



### ■ 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

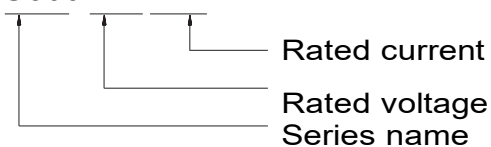
- Radio system backup solution
- Electric scooter charger
- Surveillance system
- Electric motorcycle\Electric sweeper

### ■ 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

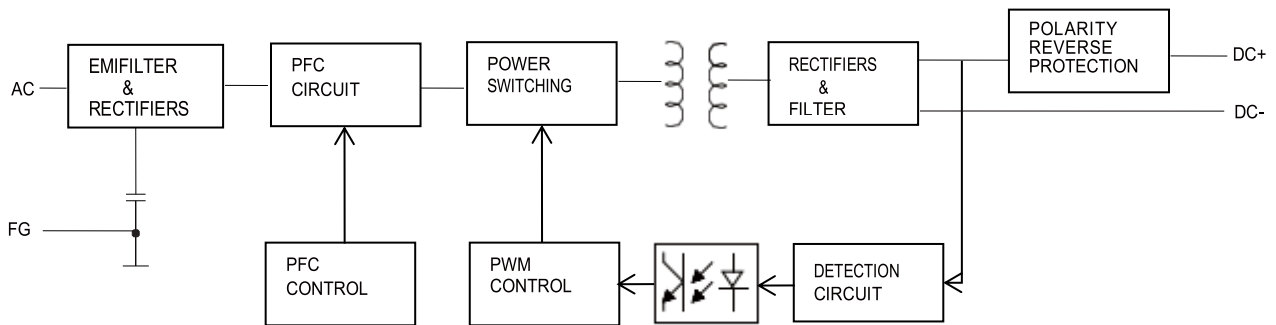
**G300-XXXYYY**



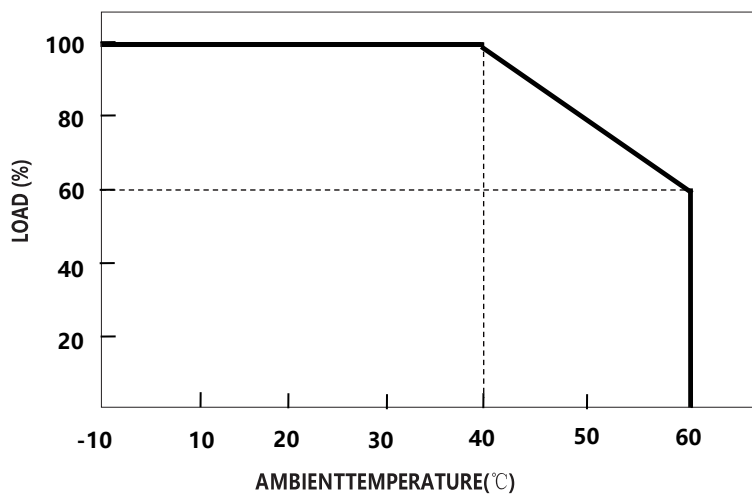
**SPECIFICATION(Li-ion battery charger)**

MODEL		G300-126180	G300-168170	G300-294100	G300-420070	G300-546050	
OUTPUT	Charge voltage	12.6V±1%	16.8V±1%	29.4V±1%	42.0V±1%	54.6V±1%	
	Charge voltage range	7.5-12.6V	10.0-16.8V	17.5-29.4V	25-42.0V	32.5-54.6V	
	Charge current	18.0A±7%	17.0A±7%	10.0A±7%	7.0A±7%	5.0A±7%	
	Pre-charge current	3.6A±7%	3.4A±7%	2.0A±7%	1.4A±7%	1.0A±7%	
	Charge-end current	≤1.8A ±10%	≤1.7A ±10%	≤1.0A ±10%	≤0.7A ±10%	≤0.5A ±10%	
	Rated power	226.8W	285.6W	294W	294W	273W	
	Recommended battery capacity Note.3	40 - 200Ah	40 - 150Ah	20 - 100Ah	15 - 80Ah	15 - 60Ah	
	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 start 75A @230VAC					
	Standby input power	< 1W					
PROTECTION	Efficiency (Typ.)	94%	95%	95%	95%	95%	
	Short circuit Note.5	Protection type : Shut down output					
	Over voltage	Protection type : Shut down output					
	Reverse polarity	Protection type : Shut down output					
ENVIRONMENT	Over temperature	-					
	Working temperature	-10 - +40℃ (Refer to " Derating Curve")					
	Working humidity	0 - 90% RH					
	Storage temperature ,humidity	-40 - +70℃, 0- 95% RH					
	Cooling	Natural convection					
SAFETY& EMC(Note.6)	Vibration resistance	10~50Hz,2G10min.1cycle,60min.eachalongX,Y,Zaxes					
	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			.....	
OTHERS	EMC IMMUNITY	EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11					
	MTBF	30000H					
	Dimension	220*105*43mm (L*W*H)					
NOTE	Weight	1300g					
	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.							

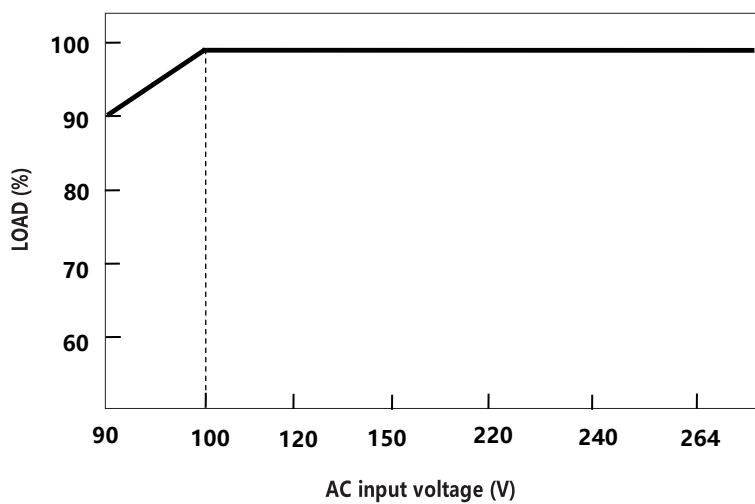
### ■ Block Diagram



### ■ Derating Curve

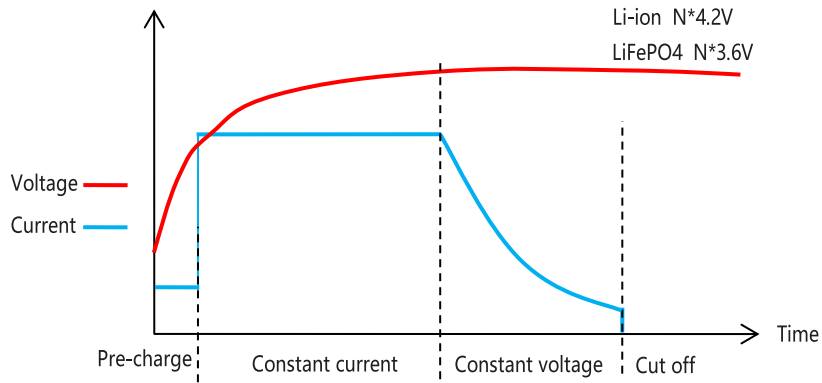


### ■ Static Characteristics

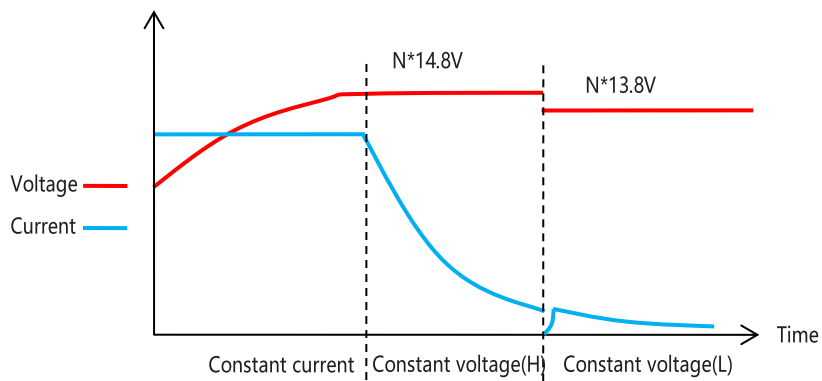


■ **Charging Curve**

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



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



■ Mechanical specification

