

MPF90

12.8V 90AH

GRP 24 LFP BATTERY

High-performance lithium batteries
built for marine applications



Parameters		MPF90
Nominal voltage		12.8V
Typical capacity		90Ah±2.7Ah (at 0.2C discharge rate)
Discharge	Typical current	90A
	Maximum continuous current	300A
	Peak point current	800A (3S)
	Cut-off voltage	About 10V
Charge	Charge Voltage	14.4V±0.2V
	Typical current	90A
	Maximum charging current	200A(60)S
	Charging mode	Constant Current/Constant Voltage
	Charge cut-off current	About 2A
Operation Temperature	Charge	0°C~+55°C
	Discharge	-20°C~+60°C
Storage Temperature		-20°C~60°C (Within 1 month)
		-20°C~45°C (Within 3 months)
		-20°C~25°C (Within 1 Year)
Discharging Inner Resistance		About 60mΩ
Protection Function		Protection functions such as overcharge, over-discharge, over-current, short circuit and temperature
Charging and discharging mode		M8 terminal
Case Material		ABS
Weight		About 11.5 kg
Dimensions (L*W*H)		(260*168*209) ±2mm
Cycle Count		Up to 4000 - capacity retention rate is ≥80%.

Operating Environment

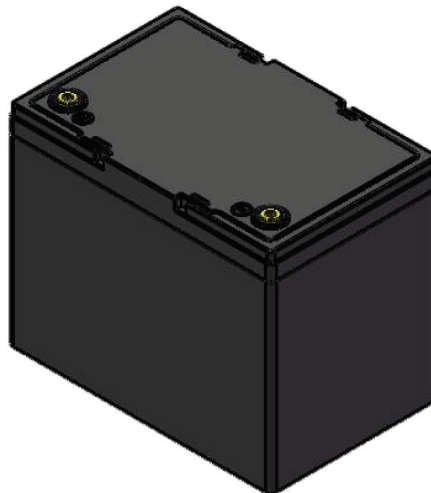
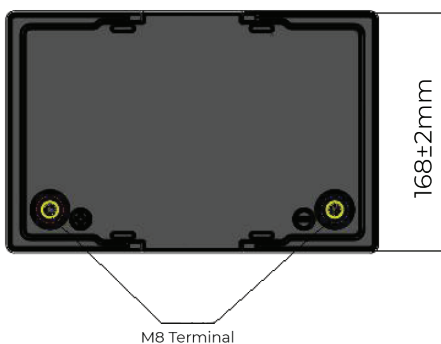
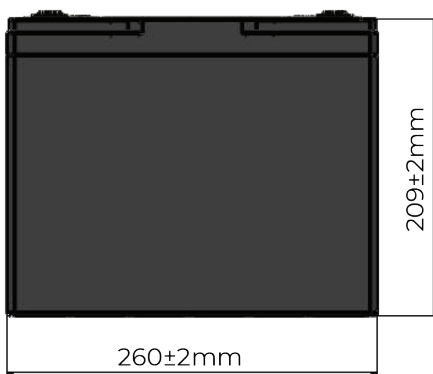
- Charge Temperature: 0°C to +55°C
- Discharge Temperature: -20°C to +60°C
- Storage Temperature: -20°C to +45°C (up to 3 months); optimal at 15°C to 25°C
- Environmental Humidity: ≤85% RH

Integrated Protection Features

- The built-in BMS provides safety monitoring for:
- Overcharge and Over-discharge
- Over-current and Short circuit
- Temperature protection

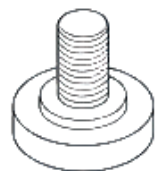
Dealer Maintenance & Storage Guidelines

- **Storage Maintenance:** Charge and discharge the battery pack once every 2 months to prevent over-discharge.
Maintain voltage between 13.28V and 13.6V during storage.
- **Installation:** Install in a well-ventilated, dry, and clean environment.
Ensure terminal polarities are correct to avoid fire or equipment damage.
- **Usage Tip:** Shallow charging and discharging (discharging to 80% of nominal capacity) is recommended to improve overall cycle life.



TERMINALS

M8 Terminal



PRODUCT DIAGRAM