# 608PD

## 智能充电器

使用说明

ISDT®

**感谢您购买ISDT 608PD 智能平衡充电器。**

欢迎您登陆艾斯特官方网站www.isdt.co了解更多智能平衡充电器功能，购买丰富相关配件。由于产品功能的不断更新，您手中的说明书可能会与实际操作有所出入。请以实际智能平衡充电器功能为准。

## 警告与安全提示

**为确保您的安全和良好的用户体验，请在使用本产品前阅读本说明和警告。**

- 不要在无人值守的情况下使用充电器，如充电器出现任何功能异常，请立即终止使用并对照说明书查阅原因；
- 确保充电器远离灰尘、潮湿、雨和高温，避免阳光直射及强烈震动；
- 请将充电器放置于耐热、不易燃及绝缘的表面。不要放置在车座、地毯等类似的地方使用。请确保易燃、易爆炸物品远离充电器的操作区域；
- 确保您已充分了解所使用电池的充放电特性及规格，并在充电器中设置恰当的充电参数。如参数设定错误，可能对充电器及电池造成损坏，甚至发生火灾、爆炸等灾难性后果。

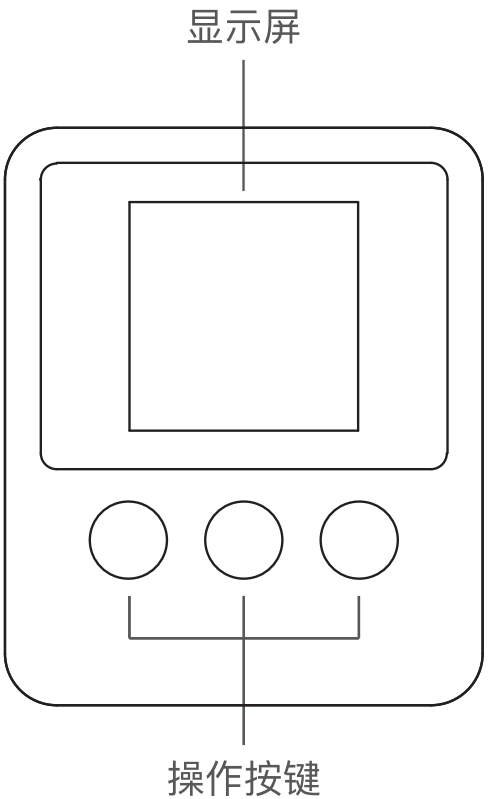
**接入电池前请确保电池电压与本产品工作电压范围相符；**
**工作过程中请确保选择的串数与接入电池串数一致。**

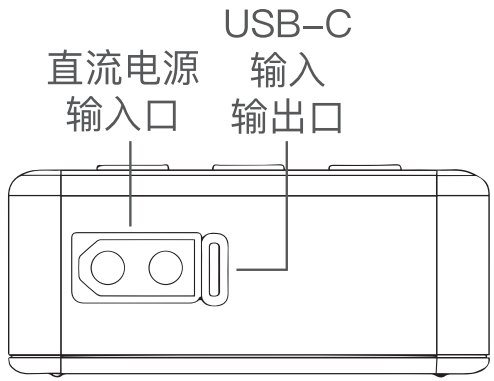
使用过程中确保本产品远离热源及潮湿环境，并注意通风散热；
本产品工作过程中将产生大量热量，切勿让儿童操作，以免烫伤；
使用结束后，应尽快断开及移除电池。

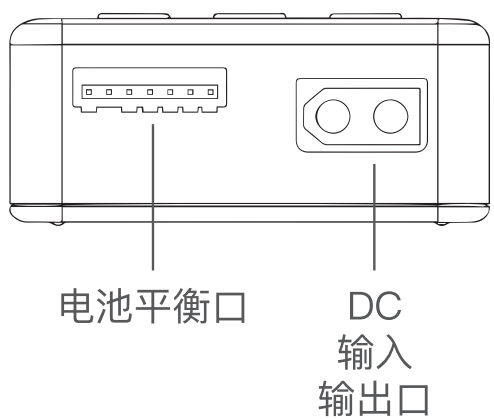
本产品支持PD2.0/3.0/3.1输入输出，也可使用航模电池给手机等用电设备充电；也可通过普通适配器来为航模电池充电；或通过直流电源以及电池进行充电任务。

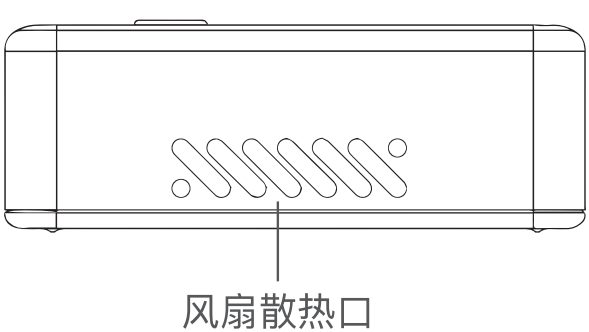
注：为保证设备正常使用和用户人身安全，
请勿同时接入机器顶端的XT60与USB Type-C接口。

## 接口 / 按键



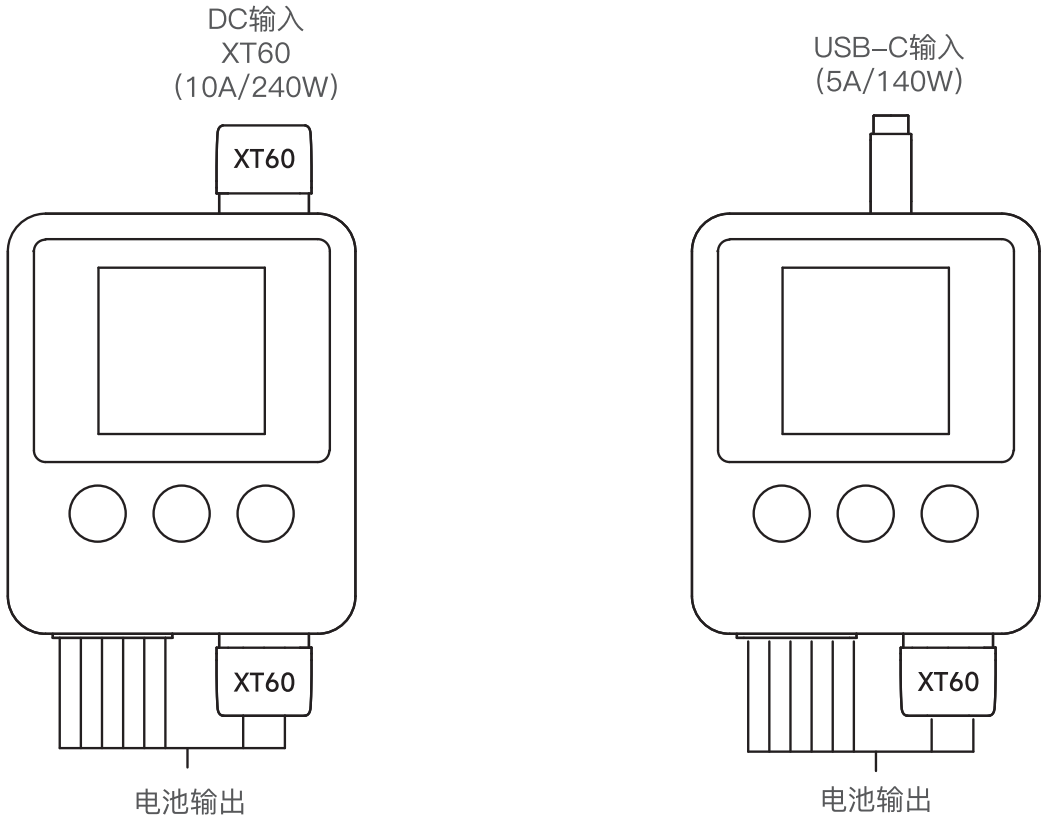

### 操作按键

左键：屏幕内容向左滚动。

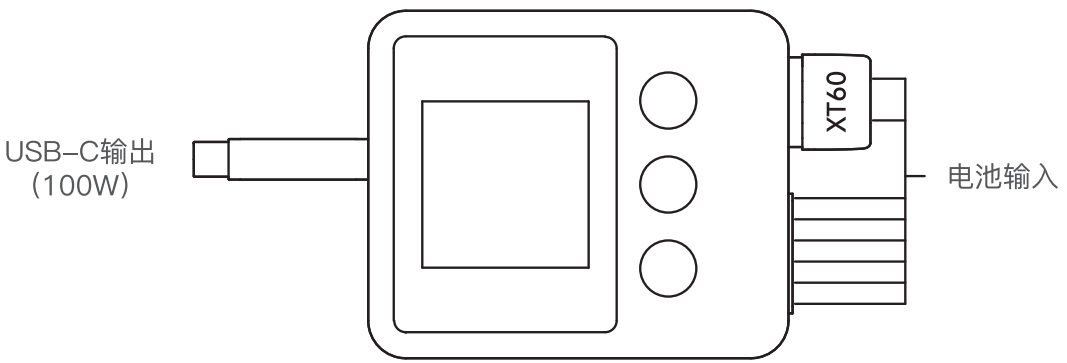
右键：屏幕内容向右滚动。

中键：短按确认当前操作，长按进入菜单。

## 充电模式


DC输入
XT60
（10A/240W）
XT60
XT60
电池输出
USB–C输入
（5A/140W）
XT60
电池输出

## 放电模式


USB–C输出
（100W）
XT60
电池输入

## 产品规格

最大输入电流：DC 10A, USB–C 5A
输入电压范围：DC 5–30V, USB–C 5–28V
输出电压范围：DC 3.0~30V
充电电流：0.5~10.0A
最大充电功率：240W/10A
最大放电功率：USB–C 100W/5A
支持电池类型及串数：LiFe, LiPo, LiHv (4.35V~4.50V) 1–6S/ Pb 1–12S/ NiMH 1–16S
平衡电流：0.8A/Cell Max
工作温度：0~40℃
存储温度：–20~60℃
电池电压异常报警：支持
串数设定错误报警：支持
尺寸：72.5×60×26.6mm
重量：85g (±10%)

## 如何确定充电电流

在充电前必须先了解清楚所用电池允许的最大充电电流，使用过大的电流对电池充电会对电池的寿命造成影响甚至损坏，过大的电流也会造成充电过程中电池发热甚至爆炸。电池充放电能力一般以C数来标识，充电C数乘以电池容量就是电池所支持的最大充电电流，例如1000mAh的电池，标识充电能力是5C，那么最大充电电流为：1000*5=5000mA=5A，也就是最大支持5A充电。对于锂电池而言，如果无法确定电池充电C数，为了安全起见请将充电电流设定在不大于1C的值。
充电C数与充电时间的参考关系：充电时间≥60分钟/充电C数
(例如使用1C充电，充电完成时间大约需要60~70分钟)，
由于电池转换能效的差异，此时间有可能会有所延长。

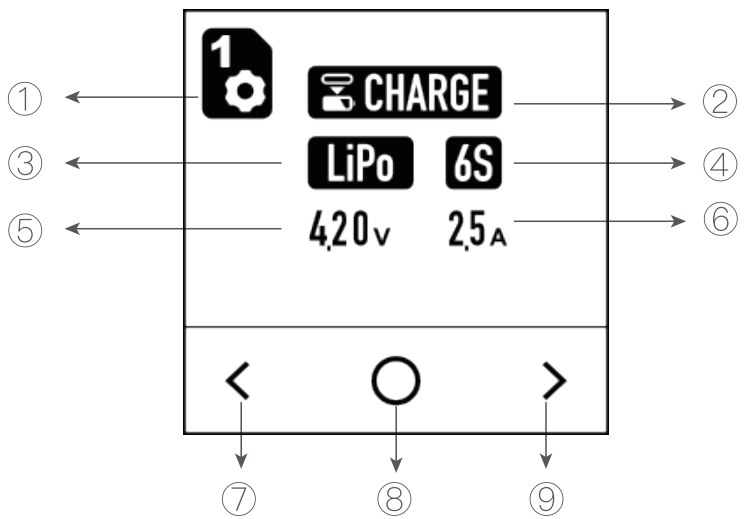
出于安全角度考虑，在使用直流电源以及电池供电时会提示并设置一个输入电压的最低限制值，当检测到电压低于这个值时会停止工作并报错。除去正常的充电功能外，本品还支持单独连接电池充电线与平衡线以确定电池的电压。

## 充电器预设电池类型及任务参数

| | NiCd/MH | Pb | LiFe | LiPo | LiHv |
|---|---|---|---|---|---|
| 额定电压 | 1.20V | 2.00V | 3.20V | 3.70V | 3.80V |
| 满充电压 | 1.40V | 2.40V | 3.65V | 4.20V | 4.35V–4.50V |
| 平衡充 | ✗ | ✗ | ✓ | ✓ | ✓ |
| 非平衡充 | ✓ | ✓ | ✓ | ✓ | ✓ |
| 支持串数 | 1~16S | 1~12S | 1~6S | 1~6S | 1~6S |
| 最大充电电流 | 10.0A | 10.0A | 10.0A | 10.0A | 10.0A |

## 任务设定

将608PD接上电源，连接好电池，短/长按中键进入充电参数选择界面：




①：预设任务序号（最多五组预设充电参数）；②：充电任务标志；
③：电池类型；④：电池串数；⑤：充电结束条件（电池满充电压）；
⑥：充电电流；⑦：左按键指示标志；⑧：菜单键指示标志；
⑨：右按键指示标志

## 操作方式

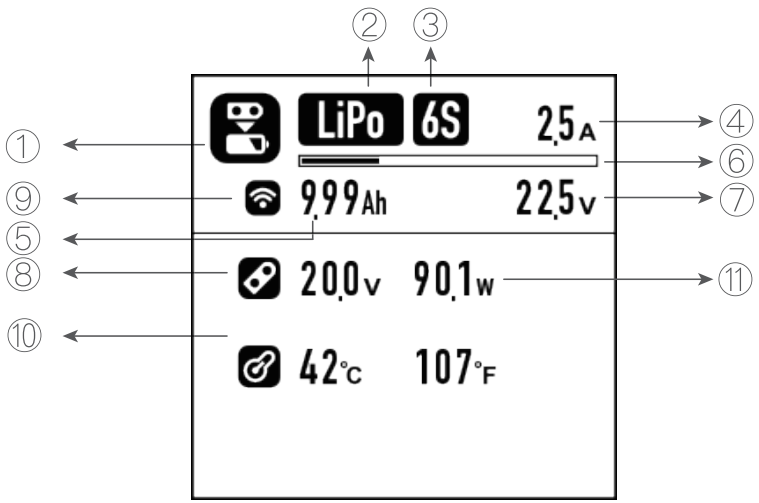
在任务选择界面，长按中键进入参数修改模式，可修改参数会闪烁；

短/长按左右键可修改参数值，短按中键切换到下一参数进行修改；

长按中键保存并退出参数修改模式；

在任务选择界面短按中键可以开始当前任务，长按左/右键可返回主页面；

充电任务的过程中，可以通过长按中键调整充电电流，短按中键结束当前任务 。




①：充电标志；②：电池类型；③：电池串数；④充电电流；

⑤：充电充入容量；⑥：电池电量百分比；⑦：当前电池电压；

⑧：输入电压标志；⑨：蓝牙连接标志；⑩：温度；⑪：输入功率；

注：① 没有开始工作时为 ，使用直流电源供电并开始工作时为 ，

使用PD协议供电并开始工作时为 ，任务完成后该图标变为绿色；

⑧ 使用直流电源供电时该图标为 ，使用TYPE-C供电时该图标为 ；

其后的两个数字分别为输入电压和输入功率；如使用PD协议则可显示其所提供的功率大小；

⑩ 其后数字分别为摄氏度与华氏度。

在需要时，可通过本产品使用电池，给具有PD协议或具有USB-C的设备供电，
具体方法为：先连接电池充电线与平衡线，短按中键，
进入修改电池最低电压限制界面，如下图所示（左图为有连接平衡线，
右图为无平衡线连接），短按中键以确定保存并开始任务，
长按中键以取消保存并返回主页面。任务开始后连接USB用电设备。



在充电器工作时，可以使用左右键切换显示内容。
电池的每节电压只有连接平衡线时才能显示；
只有在充电恒流阶段时，才能显示内阻界面。

使用DC或电池供电时，一分钟无操作系统会进入休眠状态，
点击任意按键即可重新唤醒。

## 手机连接方法

扫描尾页的二维码或搜索下载并安装ISD Link APP，开启无线通信后打开应用，
点击应用右上角的“+”号，将手机靠近运行中的设备，
点击所要连接的设备选项，并于设备上确认之后，
等待设备添加完毕即可开始使用。

ISD LINK下载二维码

# 608PD

SMART CHARGR

# Instruction Manual

ISDT®

Thanks for purchasing the ISDT 608PD Smart Charger.

Please visit: www.isdt.co for more details on the functions of this smart charger, as well as purchase various accessories.Functions of products will be kept on upgrading, the manual in your hand may be different from the actual operation, please refer to the actual functions.

## Warnings and Safety Tips

**For your safety and a better user experience, please read this manual and follow the instruction before using the new charger.**

- Never use the charger without supervision, please stop using the charger and refer to the manual for reasons if any functional abnormity.
- Keep the charger away from dust, humidity, rain and high temperature, as well as avoid direct exposure to the sunlight and intense vibration.
- Place the charger on a heat–resisting, non–flammable and insulating surface. Do not use it on the car's seats, carpet or other similar places. Keep inflammable and explosive objects away from operation areas of the charger.
- Read the instruction manual carefully to be familiar with the features of the charger, and set proper charging parameters before operating. Setting the parameters incorrectly will result in damage to the product, personal property and cause serious injury as well.

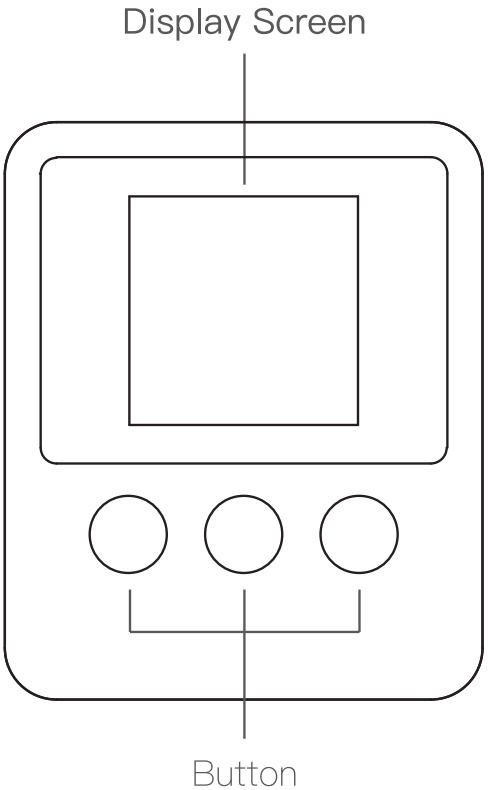
### NEVER USE CHARGER UNSUPERVISED

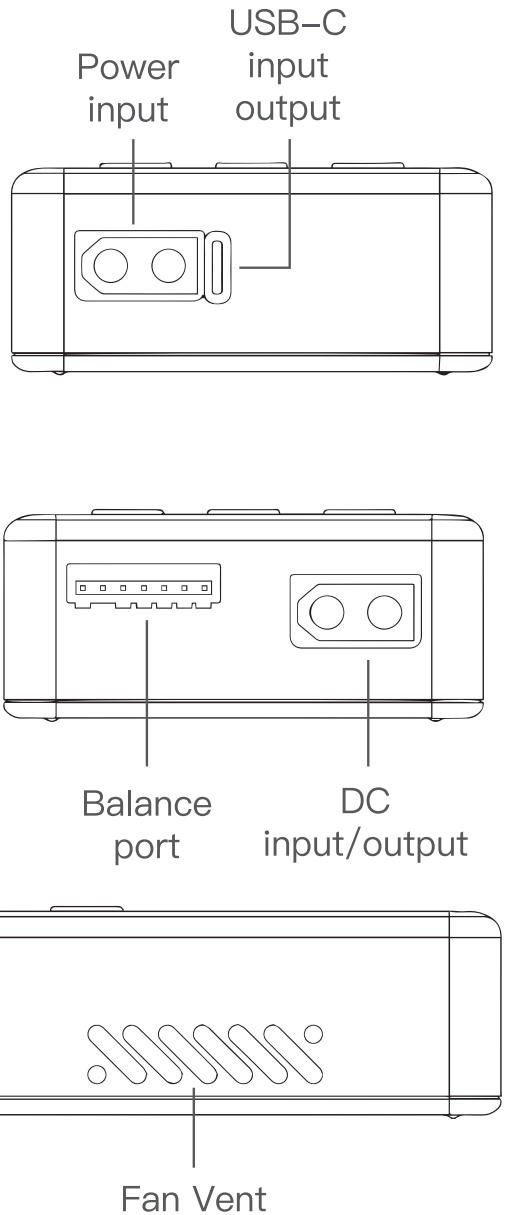
- Never attempt to charge primary (non–rechargeable) batteries.
- Batteries pose a severe risk of fire if not properly handled.
- Read entire operation manual before using charger.
- This unit may emit heat during use.
- Only operate this device in a cool ventilated area away from flammable objects.
- Failure to observe safety procedures may cause damages to property or injury.


WARNING!


FIRE HAZARD!

## Function Buttons




### Button

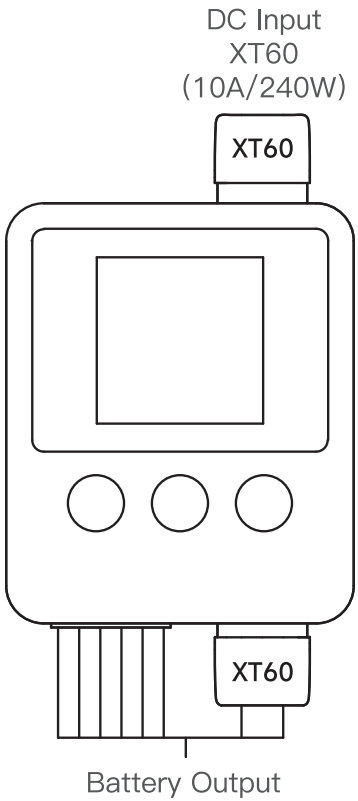
Left button: The screen content scrolls to the left.

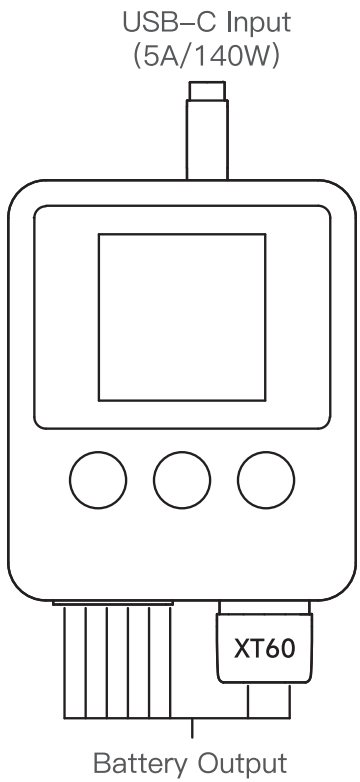
Right button: The screen content scrolls to the right.

Middle button: Short press to confirm current operation.

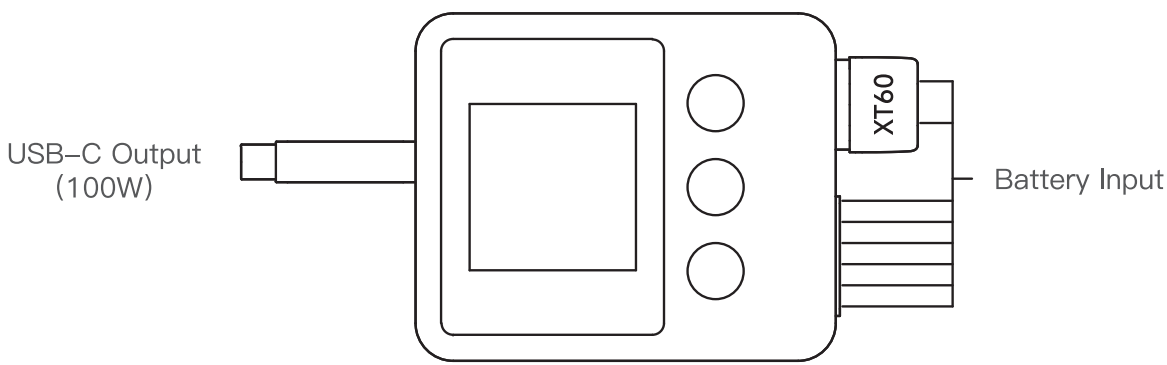
Long press to enter the menu.

## Charge Mode




## Discharge Mode



## Product Specifications

Max input current: DC 10A, USB-C 5A
Input voltage: DC 5-30V, USB-C 5-28V
Output voltage: DC 3.0~30V
Balance current: 0.8A/Cell Max
Working temperature: 0~40℃
Storage temperature: -20~60℃
Abnormal voltage alarm: Support
Incorrect cell count setting alarm: Support
Supported battery types and cell: LiFe, LiPo, LiHv (4.35V~4.50V) 1-6S/ Pb 1-12S/ NiMH 1-16S
Charging current: 0.5~10.0A
Max. charging power: 240W/10A
Max discharging power: USB-C 100W/5A
Dimension: 72.5×60×26.6mm
Weight: 85g (±10%)

## How to Confirm Charging Current

Make sure to know the maximum charging current of the battery before charging, never use excessive current to charge to damage your battery, which will result in over heat even explosion during the charging process.The charging and discharging capacity of battery is usually marked with C value. Multiplying the charging C value and battery capacity equals to the maximum charging current supported by the battery. For example, for a 1000 mAh battery with a charging capacity of 5C, the maximum charging current would be 1000*5=5000mA; therefore, the maximum charging current is 5A. For a lithium battery, if it is impossible to confirm the supported charging C value, please set the charging current below 1C, for the sake of its (lithium battery) safety. The reference relation between C value and charging time: charging time ⩾60 minutes/ charging C value (e.g. it needs around 60-70 minutes to complete charging with 1C). Due to differences in battery conversion efficiency, the time to complete the charging might be extended.

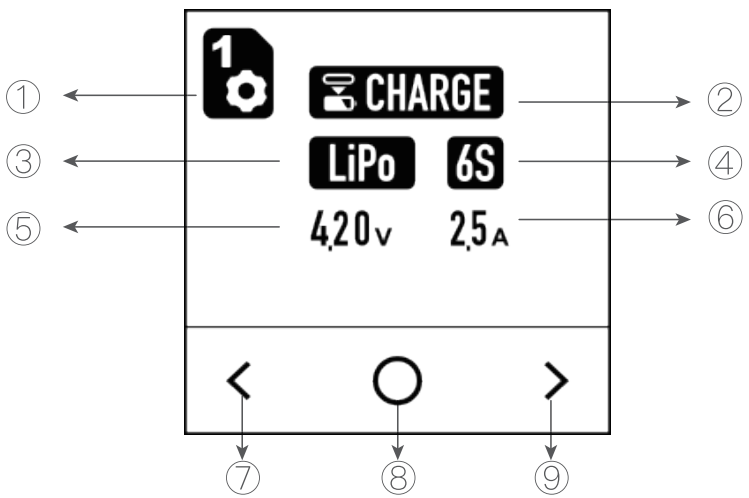
For safety reasons, when using DC power supply and battery power supply will prompt and set a minimum limit value of input voltage, when the voltage is detected to be lower than this value will stop working and report an error.
In addition to the normal charging function, this product also supports the connection of a separate battery charging cable and balancing cable to determine the battery voltage.

## Preset Battery Type of Charger and Task Parameters

| | NiCd/MH | Pb | LiFe | LiPo | LiHv |
|---|---|---|---|---|---|
| Rated voltage | 1.20V | 2.00V | 3.20V | 3.70V | 3.80V |
| Full charge voltage | 1.40V | 2.40V | 3.65V | 4.20V | 4.35V–4.50V |
| Balance charge | ✗ | ✗ | ✓ | ✓ | ✓ |
| Unbalanced charge | ✓ | ✓ | ✓ | ✓ | ✓ |
| Supported cell count | 1~16S | 1~12S | 1~6S | 1~6S | 1~6S |
| Max. charging current | 10.0A | 10.0A | 10.0A | 10.0A | 10.0A |

## Operating the Charger

Connect the 608PD to the power supply, connect the battery, short/long press the center button to enter the charging parameter selection interface:




①: Preset task sequence number (Up to five preset charging parameters);

②: Mission Sign; ③: Battery Type; ④: Battery String Number;

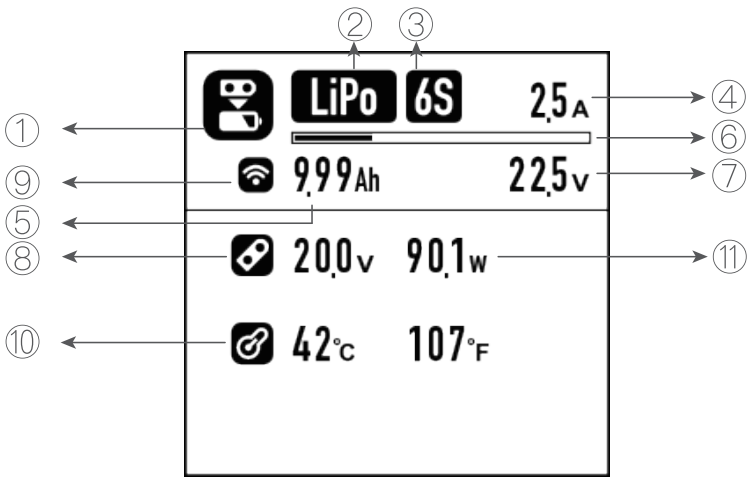
⑤: Conditions for the end of charging (Battery Full Charge Voltage);

⑥: Charging Current; ⑦: Left Button Indication; ⑧: Menu Key Indication;

⑨: Right Button Indication

## Operating mode

In the task selection interface, long press the center key to enter the parameter modification mode, the modifiable parameters will flash; Short/long press the left/right key to modify the parameter value, short press the center key to switch to the next parameter for modification; Long press the center key to save and exit parameter modification mode; In the task selection interface short press the center key to start the current task, long press the left/right key to return to the main page; During the charging task, the charging current can be adjusted by long pressing the center key, and short pressing the center key ends the current task.




①: Charging Sign； ②: Battery Type； ③: Battery String Number；

④: Charging Current； ⑤: Battery Charged Capacity； ⑥: Percentage of power；

⑦: Current Battery Voltage； ⑧: Input Voltage Sign； ⑨: Wireless Connection Sign；

⑩: Temperature； ⑪: Input Current；

Note: ① Standby mode: ; When powered by DC power supply and start charging: ; When powered by PD protocol and start charging: ; The status indicator will turn green upon the completion of the task;

⑧ When powered by DC power supply: ; When powered by TYPE-C power supply: ; The following two numbers are the input voltage and input power;

If the PD protocol is used, the amount of power supplied can be displayed.

⑩ Celsius and Fahrenheit.

When it is ncessary, you could use a battery to connect 608PD to charge the electric device which with PD protocol or USB–C.
Steps: First, connect the charging cable and the balance cable,
short press the center key to enter the interface of modifying the minimum voltage limit of the battery, please see the following picture (The left is with balancing cable connected, the right is without balancing cable connected), short press OK to save and start the task, long press to cancel the save and return to the main page.
Please connect the USB power device after the task starts.



While the charger is working, the display can be switched using the left and right keys. The voltage per cell of the battery can only be displayed when the balance cable is connected; The internal resistance screen can only be displayed when the charging constant current stage is in progress.

This product supports PD2.0/3.0/3.1 input and output, and can be used to charge phones and other electrical devices with a RC battery;
It can also be charged for the RC battery by ordinary adapter;
or charged through DC power and batteries.

Note:
In order to ensure the normal use of the equipment and the personal safety of the user, the Do not access the XT60 and USB Type-C ports on the top of the machine at the same time.

When using DC or battery power, one minute without the system will enter the hibernation state. Click any key to reawaken.

## APP Connection

Scan the QR code on the end page or search to download and install ISD Link APP, please turn on wireless communication before open the APP.
Click the "+" sign at the top right corner of the APP, and bring your phone close to the running device.
After clicking on the device option to be connected and confirming on the device, wait for the device to be added before starting to use.

Download ISD Link