



#### ◆ Features :

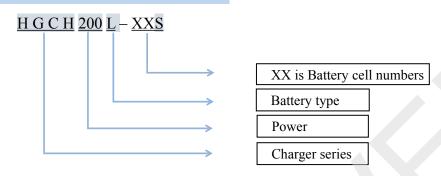
- Charger for all kind of Li-ion batteries and lead acid batteries
- Universal AC input, wide range of output voltage and current.
- Protection: Short circuit/Over voltage & Low voltage protection/Over current protection

  Over temperature protection/Wrong polarity connection protection
- BMS wake up function and precharge function.
- Charging curve setting by software, can be adjustable.
- Working temperature :  $-25^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- LED indicator for all charging status
- 3 poles AC inlet IEC320-C14
- Meet UL/CE standard
- Fully enclosed desk top plastic case, cooling by free air convection
- 2 years warranty

### ◆ Description

HGCH200 is a 200W smart charger , with wide output voltage , build-in MCU to control the charging curve by software , and independent technology to detect the output voltage & current . Smart , universal with wide range ,green with high efficiency , safe and small size are its main features .

### ◆ Product model number



## Specifications

Note: Output voltage & current can be changed based on different battery.

Model number can be changed based on different battery cell numbers.

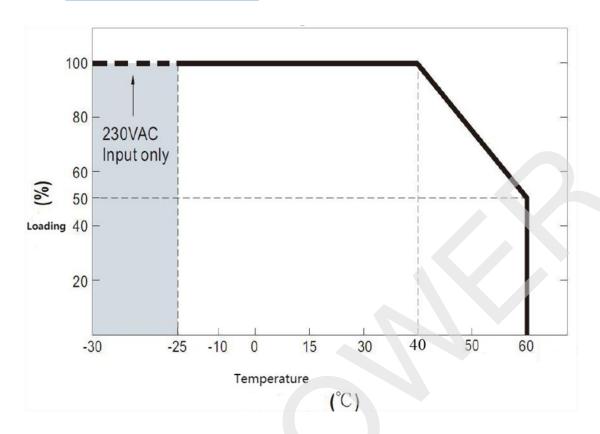
Model No.		HGCH200L-7S	HGCH200L-10S	HGCH200L-14S	HGCH200L-20S		
Output	DC Voltage	29. 4V	42. 0V	58. 8V	84V		
	DC voltage range	15-29. 4V	21-42. 0V	30-58.8V	42-84V		
	Max output current	6. 8A	4. 6A	3. 4A	2.4A		
	Max output power	199. 92W	193. 2W	199. 92W	201.6W		
	Recommended battery capacity	20Ah-70Ah	20Ah-50Ah	10Ah-30Ah	10Ah-25Ah		
		Normal in Charging : Green blinking					
	LED indicator	Full charged : Green on					
		Fault: Red blinking					
Input	Voltage range	90~264Vac					
	Frequency range	47~63Hz					
	Power factor	PF>0.98/115Vac,PF>0.95/230Vac(Full load)					
	Efficiency	90%	92%	92%	93%		
	AC current	3A/115VAC 1.5A/230VAC					
	Inrush current	70A at 230VAC					
	Leakage current	<1mA/240VAC					



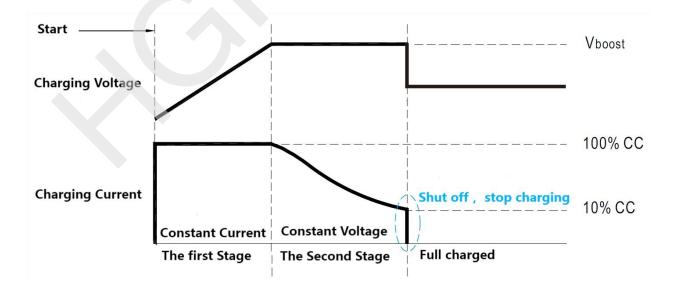
	Short circuit	No output and rep	peated detection, re	ecovers automatic	ally once fault removed		
Protection	Over Voltage	≥31V	≥44V	≥62V	× ≥88V		
	Low voltage	Shut down once less than 90% of normal output voltage					
	Over current	Shut down once over 5% of max output current					
	Wrong polarity	No output					
	Over temperature	Shut down , recovers automatically once temperatures was down					
Function	Adjustable output voltage	Adjustable between $75 \sim 100\%$ of the rated output voltage					
	Adjustable output constant current	Adjustable between $20{\sim}100\%$ the rated output current					
Environment	Working temperature	-25~+60°C					
	Working humidity	20~90%RH					
	Storage temperature &humidity	-40~+85℃, 10~95%RH					
		Operating: 5-500Hz 0.5G 15min/2cycles X,Y,Z axes					
	Vibration	Non	Non operating: 5-500Hz 1G 15min/2cycles X,Y,Z axes				
		Package: 5-500Hz 1.5G 15min/2cycles X,Y,Z axes					
	Max working altitude	10,000 feet					
	Safety standard	UL62368-1, TUV EN62368-1, EAC TP TC 004					
	Withstand voltage	1/P-O/P:3KVAC 1/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	Isolation resistance	I/P-O/P,I/P-FG, O/P-FG: 100M Ohms/500VDC/25 °C/70% RH					
	EMC Emission	EN55032(CISPR32)/EN55011(CISPR11) Class B					
	Elvie Emission	EN55032(C)	ISPR32)/EN55011	(CISPR11)			
		EN55024, EN61204-3, EN61000-6-2					
Safety &		ESD	EN61000-4-2	Level 3,8KV air; Level 2,4KV contact			
EMC		Radiated	EN61000-4-3	Level 3			
		EFT/Burst	EN61000-4-4	Level 3			
	EMC Immunity	Surge	EN61000-6-2	2KV/line-line 4KV/Line-Earth Level 3			
		Conducted	EN61000-4-6				
		Magnetic Field	EN61000-4-8	Level 4			
		Voltage Dips and Interruptions	EN61000-4-11	1	p periods,30% dip 25 o interruptions 250 periods		
Safety & EMC	Safety standard	UL62368-1, TUV EN62368-1, EAC TP TC 004					
	Withstand voltage	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC					
	Isolation resistance	I/P-O/P,I/P-FG, O/P-FG: 100M Ohms/500VDC/25 °C/70% RH					
Others	MTBF	>200000h(25 °C)					
	Dimension	210*86*48mm(L*W*H)					
	DC plug & cable	Available by customer requested					



### ◆ Derating Curve

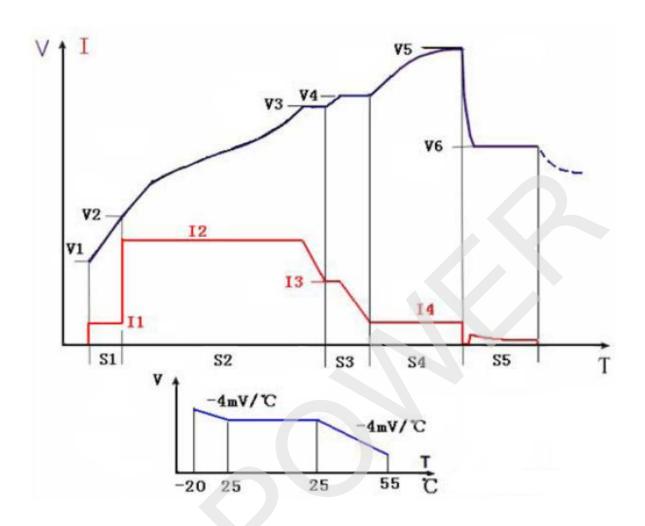


# ◆ Charging curve Li-on battery CC/CV mode





Charging curve Lead -acid battery



## Mechanical Specification

