



◆ Features :

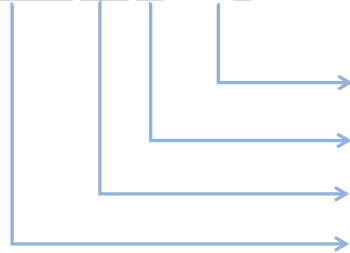
- Charger for all kind of Li-ion batteries and lead acid batteries
- Universal AC input , wide range of output voltage and current .
- Protection: Short circuit/Over voltage & Low voltage protection/Over current protection /Over temperature protection/Wrong polarity connection protection
- BMS wake up function and precharge function .
- Charging curve setting by software , can be adjustable .
- Working temperature : -25°C ~+60°C
- LED indicator for all charging status
- 2 poles AC inlet IEC320-C8
- Meet UL/CE standard
- Fully enclosed desk top plastic case , cooling by free air convection
- 2 years warranty

◆ Description

HGCH120 is a 120W 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

H G C H 120 L - X X S



XX is Battery cell numbers

Battery type

Power

Charger series

◆ Specifications

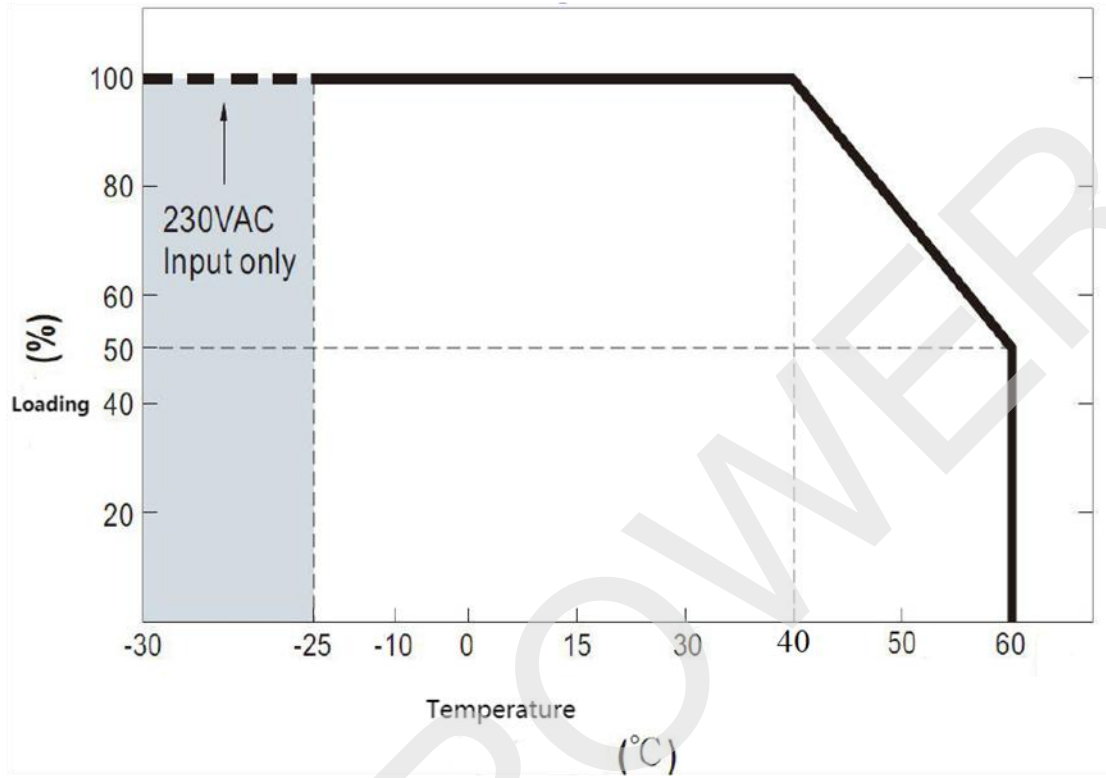
Note : Output voltage & current can be changed based on different battery .

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

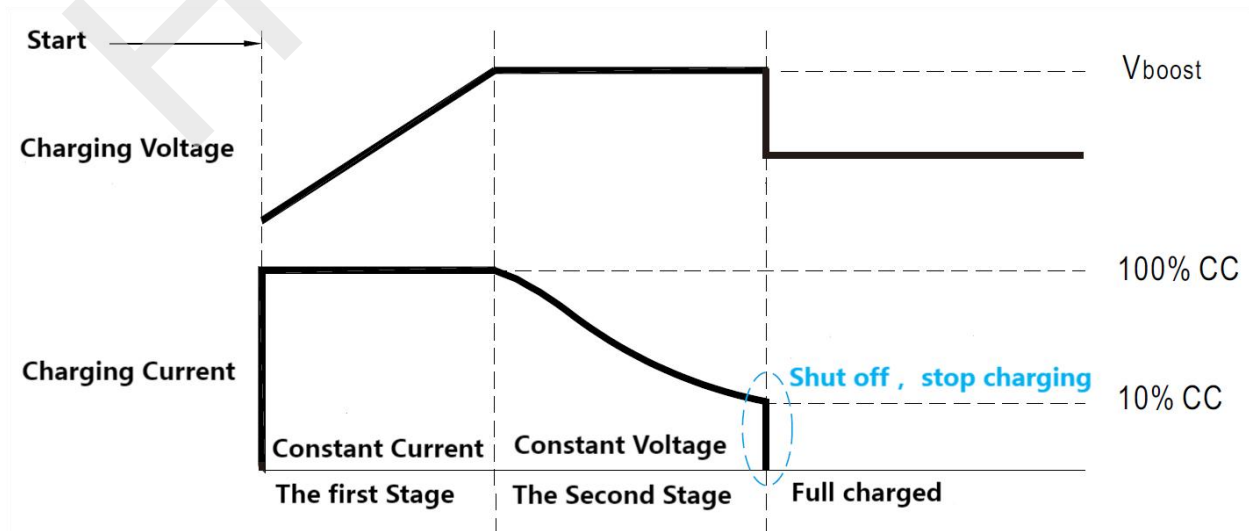
Model No.		HGCH120L-6S	HGCH120L-10S	HGCH120L-14S	HGCH120L-20S
Output	DC Voltage	25.2V	42.0V	58.8V	84.0V
	DC voltage range	15-25.2V	21-42.0V	30-58.8V	42-84.0V
	Max output current	4.5A	2.8A	2A	1.4A
	Max output power	113.4W	117.6W	117.6W	117.6W
	Recommended battery capacity	30Ah-50Ah	10Ah-30Ah	5Ah-20Ah	10Ah-20Ah
	LED indicator	Normal in Charging :Green blinking			
	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	88%	90%	90%	91%
	AC current	2A/115VAC 1A/230VAC			
	Inrush current	50A at 230VAC			
	Leakage current	<1mA/240VAC			

Protection	Short circuit	No output and repeated detection, recovers automatically once fault removed			
	Over Voltage	≥27V	≥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			
Environment	Working temperature	-25~+60℃			
	Working humidity	20~90%RH			
	Storage temperature & humidity	-40~+85℃ , 10~95%RH			
	Vibration	Operating: 5-500Hz 0.5G 15min/2cycles X,Y,Z axes			
		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 & 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			
	EMC Emission	EN55032(CISPR32)/EN55011(CISPR11)			Class B
		EN55032(CISPR32)/EN55011(CISPR11)			Class A
	EMC Immunity	EN55024, EN61204-3, EN61000-6-2			
		ESD	EN61000-4-2	Level3,8KV air; Level 2,4KV contact	
		Radiated	EN61000-4-3	Level 3	
		EFT/Burst	EN61000-4-4	Level 3	
		Surge	EN61000-6-2	2KV/line-line 4KV/Line-Earth	
		Conducted	EN61000-4-6	Level 3	
Magnetic Field		EN61000-4-8	Level 4		
Voltage Dips and Interruptions		EN61000-4-11	>95%dip periods,30% dip 25 periods, >95% 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			
	EMC Emission	EN55032(CISPR32)/EN55011(CISPR11)			Class B
Others	MTBF	>200000h(25 °C)			
	Dimension	173*76*38mm(L*W*H)			
	DC plug & cable	Available by customer requested			

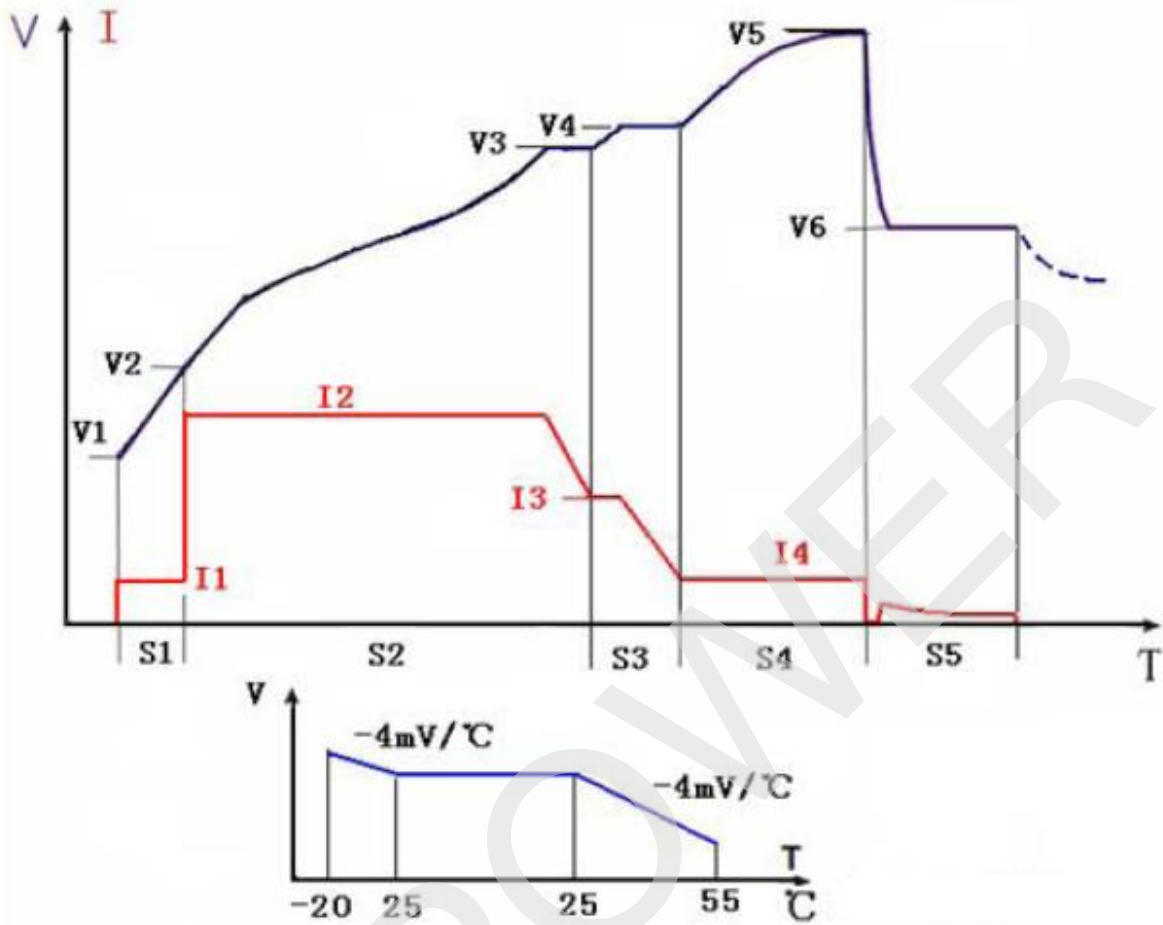
◆ Derating Curve



◆ Charging curve Li-on battery CC/CV mode



◆ Charging curve Lead-acid battery



◆ Mechanical Specification

