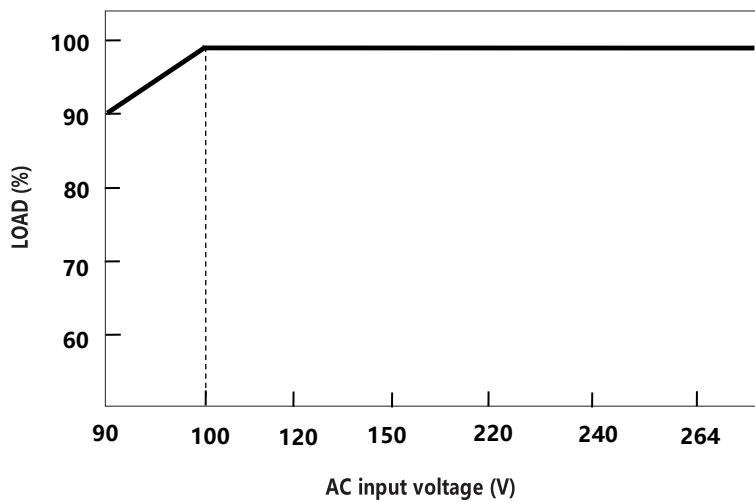
■ Block Diagram



■ Derating Curve

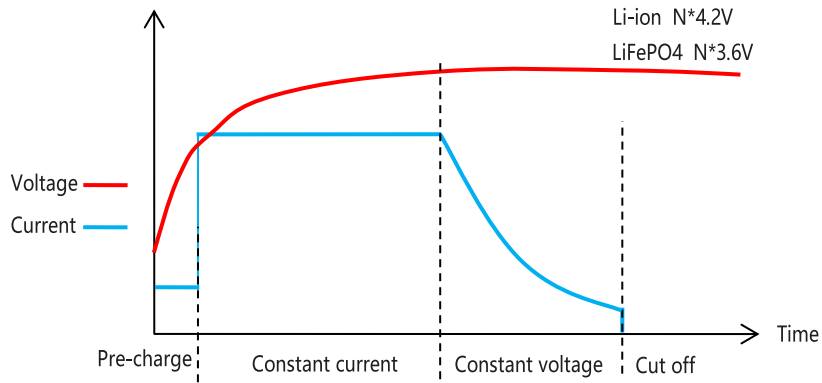


■ Static Characteristics

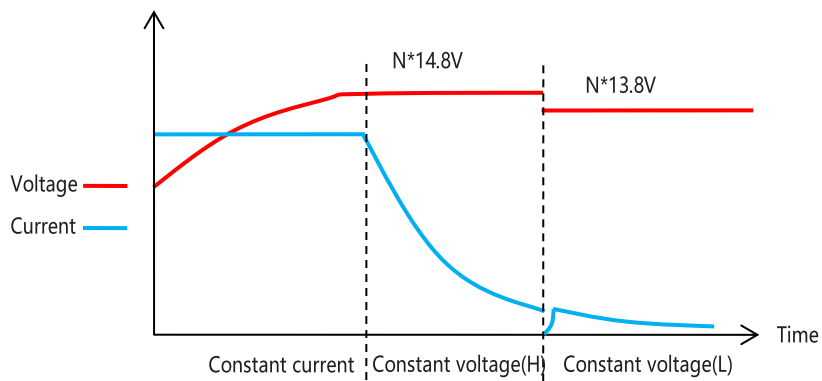


■ **Charging Curve**

© 4stage charging curve(Li-ion battery charger)



© 3stage charging curve(Lead-Acid battery charger)



■ Mechanical specification

