Lithium Battery Module

M12 Series lithium battery

12VDC 100Ah / 200Ah / 400Ah



TBB's M12 series lithium iron phosphate battery comes with high continuous discharge current, which makes it as one of best in the market to well handle heavy duty appliance for on-board application such as air-conditioner, coffer maker, microwave oven etc.

Heavy discharge current whilst still in light weight and compact size, plus supports parallel connection up to 8pcs, M12 series lithium battery is versatile for almost all implementation and flexible on installation.

With built-in BMS against to overcharging, over discharging, over temperature by monitoring current/voltage of each cell etc., to provide overall protection to battery and prolong battery service life.

With built-in heating element, it will automatically heat the lithium battery cells when external charging resources detected, to ensure the charging even in extreme low ambient temperature

An elegant design monitor with information of battery voltage, current, SoC etc, which allows user to fully understand his/her battery status, as well as allows user to cut-off power from battery remotely. Furthermore, the monitor also supports mobile APP with its built-in Bluetooth connectivity.

- Long cycle life, over 3000 cycles at 100% DoD @25°C
- Supports max discharge current 150A for M12-100 and 300A for M12-200/M12-400
- Supports parallel connection up to 8pcs
- Built-in BMS with automatic balancing and complete protection
- Built-in high precision(±0.1A) shunt for SOC calculation
- Built-in heater element to support battery be charged at temperature -30°C
- Special designed BMS to reduce idle power by 90% (<0.1mA) upon battery turns off
- Predebugged BMS software compatible with TBB power system to assure designed lifespan of lithium battery
- Supports CAN and RS485 communication
- Supports remote battery switch



Model No.		M12-100	M12-200	M12-400
ctrical				
Nominal voltage (VDC)		12.8		
Nominal capacity (Ah)		100	200	400
Energy (kWh)		1.28	2.56	5.12
Charging @25°C	Charge voltage (VDC)	14.2		
	Recommended charge current (A)	50	100	200
	Max charge current (A)	100	200	200
	Nominal discharge current (A)	100	200	200
Discharging @25°C	: Max discharge current (A)	150 (30mins)	300 (10mins)	300 (10mins)
	Discharge cut-off voltage (VDC)	11.6	11.2	11.2
Operating cell	Charging	2°C ~ 60°C		
temperature	Discharging	-30°C ~ 60°C		
Built in heater element		Optional		Yes
Parallel connection		Max 8pcs		
Operating humidity		10%~90% RH		
IP class		IP20		
Certifications		UN38.3 / CE		UN38.3 / CE / U
Dimensions (L x W x H) (mm)		310 x 165 x 187	380 x 225 x 325	462 x 237 x 320.
Weight (kg)		10.8	25.2	42.5

