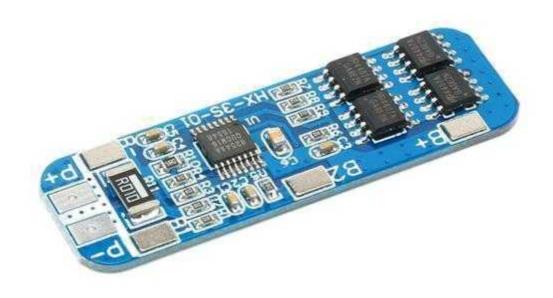
# **Datasheet**

# 3S 12V 10A 18650 Lithium Battery Overcharge and Over-current Protection board

This is a protection module for 3-serial-cell lithium-ion / lithium polymer rechargeable batteries and includes a high-accuracy voltage detector and delay circuit. Automatically cancel protection after fault conditions removed. With Protection function of overcharge, over-discharge, short circuit and over-current protection. Suitable for lithium battery pack of 11.1V, 12V & 12.6V.



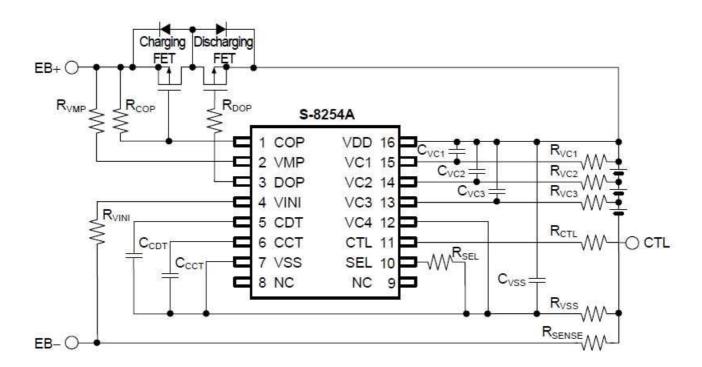
#### **Brief Data:**

- Overcharge Voltage Detection:  $3.9 \sim 4.35 \text{V} \pm 0.05 \text{V}$ .
- Over discharge voltage Detection:  $2.3 \sim 3.0 \text{V} \pm 0.05 \text{V}$ .
- Maximum operating current: 6~8A.
- Quiescent current: < 30uA.
- Internal resistance:  $< 100 \text{m} \Omega$ .
- Charging voltage: 12.6V ~ 13V.
- Working temperature: -40~+50°C
- Short circuit protection: Yes, delayed self recovery.
- Dimensions: (50 x 16 x 1) mm

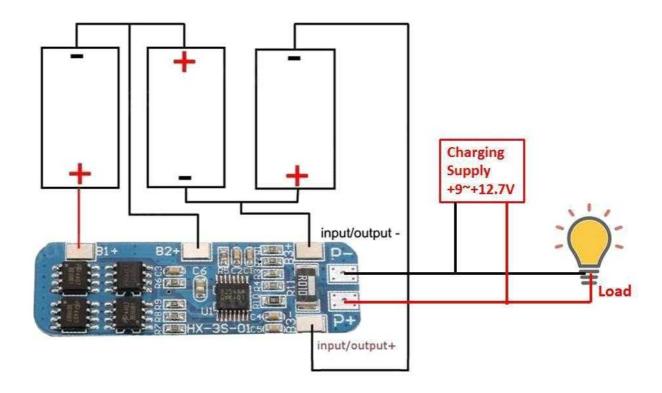
### **Board Dimension:**



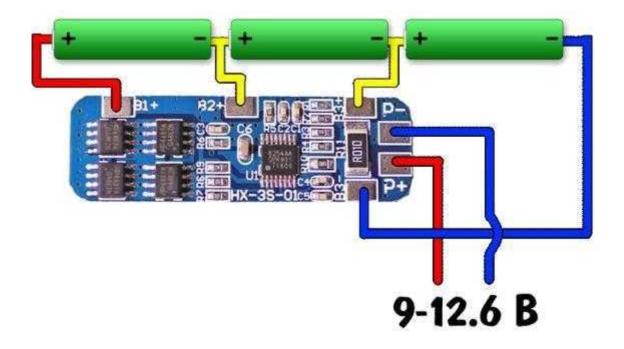
## **Schematic Diagram:**



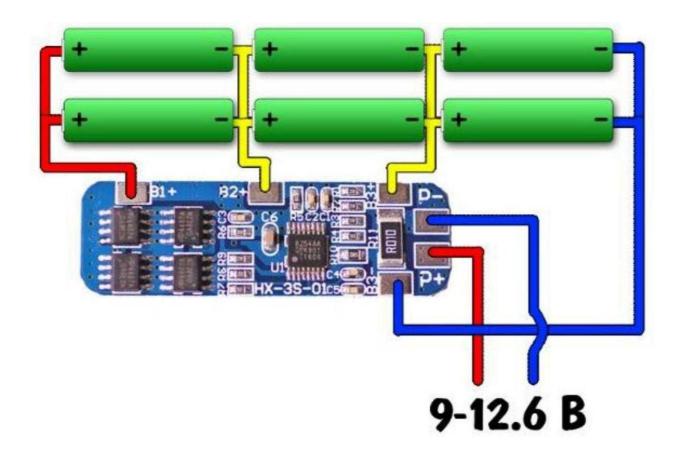
### **Basic Connection Diagram:**



# **Application Example:**



**Charging 3S1P (3 Series 1 Parallel)** 



**Charging 3S2P (3 Series 2 Parallel) Configuration**