



### ■ Features

- Charger for lithium batteries (Li-ion, LiFePO4 and lithium manganese) and Lead-Acid batteries
- Built- in 2-stage charging curve(For Lithium batteries) and 3-stage charging curve(For Lead-Acid batteries )
- Universal AC input, wide range cover 90-264V
- Small size , only 75\*43\*28mm
- High efficiency, >91% at AC 90V input
- Protection: Short circuit, OCP, OVP & reverse polarity
- 1years warranty

### ■ Applications

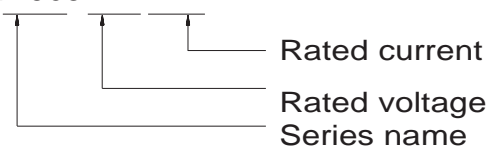
- Power tools & Drones
- Electric scooter
- Surveillance system
- Consumer electronic devices

### ■ Description

GaN065 is a single output 65W AC/DC desktop type charger with 2 and 3 stage charging curve, The different curves are suitable for different batteries, such as Lead- acid batteries (gel, flooded and AGM) and Lithium batteries(Li-ion, LiFePO4 and Lithium manganese).

### ■ Mode Encoding

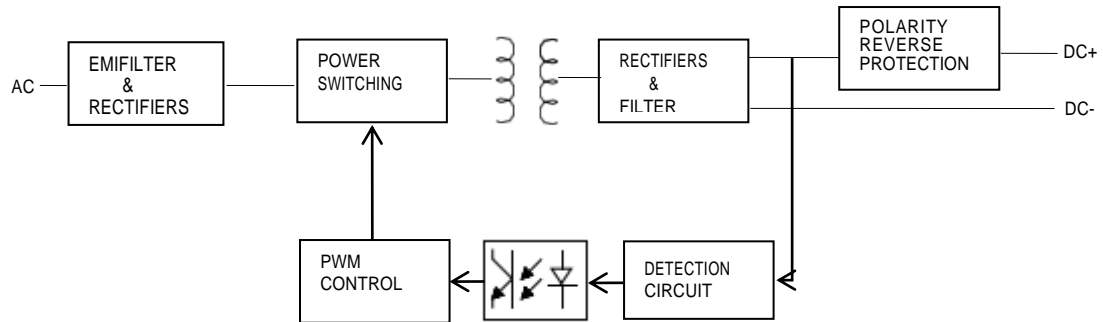
GaN065-XXXYYY



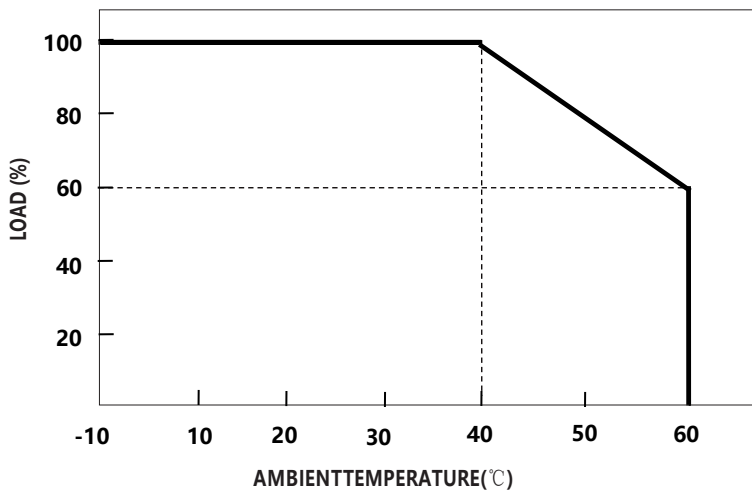
## SPECIFICATION (Lead-Acid battery charger)

MODEL		GaN065-148033	GaN065-296017	
OUTPUT	Charge voltage (High voltage)	14.8V±1%	29.6V±1%	
	Charge voltage range	10-14.8V	20-29.6V	
	Float charge (Low voltage)	13.8V±1%	27.6V±1%	
	Charge current	3.3A±10%	1.7A±10%	
	Charge-end current	≤0.66A ±20%	≤0.34A ±20%	
	Rated power	48.84W	50.32W	
	Recommended battery capacity Note.3	20 - 40Ah	10 - 20Ah	
	Leakage current from battery (Typ.)	≤2mA		
CHARGE INDICATOR	LED indication	Red: Charging. Green: Full or Idle		
INPUT	Rated input voltage	100 - 240VAC 50 / 60Hz		
	Input voltage range Note.4	90 - 264VAC		
	Power factor (Typ.)	PF>0.55@AC100V, full load		
	Input current (Typ.)	1.2@100VAC		
	Inrush current (Typ.)	Cold start 75A @230VAC		
	Standby input power	<0.5W		
	Efficiency (Typ.)	92.5%		
PROTECTION	Short circuit	Yes		
	Over voltage	Yes		
	Reverse polarity	Yes		
	Over temperature	-		
ENVIRONMENT	Working temperature	-10 - +40°C (Refer to " Derating Curve")		
	Working humidity	0 - 90% RH		
	Storage temperature, humidity	-40 - +70°C, 0 - 95% RH		
	Cooling	Natural convection		
	Vibration resistance	10 - 50Hz, 2G 10min. 1cycle, 60min. each along X, Y, Z axes		
SAFETY& EMC(Note.6)	Max. temperature rise	< 40°C on casing		
	Hi-Pot Insulation	i/p to o/p: 3000V (1 min)		
	Safety standards	IEC62368-1		
	EMC Emission	Parameter	Standard	Test Level   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	75*43*28.5mm (L*W*H)		
	Weight	120g		
NOTE	<p>1. Modification for charger specification may be required for different battery specification. Please contact battery vendor and Green digital power for details.</p> <p>2. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>3. This is Green suggested range. Please consult your battery manufacturer for their suggestions about maximum charging current limitation.</p> <p>4. Derating may be needed under low input voltages. Please check the derating curve for more details.</p> <p>5. This protection mechanism is specified for the case the short circuit occurs after the charger is turned on.</p> <p>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.</p> <p>7. AC Inlet is ICE320-C8, DC cord is 1.5m 2*18AWG wires, DC terminal is defined when order.</p>			

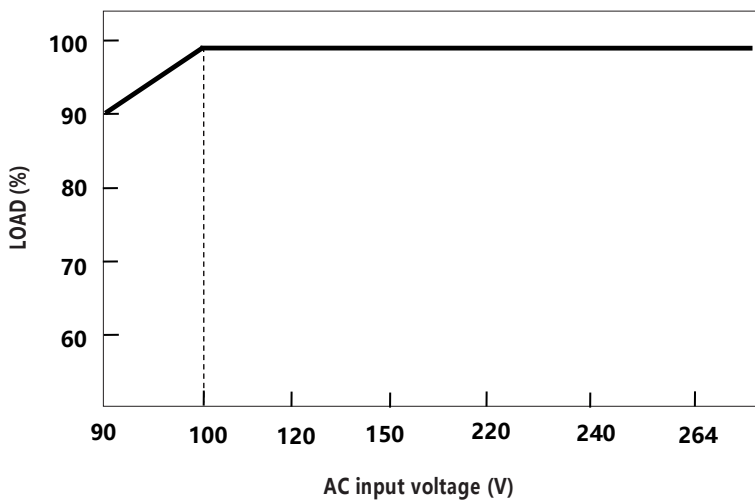
■ Block Diagram



■ Derating Curve

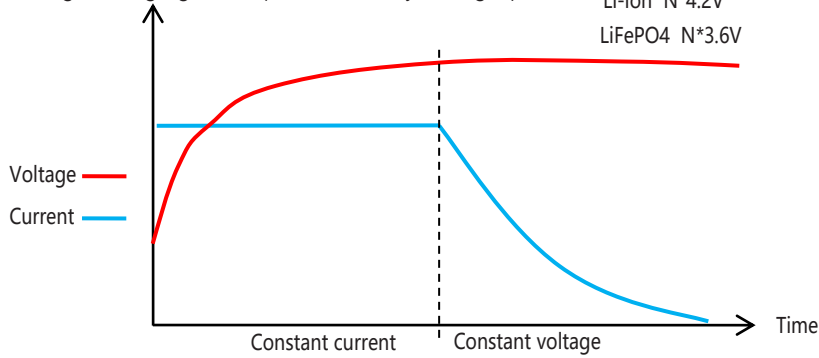


■ static Characteristics

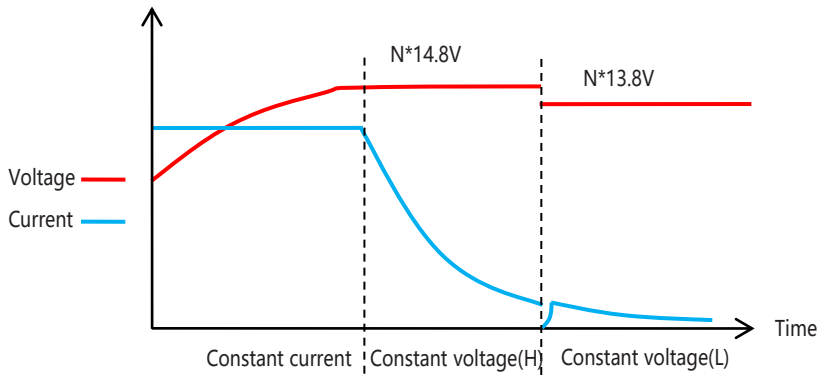


■ **Charging Curve**

◎ 2stage charging curve(Li-ion battery charger)



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



■ **Mecanical specification**

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