



◆ Features

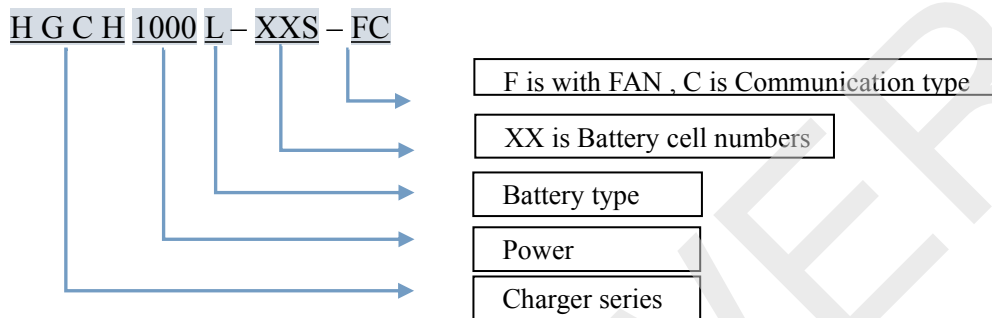
- Charger for all kind of Li-ion batteries and lead acid batteries
- Universal AC input , wide range of output voltage and current .
- Protection: Short circuit/Over voltage & Low voltage protection/Over current protection /Over temperature protection/Wrong polarity connection protection
- BMS wake up function and precharge function .
- Can be with Built-in CANBus .
- Charging curve setting by software , can be adjustable .
- Working temperature : -25°C ~+70°C
- LED indicator for all charging status
- 3 poles AC inlet IEC320-C14
- Meet UL/CE standard
- Metal case IP20 with thermal controlled fan
- 2 years warranty

◆ Description

HGCH1000 is a 1000W 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 . This charger also can be with built-in CANBus to set the charging voltage or current , and monitor the charging process.

◆ Product model number

H G C H 1000 L - X X S - F C



◆ Specifications

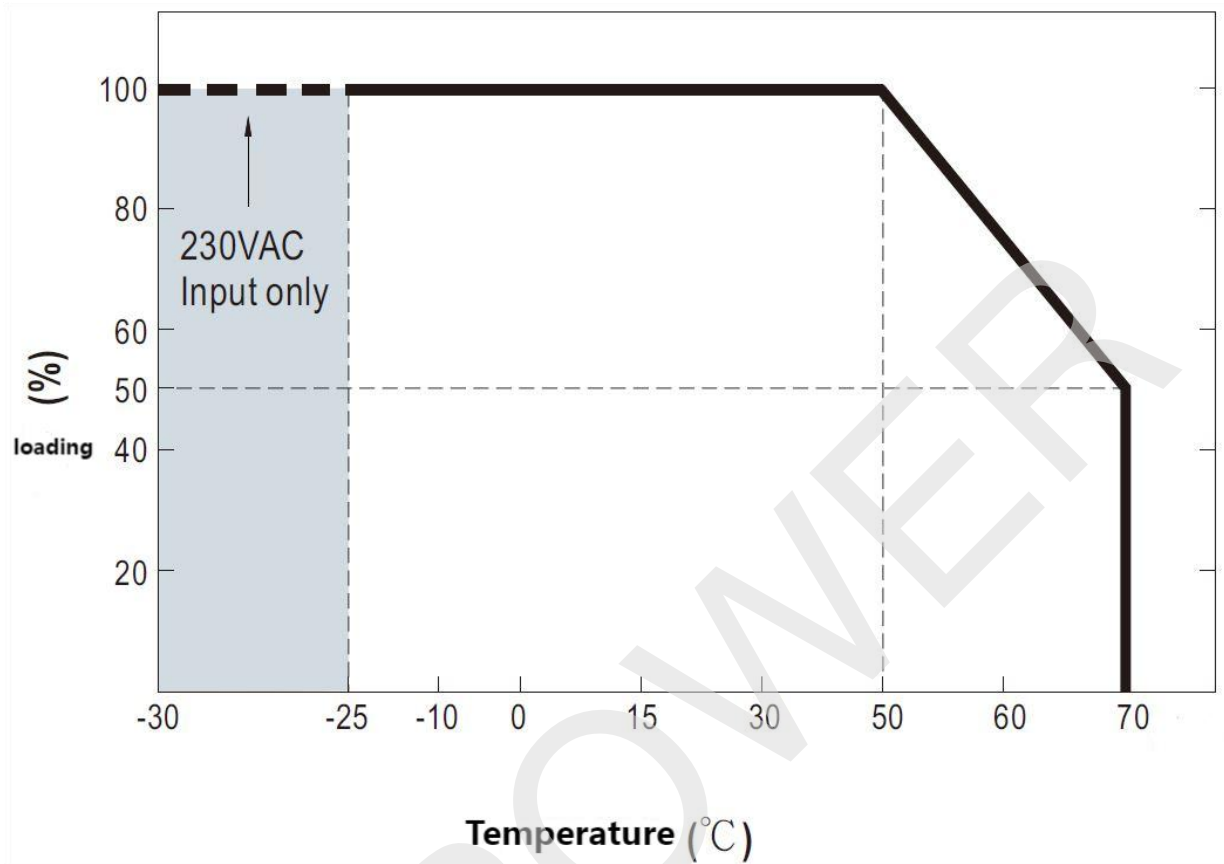
Note : Output voltage & current can be changed based on different battery .

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

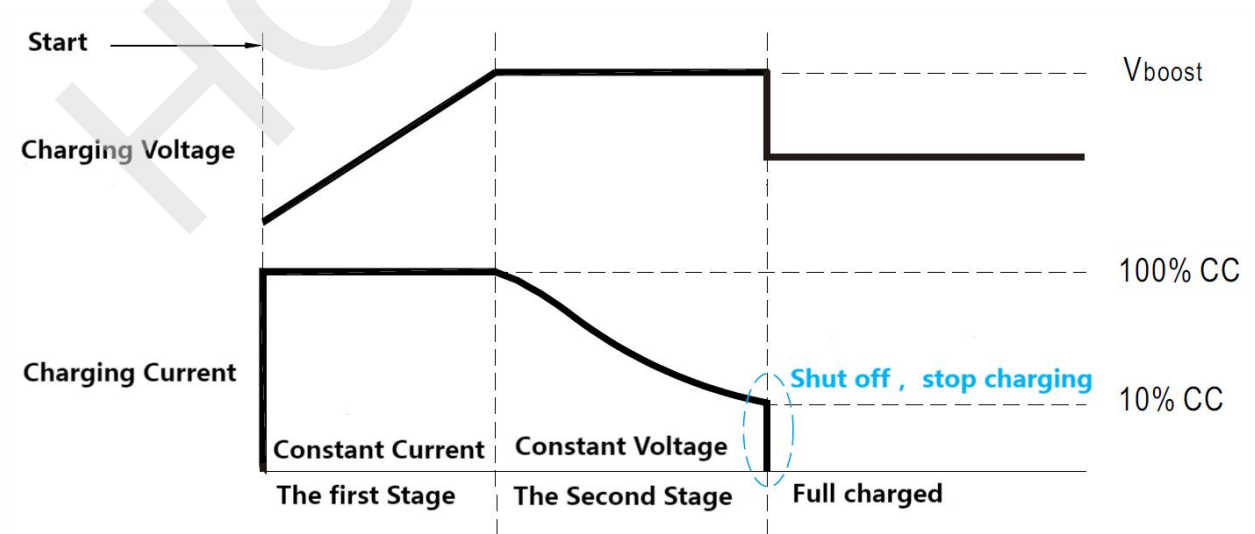
| Model No. | | HGCH1000L-6S-F | HGCH1000L-10S-F | HGCH1000L-14S-F | HGCH1000L-20S-F |
|-----------|--|--|-----------------|-----------------|-----------------|
| Output | DC Voltage | 25.2V | 42.0V | 58.8V | 84.0V |
| | DC voltage range | 15-25.2V | 21-42.0V | 30-58.8V | 42-84.0V |
| | Max output current | 35A | 24A | 18A | 12A |
| | Max output power | 882W | 1008W | 1058.4W | 1008W |
| | Recommended battery capacity | 80Ah-260Ah | 60Ah-240Ah | 40Ah-200Ah | 20Ah-120Ah |
| | LED indicator | Normal in Charging : Green blinking | | | |
| | Full charged : Green on | | | | |
| | Self detection:Green & Red blinking by turns | | | | |
| | 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 | 13A/115VAC 6A/230VAC | | | |
| | Inrush current | 70A 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 | | | |
| | Communication outage | Shut down , No output | | | |
| Function | Adjustable output voltage | Adjustable between 75~100% of the rated output voltage | | | |
| | Adjustable output constant current | Adjustable between 20~100% the rated output current | | | |
| Environment | Working temperature | -25~+70℃ | | | |
| | 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 | | | |
| Others | MTBF | >200000h(25 °C) | | | |
| | Dimension | 232*150*67mm(L*W*H) | | | |
| | DC plug & cable | Available by customer requested | | | |

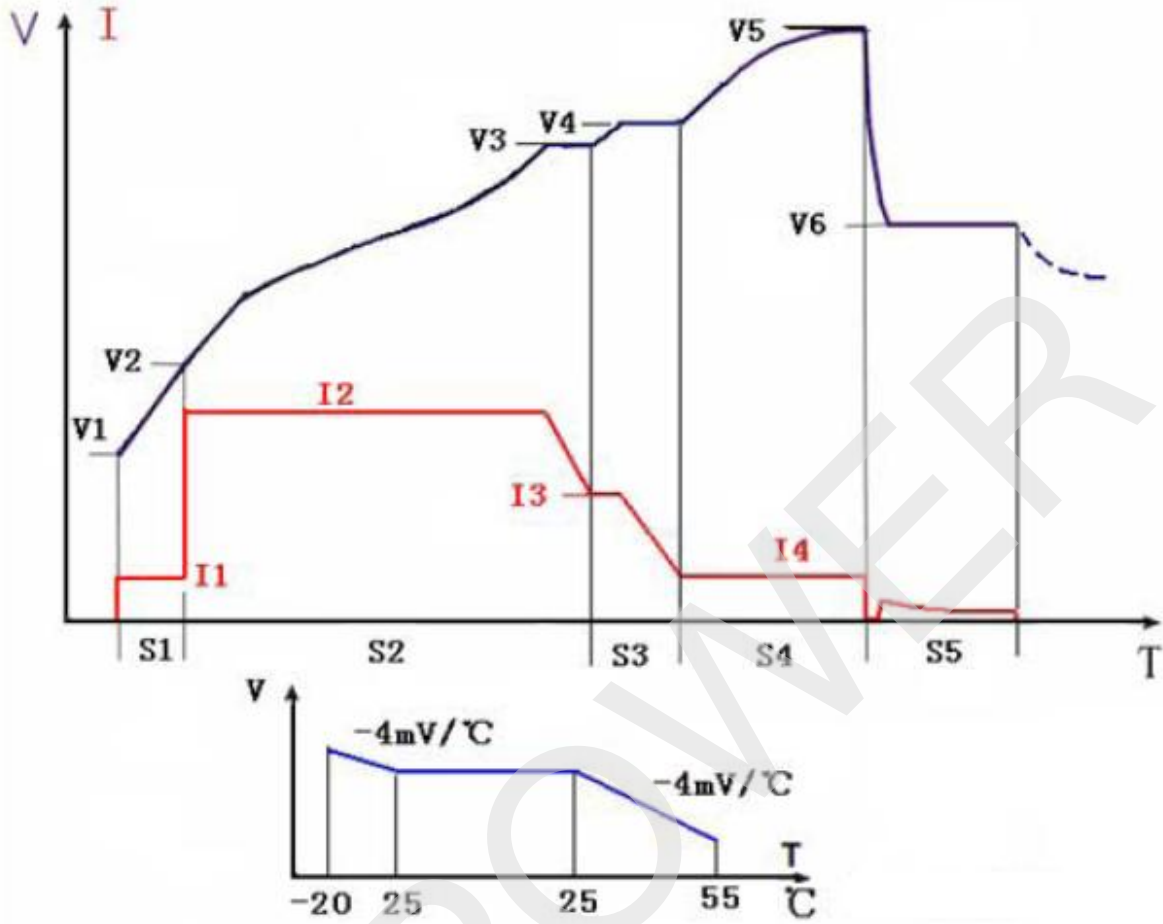
◆ **Derating Curve**



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



◆ Charging curve Lead-acid battery



◆ Mechanical Specification

