

Y-Hub产品说明



产品介绍

Y-Hub是一种电源分析仪设备（也称电池监控器）。通过持续监测电池系统的电压、电流、温度等基础数据，利用边缘计算和大数据算法分析电池的SOC、SOH及异常警告等有效信息，通过提醒（如提醒保养、减少过度深放电和不完全充电等）帮助用户养成正确使用电池的习惯，显示更可靠的设备运行时间、提高电池寿命、降低运营成本，创造更好的经济和社会效益。

Y-Hub支持蓝牙BLE4.2/5.0 同时，可以扩展全球通讯的物联网卡上网模块和全球定位系统，方便监控和管理世界各地的设备。

Y-Hub拥有强大的CANBUS接口拓展能力，可以灵活与所有支持CAN通信的设备接口通信，辅助设备信息上传云端。

Y-Hub采用灌胶+直出线结构设计，拥有IP67防水等级，确保设备寿命更长久，用户使用更安心。

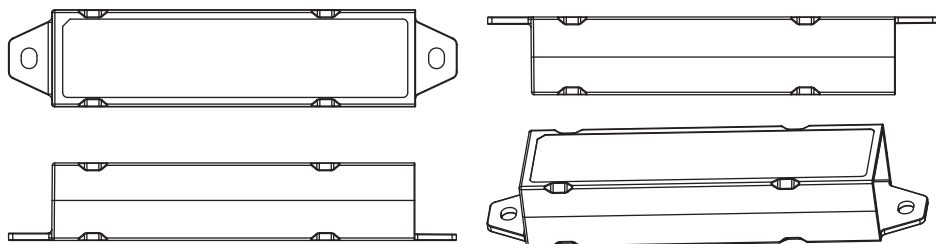
配件清单

• 必备配件

电源正极线: 线长1米,含M10端子,带2A保险丝。

电源负极线: 线长1米,含M10端子,内置温度采集感应器 (选配)。

电流采集线: 线长1米,卡扣式安装



• 可选配件

液位计: 铅酸加水电池，有液帽盖及钻孔两种类型。

继电器线: 外置20A@5V继电器，实现远程控制开关，如远程锁车。

通讯线: CANBUS通讯线，RS485通讯线，通用输入最高支持80VDC。

其它信号线: 点火信号采集线，发动机运作信号采集线，第二路电压和电流采集线，针式温度采集线，分流器类型电流采集线。

规格参数

工作电压: 24~150VDC (可选12~150VDC) 。

工作温度: -20°C~70°C。

测量范围: 电压: 17.5-150 VDC (可选8-150VDC) , 精度 ± 0.1 VDC 电流: ± 300 A(默认) / ± 800 A, 精度 ± 0.5 A (霍尔) / ± 0.1 A(分流器) 温度: -20°C~110°C, 精度 ± 1 °C。

设备功耗: 额定功率: 0.6W

硬件在绝对低电压下保护电池功率为0W。

通讯: 支持CANBus 2.0A and 2.0B标准协议
如SAE J1939, CANOpen。
支持低功耗蓝牙4.2/5.0 近距离通讯。
支持RS485 通讯。
可扩展支持: 全球覆盖网络频段/不同国家和地区的大多数运营商。
支持GPS / GLONASS /北斗。



Y-Hub user manual



Introduction

Y-Hub is a device for power analysis, also known as "Battery Monitor". By measuring the voltage, current and temperature it can calculate the SOC (State of Charge) and SOH (State of Health) of a battery. And it can also provide other derived information such as over temperature, over or under voltage, low SOC, lack of acid level etc.

Y-Hub will send the raw data in real time to our GPD. Connect cloud system, and the cloud system will store and analyse the data. Eventually we will provide real time warning notifications and weekly report suggestion for better battery maintenance, and thus extend the life of battery and save cost.

Y-Hub is built-in with **this** capabilities: Bluetooth Low Energy 4.2/5.0,

Extension support: Global 4G network, GPS location,

Y-Hub support CANBUS communication. It can be connected to any existing CANBUS system, extract status information and send back to our GPD. Connect system for display and analyse.

Y-Hub is sealed completely with IP67 rating, making it more reliable in harsh environment.

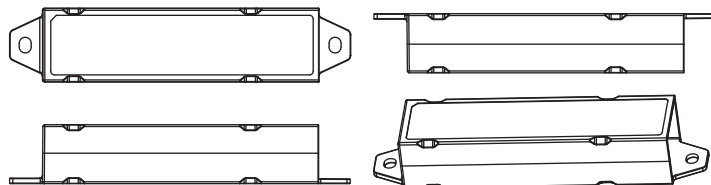
Packing list

• Standard

Positive wire: 1 meter with M10 terminal, 2A fuse.

Negative wire: 1 meter with M10 terminal, built-in temperature sensor is optional.

Y-hall wire: 1 meter, half open clamp.



• Optional

Level sensor: used in lead acid battery, bayonet or drill.

Interlock relay: External remote control relay 20A@5V.

Digital communication: CANBUS, RS485, General purpose input support up to 80VDC.

Others: Ignition, Hourmeter, Auxiliary voltage and current input, shunt type current sensor.

Parameters

Working voltage: 24 to 150VDC (Optional 12~150VDC).

Working temperature: -20°C to 70°C.

Measure range: Voltage: 17.5 to 150VDC (Optional 8-150VDC), Accuracy $\pm 0.1\text{VDC}$

Current: $\pm 300\text{A}$ (Default) / $\pm 800\text{A}$,

Accuracy $\pm 0.5\text{A}$ (Hall) / $\pm 0.1\text{A}$ (Shunt)

Temperature: -20°C to 110°C, Accuracy $\pm 1^\circ\text{C}$

Power consumption: Rated power 0.6W

0W if voltage is below the hardware protected voltage.

Communication interface: CANBUS, support SAE J1939 and CANOPEN protocol.

Bluetooth Low Energy 4.2 and 5.0.

RS485 with modbus protocol.

Extension support :

Global cellular network.

Global positioning.



Scan to view details