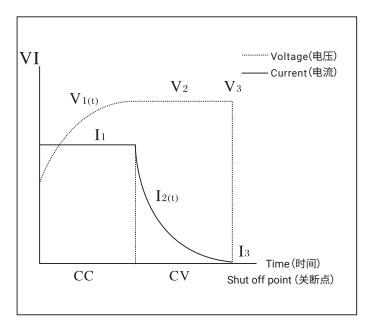
产品型号 Model	AP-PF600CH05220100
产品名称 Product Name	SPIRIT 1.0 Plus Fast Charger
适用电池 Suitable for	SPIRIT Battery Plus
最大输出功率 Max Output Power	522 W
最大输出电压 Max Output Voltage	52.2 V
输出电流 Output Current	10 A
输入电压 Input Voltage	100~240 Vac
规格尺寸 Dimensions	215x100x54 mm



Lithium battery charging curve 锂电池充电曲线

# SPIRIT 1.0 PLUS FAST CHARGER MANUAL SPIRIT 1.0 PLUS快速充电器使用说明书

Max Output Power 522W 最大输出功率522W

Suitable for SPIRIT Battery Plus 适用于SPIRIT电池Plus



Please read this manual carefully before use. 使用前请认真阅读此说明书!

2021.6 Version 2.1

#### A. Features:

- 1. This charger is configured with over-temperature, output short-circuit, output reverse polarity, output over-voltage, charging over-time protections.
- 2. Reverse polarity protection: when the charger is reverse connecting with the battery, the charger will shut down automatically. At this time, after switching off the power for several seconds, connect properly and restart the power to restore.
- 3. It implements automatic conversion for constant current charging stage and constant voltage charging stage. It cuts off when fully charged without overcharging.
- 4. LED display:

Charge indicator (blue): blink means that the charger is charging.

Fault/Protection indicator (red): blink means that the charger is in the protections.

Full/Standby indicator (green): shown constantly means that the charger is ready for charging or the battery is fully charged.

# **B. Operations:**

- 1. This charger is configured for SPIRIT battery Plus. To charge other batteries with this charger, consult the manufacturer first.
- 2. Connect the DC cables to battery terminals.
- 3. Confirm the charger's AC input voltage level confroms to the local main/grid/AC voltage level. Then connect the charger system to a wall socket strongly. When the Charge indicator blinks, it means the AC power is on.
- 4. When the internal temperature of the charger reaches the maximum operating temperature, the charger will reduce its internal temperature by reducing the output current. In extreme conditions, even if the output current is reduced, the internal temperature of the charger may continue to rise. In this case, the charger will turn off and restart automatically after the internal temperature returns to normal.

#### C. Notices:

- 1. The charger is configured for SPIRIT battery Plus. The charging curve is attached.
- 2. The charger should be used in well ventilated, dry, particle free environment.
- 3. The aluminum case is an important means of heat dissipation, thus should not be covered. Do not obstruct the wind/cooling channels.
- 4. Should the charger not work proper, please follow the check list:
  - \* is the battery and charger correctly connected?
  - \* is the voltage level appropriate?
  - \* is the charger in a protected state? Has the charger entered protection mode?

After troubleshooting and fixing the problem, disconnect power for a few seconds, then reconnect to mains. If the charger still does not work properly, please contact manufacutrer immediately. Do no attempt to fix the charger without technical support from the manufacturer.

5. Opening the housing of the charger without prior written consent of the manufacturer voids the manufacturer's warranty immediately.

#### 一、本机特点:

- 1.本充电器具有过热保护、输出短路保护、输出反接保护、输出过压保护、充电超时保护等多重保护功能;
- 2.电池保护:电池反接时,充电器自动关断,此时断开电源数秒后改正反接并重启即恢复;
- 3.恒流、恒压充电过程自动转换,充满自动关断,绝无过充;
- 4.指示灯显示:

充电指示灯Charge(蓝):闪烁为处于充电状态。

警告指示灯Fault/Protection(红):闪烁为进入保护状态。

状态指示灯Full/Standby(绿):常亮为电池已充满或充电器未连接。

## 二、安装使用方法:

- 1.本充电器适配SPIRIT电池Plus,若要给其他电池充电,请先咨询电池厂商;
- 2.连接直流输出线到电池;
- 3.先检查交流电压等级是否相符,然后接上电源,充电指示灯蓝色闪烁;
- 4.当充电器内部达到最大操作温度,充电器自身会通过减少输出电流来降低其内部温度。

在极端环境下,即使降低了输出电流,充电器内部温度还可能不断上升。在这种情况下,充电器将完全关断,待内部温度恢复正常后自动重启。

## 三、注意事项:

- 1.本充电器适用于SPIRIT电池Plus,电池充电曲线附后;
- 2. 充电时,将充电器放置于少尘、干燥和通风的环境下;
- 3. 铝质外壳作为散热器,不能被覆盖,避免过热;
- 4. 若充电器无法正常工作,请根据下列检查清单进行检查:
- \* 电池和充电器是否连接恰当?
- \* 电压水平是否合适?
- \* 充电器是否处于受保护状态?充电器是否已经进入保护模式? 排查故障并解决问题后,断电数秒钟,然后再重新连接。如果充电器仍然无法正常工作,请立即联系厂商。若无厂商指导,请勿尝试解决问题。
- 5.请勿擅自拆卸充电器,否则保修将失效。

#### 装箱清单

● 快速充电器一台 ● 电源线一根 ● 使用说明书一份

## **Packing List**

● Fast Charger x1 ● Power Cable x1

User Manual x1