

# $\epsilon$

#### ■ Characteristic

- Rechargeable lithium batteries (lithium-ion batteries, lithium iron phosphate batteries, and manganese lithium batteries) and Lead-acid battery
- Built in 4-stage charging (lithium battery) and 3-stage charging (lead-acid)
- Worldwide 90-264Vac input
- Built in active power factor correction function
- Multiple protection functions: output short circuit protection/output overvoltage protection/internal overheating protection/battery reverse polarity protection
- Waterproof: IP68

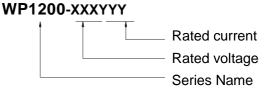
### Application

 Radio system backup Electric scooter Monitoring system Electric motorcycles Electric cleaning vehicle Electric golf cart

#### ■ Brief Introduction

The WP1200 series is a desktop waterproof charger with a single output of 1200W AC to DC. It has a built-in programmable charging mode and features 4-stage and 3-stage charging modes, corresponding to lithium batteries (lithium-ion, lithium iron phosphate, manganese lithium) and leadacid batteries (colloidal batteries, liquid batteries, AGM batteries).

## Model code



### Spectification (Lithium charger)

DHz DHz  AC  AC  Adaptive Derating Curv  RH  1 cycle, 60min. 6	54.6V±1% 32.5-54.6V 20.0A±10% 4.0A±10% ≤2.0A±10% 1092W 40 - 100Ah arged or standby  93%  packed along X, Y, Z ax		84.0V±1% 50.0-84.0V 14.0A±10% ≥.8A±10% ≤1.4A±20% 1176W 30 - 80Ah					
OA±10% A±10% BA ±10% COMPANIENT OF THE PROPERTY OF THE PROPERT	20.0A±10% 4.0A±10% ≤2.0A±10% 1092W 40 - 100Ah arged or standby  93%	17.5A±10% 3.5A±10% ≤1.8A±10% 1776W 40 - 100Ah 93%	14.0A±10% 2.8A±10% ≤1.4A±20% 1176W 30 - 80Ah					
A±10%  .8A±10%  76W  -150Ah  een light fully ch  DHz  AC  d automatically the Derating Curv  RH  1cycle, 60min. 6	4.0A±10%  ≤2.0A±10%  1092W  40 - 100Ah  arged or standby  93%	3.5A±10%  ≤1.8A±10%  1776W  40 - 100Ah  93%  perature is normal	2.8A±10% ≤1.4A±20% 1176W 30 - 80Ah					
2.8A ±10%  76W  - 150Ah  een light fully ch  OHz  AC  d automatically the Derating Curv  RH  1cycle, 60min. 6	<2.0A ±10% 1092W 40 - 100Ah arged or standby 93% recover after the temper	≤1.8A ±10% 1776W 40 - 100Ah  93%  perature is normal	≤1.4A ±20% 1176W 30 - 80Ah					
r6W - 150Ah  een light fully ch DHz  /AC /AC /A d automatically be Derating Curv RH  1cycle, 60min. 6	1092W 40 - 100Ah arged or standby  93%  recover after the tempre)	93%	1176W 30 - 80Ah					
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d automatically be Derating Curver RH  1 cycle, 60min. 6	recover after the temp	perature is normal	93%					
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		< 30°C (Surface) i/p to o/p: 3000V (1 min)						
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Lanuaru								
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N55032 FCC F	ARTIS		Class B					
harmonic current EN61000-3-2			•••••					
Flicker EN61000-3-3								
EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11								
30000H								
288*168*89mm (L*W*H)								
4300g								
	H)  ters, please cor at 230VAC input um charging cut ease refer to the	N61000-3-3 D00-4-3, EN61000-4-4, EN61000-4 H)  Iters, please contact the battery support at 230VAC input, rated load, and argument charging current, please consult the sase refer to the derating curve for decrease refer to the derating curve	N61000-3-3 2000-4-3,EN61000-4-4,EN61000-4-5,EN61000-4-6,EI					

### Spec (LiFePo4 Charger)

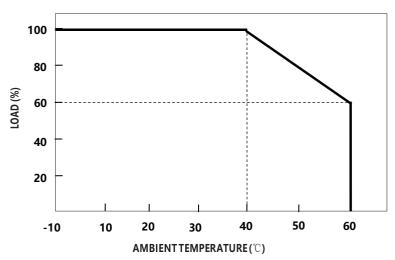
	Item	WP1200-288360	WP1200-360300	WP1200-432277	WP1200-576200	WP1200-720166			
	Charge Voltage	28.8V±1%	36.0V±1%	43.2V±1%	57.6V±1%	72.0V±1%			
	Charger Voltage range	20.0-28.8V	25.0-36.0V	30.0-43.2V	40.0-57.6V	50.0-72.0V			
	Charge current	36.0A±10%	30.0A±10%	27.7A±10%	20.0A±10%	16.6A±10%			
	Pre-charge current	7.2A±10%	6.0A±10%	5.54A±10%	4.0A±10%	3.32A±10%			
	End Charge	≤3.6A ±10%	≤3.0A ±10%	≤2.77A ±10%	≤2.0A ±10%	≤1.66A ±10%			
Сифи	Rated Output power	1036.8W	1080W	1196.64W	1152W	1195.2W			
	Fit battery capacity (Note 3)	80 - 200Ah	80 - 200Ah	60 - 150Ah	40 - 100Ah	30 - 80Ah			
	, , ,		00 - 200AII	00 - 130AH	HO - 100AII	po - 00AII			
	Battery leakage current≤1mA (typical)								
Indication	LED	Red light charging, green light fully charged or standby							
	Rated input voltage	100 - 240VAC 50 / 6	60Hz						
	Input voltage range (Note 4)	90 - 264VAC	90 - 264VAC						
	Power Factor	PF>0. 96 @Full load							
Input	Input Current	14A@100VAC							
	Impulse current	cold start 75A @230	VAC						
	standby power	< 6W							
	efficiency	92%	92%	93%	93%	93%			
	Short circuit protection (Note 5)	Internal relay closed							
Protection	Output overvoltage protection	Internal relay closed							
	reverse polarity protection	Internal relay closed							
	Over Temperature Protection	Turn off the output and automatically recover after the temperature is normal							
	operation temperature	-10 - +40°C (Reference Derating Curve)							
	Working humidity	0 - 90% RH							
Environme		d-40 - +70°C, 0 - 95%	RH						
1	humidity	for cooled							
	Cooling method  Anti vibration	fan cooled  10 - 50Hz, 2G 10min. 1cycle, 60min. each along X, Y, Z axes							
			i. Tcycle, bornin. eaci	Talong A, T, Z axes					
	Maximum temperature rise	< 30°C (Surface)							
	Isolation withstand voltage	i/p to o/p: 3000V (1 r	niin)						
Safety&EI	safety standards	IEC62368  Item Standard Degree							
ectromagn	l EMC interference	Item	EN55032 FCC PART15			Degree			
etic		conduct				Class B			
ity (Note 6)		radiation	EN55032 FCC PART15			Class B			
		harmonic current	EN61000-3-2						
	<b>EMO</b> : "	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							
	mean time between failures	30000H							
Other	Size	288*168*89mm (L*W*H)							
	Weight	4300g							
	To modify different battery specifications and parameters, please contact the battery supplier for details.								
	2. Parameters not specifically mentioned are measured at 230VAC input, rated load, and ambient temperature of 25 °C.								
	3. This is the range recommended by Gu Run. For maximum charging current, please consult the battery supplier.								
Note	Derating may be required under low input voltage, please refer to the derating curve for details.								
	5. This protection mechanism is specified for situations where a short circuit occurs after the charger is connected.								
	<ol><li>The battery charger is considered as an independent device, but the final device still needs to reconfirm that the entire system complie with EMC directives.</li></ol>								

Spec (Lead Acid charger)

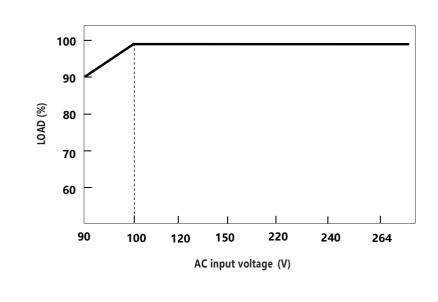
, ,	Item	WP1200-296360	WP1200-444270	WP 1200-592200	WP1200-740160	WP1200-888130			
	Charge Voltage	29.6V±1%	44.4V±1%	59.2V±1%	74.0V±1%	88.8V±1%			
	Charger Voltage range	20.0-29.6V	30.0-44.4V	40.0-59.2V	50.0-74.0V	60.0-88.8V			
Output	Charge current	27.6V±1%	41.4V±1%	55.2V±1%	69.0V±1%	82.8V±1%			
	Pre-charge current	36.0A±10%	27.0A±10%	20.0A±10%	16.0A±10%	13.0A±10%			
	End Charge	≤7.2A ±20%	≤5.4A ±20%	≤4.0A ±20%	≤3.2A ±20%	≤2.6A ±20%			
ı	Rated Output power	1065.6W	1198.8W	1184W	1184W	1154.4W			
	Fit battery capacity (Note 3)	> 200Ah	>150Ah	100 - 200Ah	80 - 150Ah	60 - 130Ah			
		rrent≤1mA							
	(typical)								
Indication	LED	Red light charging, green light fully charged or standby							
	Rated input voltage	100 - 240VAC 50 /	60Hz						
	Input voltage range (Note 4)	90 - 264VAC							
	Power Factor	PF>0. 96 @ Full loa							
Input Unput Current 14A@100VAC									
	Impulse current	cold start 75A @230	OVAC						
	standby power	<6W							
	efficiency	92%	92%	93%	93%	93%			
	Short circuit protection (Note 5)	Internal relay closed							
Dueteetien	Output overvoltage protection	>15.5V*N							
Protection	reverse polarity protection	Internal relay closed							
	Over Temperature Protection	Turn off the output and automatically recover after the temperature is normal							
	operation temperature	-10 - +40℃ (Reference Derating Curve)							
	Working humidity	0 - 90% RH							
Environme nt	Storage temperature and humidity	d-40 - +70°C, 0 - 95%	RH						
	Cooling method	Fan cool							
	Anti vibration	10 - 50Hz, 2G 10min. 1cycle, 60min. each along X, Y, Z axes							
	Maximum temperature rise	< 30℃ (Surface)							
	Isolation withstand voltage	i/p to o/p: 3000V (1 min)							
	safety standards	IEC62368							
Safety&EI	n I IBMC interference	Item	Standard			Degree			
ectromagn etic		conduct	EN55032 FCC PART15			Class B			
Compatibil		radiation	EN55032 FCC PART15			Class B			
ity (Note 6		harmonic current	EN61000-3-2						
		Flicker	EN61000-3-3						
	EMC immunity	EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-11							
	mean time between failures	30000H							
Other	Size	288*168*89mm (L*W*H)							
	Weight	4300g							
	To modify different battery specifications and parameters, please contact the battery supplier for details.								
	2. Parameters not specifically mentioned are measured at 230VAC input, rated load, and ambient temperature of 25 ℃.								
Note	This is the range recommended by Gu Run. For maximum charging current, please consult the battery supplier.      Derating may be required under low input voltage, please refer to the derating curve for details.								
	This protection mechanism is specified for situations where a short circuit occurs after the charger is connected.								
	<ol> <li>The battery charger is considered as an independent device, but the final device still needs to reconfirm that the entire system complies with EMC directives.</li> </ol>								

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### **■** Temperature Derating Curve

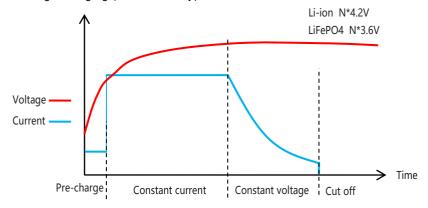


### **■** Voltage Derating Curve

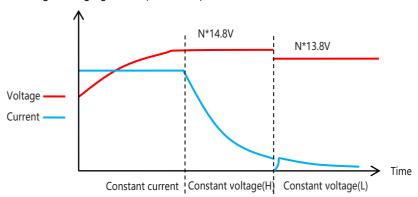


### 1. Charge curve

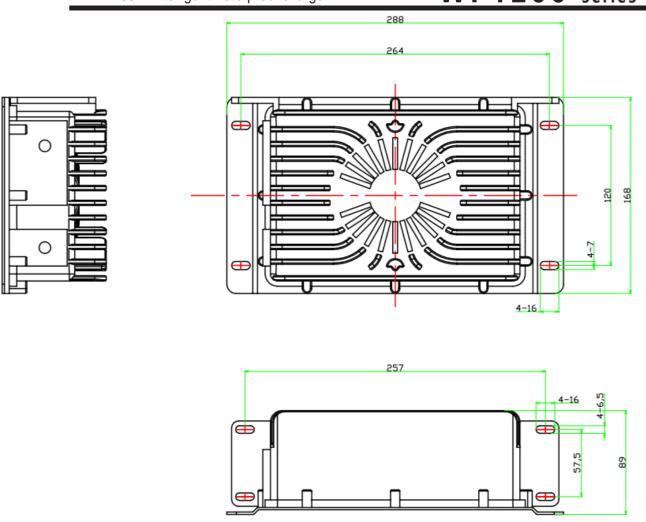
© 4-stage charging (lithium battery)



© 3-stage charging curve (lead-acid)



■ Size



Contact Email: <a href="mailto:charger2003216@vip.163.com">charger2003216@vip.163.com</a>