



## Features

- The fast control for the balanced voltage of Li-ion battery cell and the charging output of the AC charger
- Real-time battery voltage monitoring for 4 cells and 8 cells of Li-ion battery
- Adjustable maximum and minimum voltage 1.8V~5V per cell is suitable for different kinds of Li-ion batteries
- Cell balancing ability with 3A to ensure the safe charging for battery cells
- RS485/CAN2.0B ports to communicate with CMUR relay board, AC charger and Computer to maximize the performance of the battery management system
- User friendly interface for parameter settings such as cell voltage protection values and heatsink temperature protection values
- External temperature sensors to detect the actual temperature of battery
- Variable speed control of external fan for temperature cooling

## Specifications

Model No.		CMU-4S3A-R	CMU-8S3A-R	CMU-4S3A-C	CMU-8S3A-C
Battery Input Voltage Range		10V ~ 18V 4 battery cells in series	16V ~ 36V 5~8 battery cells in series	10V ~ 18V 4 battery cells in series	16V ~ 36V 5~8 battery cells in series
Cell Balance Current		Max.: 3A			
Cell Voltage Range		1.8 ~ 5VDC per cell (Resolution: 1.5mV)			
Number of the CMU		Max.: 32 units (128 cells)	Max.: 32 units (256 cells)	Max.: 32 units (128 cells)	Max.: 32 units (256 cells)
Cell Temperature Range		0°C ~ 50°C (Resolution: 1°C)			
Cell Voltage Protection	Cell Over Voltage	4.0V (Default) , Selectable			
	Cell Balance	3.8V (Default) , Selectable			
	Cell Under Voltage Warning	2.6V (Default) , Selectable			
	Cell Under Voltage	2.4V (Default) , Selectable			
Heatsink Temperature Protection	Heatsink Warm (Fan Active)	50°C (Default) , Selectable			
	Heatsink Hot (Fan Full Speed)	65°C (Default) , Selectable			
	Heatsink Over Temperature	80°C (Default) , Selectable			
	Fan Control	Fan operating speed depends on the temperature of heatsink			
CMU Power Consumption		< 10mA ± 1mA			
External Fan Control		12VDC	24VDC	12VDC	24VDC
Communication Interface		RS485		CAN2.0B	
Communication Port		2 RJ-45 Ports / 8 Pin			
Controller Size (H x W x D) mm		32 x 145 x 77.5			
Weight (Kgs)		0.26	0.28	0.28	0.30
RJ-45 Port / 8 Pin Terminal Output Signal	Pin 1	X		Over Temperature	
	Pin 2	RS485 D+		CAN H	
	Pin 3	RS485 D-		CAN L	
	Pin 4	GND			
	Pin 5	Cell Under Voltage (Low Active)			
	Pin 6	Cell Over Voltage (High Active)			
	Pin 7	10 ~ 15V (Input Voltage)			
	Pin 8	Cell Under Voltage Warning (Low Active)			