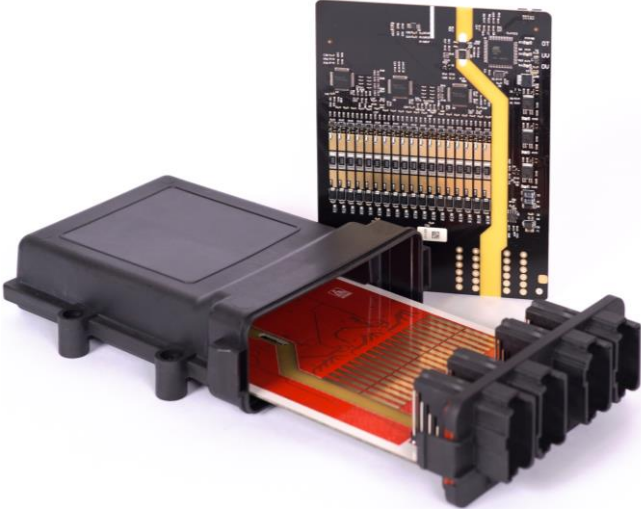


X_BMS_18S

Battery Monitoring System upto 18 cells

<p style="text-align: center;">Picture</p> 	<p style="text-align: center;">Processor</p> <ul style="list-style-type: none"> • STM32F4 family <ul style="list-style-type: none"> ◦ 32 bit, 168 MHz ◦ Flash 1 MB, RAM 192 kB <p style="text-align: center;">Power</p> <ul style="list-style-type: none"> • Logic <ul style="list-style-type: none"> ◦ 7-15V DC, <200mA • Contactors <ul style="list-style-type: none"> ◦ 7-15V DC, max 10A <p style="text-align: center;">I/O</p> <ul style="list-style-type: none"> • Relay State Detection <ul style="list-style-type: none"> ◦ With auxiliary contacts ◦ 1 channel • Digital Outputs <ul style="list-style-type: none"> ◦ 12V, 2.5A per channel (10A peak current) ◦ High-side switches ◦ 3 channels • Cell Voltage <ul style="list-style-type: none"> ◦ 1-4.5V ◦ Fuse protected ◦ 18 channels (6-18 cells) • Cell Temperature <ul style="list-style-type: none"> ◦ NTC thermistor ◦ Upto 6 channels <p style="text-align: center;">Communication</p> <ul style="list-style-type: none"> • CAN-bus 2.0A and 2.0B <ul style="list-style-type: none"> ◦ ISO 11898-2 <1Mbps <p style="text-align: center;">Others</p> <ul style="list-style-type: none"> • Isolation rated for 600VDC • Passive balancing • Cascadable I/Os • IP67 (IP6K9K capable)
<p style="text-align: center;">Typical Application</p> <ul style="list-style-type: none"> • Supervised Industrial Battery Systems <ul style="list-style-type: none"> ◦ LiFePO₄ ◦ Lithium-ion ◦ All other Li-based chemistry • Electric Land Vehicles (bike, car) • Electric Marine Vehicles (boat, jet-ski) 	

Short Description

The X_BMS_18S is an application specific battery monitoring unit with all the required I/O for complete battery solutions, high-speed CAN-bus, robust plastic packaging (IP6K9K) and medium form factor. Part of the PCB directly connected to the cells is galvanically isolated, no further isolation is required. It is equipped with an STM32F4 microcontroller which has great performance, support and reliability. With the cascadable high-current outputs, relay state detection and in-built protections, this device is suitable for monitoring a big variety of batteries, and implementing advanced battery control algorithms.

Mechanical Parameters

Material: Nylon 6/6 (enclosure)

Color: Black

Dimensions: 160.0 x 198.5 x 54.7 mm (W x L x H)

Protection: IP67 (with mated connectors)

Weight: 505 g

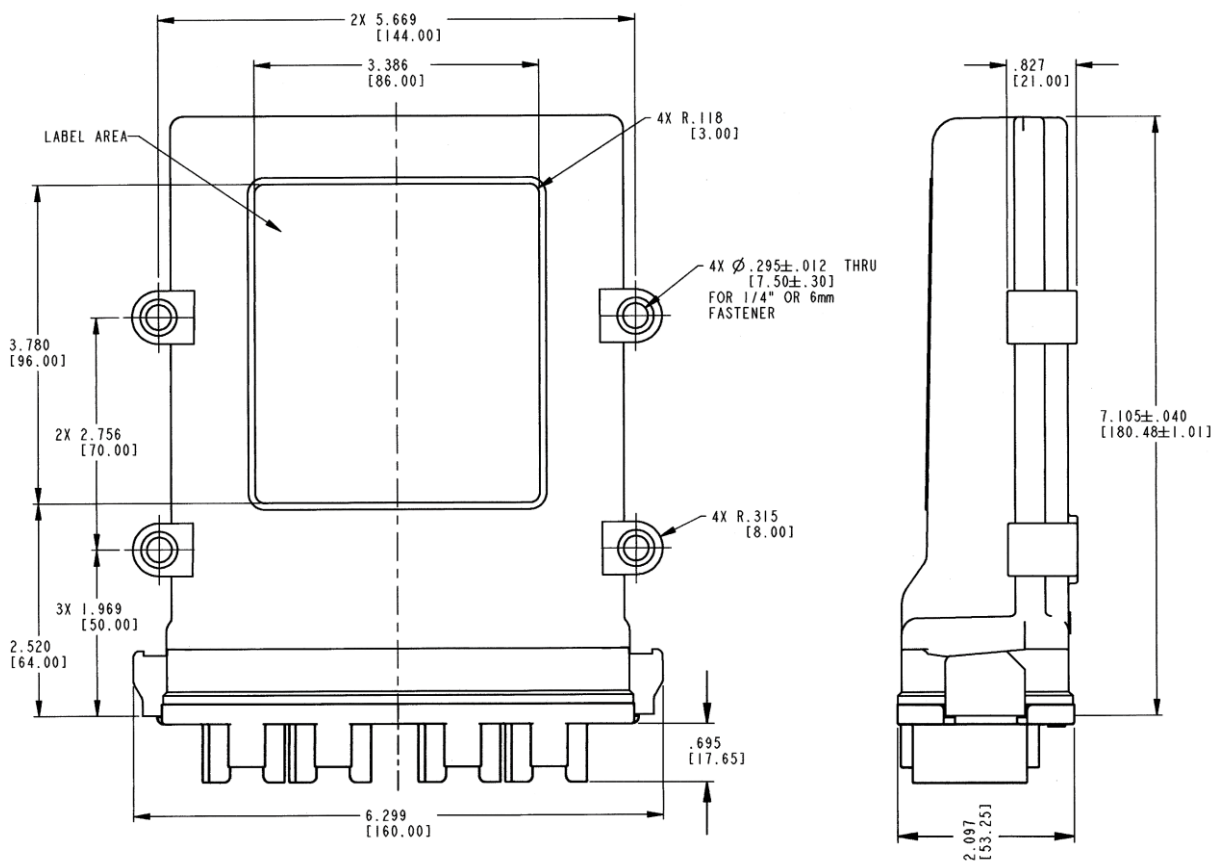


Figure 1 - Mechanical Dimensions