

HP16S100-10系列 锂电池保护板

LITHIUM BATTERY PROTECTION BOARD



HP16S100-10 保护板
Protection Board



HP16S100-10 通信板
Communication Board



显示板
Display Board

简介

用于 15-16 串锂电池基站通信备用电源和户用储能等系统，对过压、欠压、过流、过温、反接等报警和保护，可通过 RS232、RS485、CANBUS 等接口实现数据监控、参数配置和固件升级。

特点

- 4个通道的电芯温度检测，传感器类型NTC 10K-3950
- MOS管温度、环境温度采样
- 电池模块回路充电和放电控制，承载电流能力 100A
- 电源、充放电、电量、报警LED 指示灯
- 2个可编程输出口
- 限流功能 10A（可选）
- 休眠与唤醒功能，实现低功耗
- 被动均衡，最大均衡电流85mA
- 实时时钟，历史记录(1000)，黑匣子
- 蜂鸣器报警
- 电池模块加热
- 预充电路最大满足容性负载30000uF，数值以系统实测为准

Overview

It is mainly used as backup power supply for 15~16 strings lithium battery base station communication, household energy storage and other systems. It can alarm and protect the over/under voltage, over current, over temperature, reverse connection, etc. It can also realize the data monitoring, parameter configuration and firmware upgrade via RS232, RS485, CANBUS and other interfaces.

Features

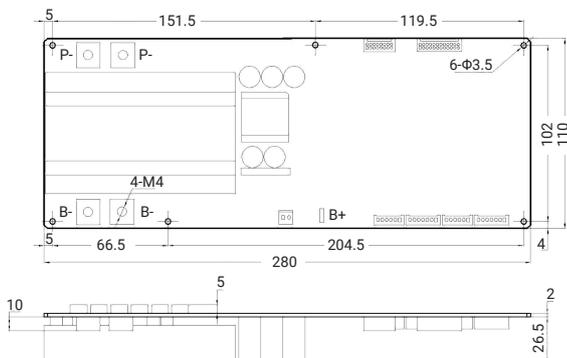
- 4 channels of cell temperature detection are supported, and the temperature sensor type is NTC 10K-3950
- MOS temperature and ambient temperature sampling function
- Battery loop charge and discharge control, carrying current capacity is 100A
- LED indication includes power supply indicator, charge/discharge indicator, power indicator and alarm indicator
- 2 Aux. output ports
- Current limiting function 10A (Optional)
- Sleep and wake-up functions for low power consumption
- Passive balance function, and the max. balanced current is 85mA
- RTC display and event log functions (1000), black box
- Buzzer alarm function
- Battery module heating function
- The maximum capacity load of the pre-charging circuit is 30000uF, and specific value is subject to the actual measurement of the system



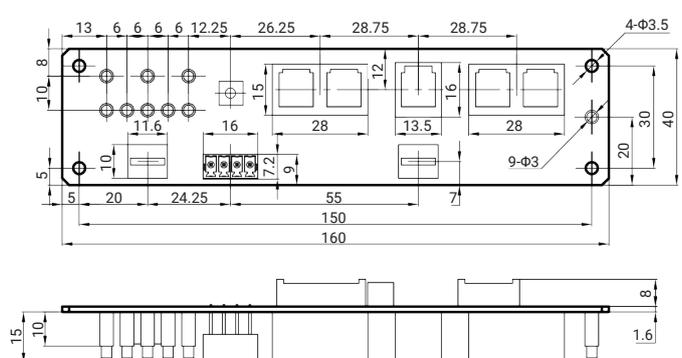
供电和功率 Power	工作电压: DC(30~70)V 整机功耗: ≤2.8W(待机: ≤15mW)	Working Voltage: DC(30~70)V Overall Power Consumption: ≤2.8W(standby: ≤15mW)
电流采集 Current Acquisition	范围: (-150~+150)A 分辨率: 0.1A 精度: 1%FS	Range: (-150~+150)A Resolution: 0.1A Accuracy: 1%FS
电芯电压采集 Cell Voltage Acquisition	范围: (0~5000)mV 分辨率: 1mV 精度: ±10mV	Range: (0~5000)mV Resolution: 1mV Accuracy: ±10mV
温度采集 Temperature Acquisition	范围: (-40~+125)°C 分辨率: 1°C 精度: ±1°C 温度传感器类型: NTC 10K	Range: (-40~+125)°C Resolution: 1°C Accuracy: ±1°C Temp. Sensor: NTC 10K
通信接口 Communication Interface	CAN接口: 1路, 250kbps, 隔离 RS485接口: 2路, 9600bps, 隔离 RS232接口: 1路, 9600bps, 隔离	CAN: 1-way, 250kbps, isolation RS485: 2-way, 9600bps, isolation RS232: 1-way, 9600bps, isolation
环境 Environment	工作温度: (-40~+70)°C 工作湿度: (20~93)%RH 贮存温度: (-40~+80)°C	Working Temperature: (-40~+70)°C Working Humidity: (20~93)%RH Storage Temperature: (-40~+80)°C
结构 Communication Interface	外形尺寸 锂电池保护板: 280 × 110 × 33.5mm 通信板: 160 × 40 × 24.6mm 安装尺寸 锂电池保护板: 271 × 102mm 通信板: 150 × 30mm	Overall Dimension Lithium Battery Protection Board: 280 × 110 × 33.5mm Communication Board: 160 × 40 × 24.6mm Installation Dimension Lithium Battery Protection Board: 271 × 102mm Communication Board: 150 × 30mm
标准 Standard	振动: IEC 60068-2-6 5-8Hz: 位移±7.5mm 8-500Hz: 加速度±2g 碰撞: IEC 60255-21-2 25g _n , 16ms, 半正弦 冲击: IEC 60068-2-27 50g _n , 11ms, 半正弦	Vibration: IEC 60068-2-6 5-8Hz: displacement±7.5mm 8-500Hz: a±2g Bump: IEC 60255-21-2 25g _n , 16ms, half-sine Shock: IEC 60068-2-27 50g _n , 11ms, half-sine

● 尺寸 Dimensions

单位(Unit): mm



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