



MANLY

MARINE LiFePO4 BATTERY SERIES

Standard House • Trolling • Marine System • Light Propulsion Platforms

CHEMISTRY LiFePO4	WARRANTY 8 Years	CORE TERMINAL M8	VOLTAGE RANGE 12.8V - 96V
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Series at a Glance

The standard range is organized by voltage family so distributors, installers and boatbuilders can select a platform first, then capacity and project options.

Voltage Family	Capacity	Energy	Primary Application	Housing
12.8V	100 / 200 / 300Ah MH12-100 / MH12-200 / MH12-300	1.28 - 3.84kWh	House / Yacht / Refit	Plastic
25.6V	100 / 200Ah MH24-100 / MH24-200	2.56 - 5.12kWh	24V House / System	Plastic
38.4V	100Ah MT36-100	3.84kWh	36V Trolling Motor	Plastic
51.2V	100 / 200Ah MP48-100 / MP48-200	5.12 - 10.24kWh	48V System / Light Propulsion	Plastic / Metal
72V / 96V	Custom MP72-C / MP96-C	Project Based	Electric Propulsion / Commercial	Metal / Project

Standard Marine Platform
Integrated BMS protection for over-charge, over-discharge, over-current, short-circuit and temperature conditions.
M8 terminal platform across standard 12.8V-51.2V models.
Black engineering-plastic housing on standard catalogue models, with 51.2V 200Ah fixed as Metal Housing.
8-year standard warranty for the Marine LiFePO4 series.
Model nomenclature: MH = Marine House, MT = Marine Trolling, MP = Marine Propulsion; model voltage codes use the vessel system class (12 / 24 / 36 / 48V).

Available Project Options
Optional features: Bluetooth monitoring, CAN / RS485 communication and external display, selected according to project requirements.
Optional self-heating for cold-climate projects where required.
OEM logo / label, terminal orientation and enclosure adaptation where feasible.
Project-defined waterproof high-current connectors for propulsion applications.

Mechanical specification policy: Dimensions and weights in this document are the current standard reference values. For OEM, refit or propulsion projects, mechanical dimensions may be adjusted to suit the installation envelope while maintaining the agreed electrical performance and safety structure. Drop-in replacement projects should confirm compartment dimensions before ordering.

Application	Preferred Voltage Family	Typical MANLY Platform	Why It Fits
Small boat / electronics	12.8V	MH12-100	Compact Marine House and auxiliary-power platform
Yacht house / refit	12.8V	MH12-200 / MH12-300	Higher energy and inverter support
24V yacht / solar	25.6V	MH24-100 / MH24-200	Native 24V house / inverter architecture
36V trolling	38.4V	MT36-100	Single-battery 36V platform
48V trolling / light propulsion	51.2V	MP48-100 / MP48-200	Higher-voltage marine system platform

MH12 Series | 12.8V Marine House Battery

Three standard capacities for small craft, yacht house banks, fishing boats, refit projects and inverter / solar systems. Recommended charge voltage: 14.6V.

NOMINAL VOLTAGE 12.8V	CAPACITY RANGE 100 - 300Ah	HOUSING Black Plastic	TERMINAL M8
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Model	Energy	Reference Size	Weight	Continuous	Terminal	Ingress	Primary Application
MH12-100 12.8V 100Ah	1.28kWh	330 x 170 x 220 mm	10.5 kg	100A	M8	IP67	Small Boat / Fishing / Auxiliary Power
MH12-200 12.8V 200Ah	2.56kWh	522 x 240 x 218 mm	21.0 kg	200A	M8 Heavy-Duty	IP67	Marine House / Yacht / Refit
MH12-300 12.8V 300Ah	3.84kWh	640 x 245 x 200 mm	28.0 kg	300A	M8 Heavy-Duty	IP67	Large House / High-load Inverter

Model Positioning

- 100Ah - compact platform for small boats, fishing electronics and lighter house-power loads.
- 200Ah - high-output Marine House platform combining 2.56kWh capacity, 200A continuous discharge and practical installation size.
- 300Ah - high-capacity platform for larger yachts, extended off-grid operation and higher inverter demand.

Standard Configuration

Black engineering-plastic enclosure selected for corrosion resistance and practical marine handling.
M8 terminal platform across the standard series.
Integrated BMS protection and 14.6V charging architecture.
Optional features: Bluetooth, CAN / RS485, external display and self-heating, selected according to project requirements.

Configuration Item	Standard / Available	Project Note
Housing	Black engineering-plastic	Standard catalogue platform; alternate enclosure only by project
Terminal	M8 / M8 Heavy-Duty	Cable lug size and torque should match current and installation
Monitoring	Bluetooth optional	Useful for refit, house-bank and end-user monitoring
Communication	CAN / RS485 optional	Confirm inverter / charger / vessel system before production
Heating	Optional	Recommended only for cold-climate charging environments
OEM / ODM	Logo, label, mechanical adaptation	Final drawing approved before production

Application Guidance: 100Ah is suited to compact marine house-power and auxiliary loads; 200Ah provides higher capacity and 200A continuous output for mainstream house-bank systems; 300Ah is designed for larger vessels requiring greater energy reserve and higher inverter demand.

Marine Integration Notes

- Charger must use the correct 14.6V LiFePO4 profile and be compatible with the selected BMS.
- Cable, fuse and disconnect sizing should follow the actual continuous load and cable length.
- Battery must be mechanically secured against vessel motion and installed with protected terminal access.

Typical Applications

- House-power upgrades for sailing yachts, motor yachts, fishing boats and other leisure craft.
- AGM / lead-acid replacement in refit and electrical-upgrade projects.
- Factory-installed lithium house banks for new-build vessels and premium electrical packages.

MH24 Series | 25.6V Marine House / System Battery

Standard 24V platform for yachts, catamarans, houseboats, marine solar systems and inverter-based auxiliary power. Recommended charge voltage: 29.2V.

NOMINAL VOLTAGE 25.6V	CAPACITY RANGE 100 / 200Ah	MAX STANDARD OUTPUT 200A	HOUSING Black Plastic
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Model	Energy	Reference Size	Weight	Continuous	Terminal	Ingress	Primary Application
MH24-100 25.6V 100Ah	2.56kWh	522 x 238 x 222 mm	22.7 kg	100A	M8	IP67	24V House / Solar / Inverter
MH24-200 25.6V 200Ah	5.12kWh	640 x 245 x 200 mm	41.6 kg	200A	M8 Heavy-Duty	IP67	Yacht / Catamaran / Houseboat

Where the 24V Platform Fits

- 24V yacht house banks where cable current should be lower than an equivalent 12V system.
- Marine solar / inverter systems with higher continuous auxiliary loads.
- Catamarans, houseboats and larger refit projects requiring a compact 2.56-5.12kWh battery module.
- 24V equipment and auxiliary systems requiring a standardized LiFePO4 platform.

Engineering Focus

- 100Ah model uses the standard M8 platform and 100A continuous BMS configuration.
- 200Ah model is fixed at 200A continuous discharge.
- Plastic enclosure remains the standard Marine catalogue housing for corrosion resistance.
- Final cable size, fuse, disconnect and installation arrangement should be engineered around vessel load and current.

Configuration Item	Standard / Available	Project Note
Charge Architecture	29.2V recommended	Charger profile must be suitable for LiFePO4
Monitoring	Bluetooth optional	State-of-charge monitoring and diagnostics
Communication	CAN / RS485 optional	Confirm required protocol and inverter / charger model
External Display	Optional	Useful where battery is installed out of sight
Heating	Optional	For cold-region charging only
Mechanical Adaptation	Available by project	Battery compartment and cable routing to be confirmed

Sizing policy: The listed dimensions are the current standard enclosure reference. For OEM or refit projects, enclosure dimensions may be adjusted where necessary to match the battery compartment, provided agreed electrical performance and safety structure are maintained.

Lower Current for Same Power	House + Inverter Focus	OEM / Refit Friendly
24V architecture can reduce current compared with an equivalent 12V load, supporting practical cable design.	The 25.6V range is positioned around yacht house banks, solar charging and inverter-based auxiliary loads.	Reference dimensions can be adapted when an existing battery compartment or new-build layout requires it.

Typical 25.6V Integration Flow

1	2	3	4	5
24V Loads	Capacity	Protection	System Link	Install
Inverter / house / solar	100Ah or 200Ah	Fuse + disconnect + cable	Charger / inverter protocol	Secure mounting + final test

MT36-100 | 38.4V 100Ah Trolling Motor Battery

Single-battery 36V trolling platform for fishing boats and small craft. Recommended charge voltage: 43.8V.

NOMINAL VOLTAGE 38.4V	ENERGY 3.84kWh	CONTINUOUS OUTPUT 100A	HOUSING Black Plastic
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Specification	38.4V 100Ah
Capacity	100Ah
Reference Dimensions	640 x 245 x 200 mm
Approx. Weight	30.6 kg
Continuous Discharge	100A
Recommended Charge Voltage	43.8V
Housing	Black engineering-plastic housing
Terminal	M8
Ingress Protection	IP67
Warranty	8 Years
Primary Application	36V trolling motor / fishing boat

Application Positioning Designed as a single-battery 36V trolling platform, simplifying a multi-battery bank layout. Suitable for fishing boats, bass boats and other small craft using 36V trolling motors. Plastic housing supports corrosion resistance and practical handling in marine environments. Bluetooth monitoring is optional and can be specified where state-of-charge visibility is required.	Installation Checklist - Confirm trolling-motor rated voltage, continuous current and peak current before selection. - Verify battery compartment size, securing method and cable routing on the vessel. - Use cable lugs and protection devices sized for the actual motor current and cable length. - Confirm charger voltage and LiFePO4 charge profile before commissioning.
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Traditional 36V Bank	MANLY 38.4V	Project Validation
Multiple 12V batteries	Single battery platform	Motor + charger + space
More interconnects	Simplified battery bank	Confirm before order

System Data to Confirm - Trolling motor brand / model and rated system voltage. - Expected operating current, maximum current and required run time. - Existing battery-box / compartment dimensions and cable-lug arrangement.	Application Fit - A single 38.4V battery provides a streamlined 36V-class solution compared with multi-battery configurations. - Suitable for fishing boats, trolling-motor systems and marine accessory installations. - System validation should confirm installation fit, expected runtime and charger compatibility.
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Trolling Motor Validation Flow

1	2	3	4	5
Motor Match	Run Time	Compartment	Charger	Sea Trial
36V trolling platform	Confirm energy requirement	Size + fixing + cable	43.8V LiFePO4 profile	Verify performance in vessel

MP48 Series | 51.2V Marine System / Light Propulsion

48V marine platform covering high-voltage trolling, electric outboards, auxiliary systems and selected light-propulsion / workboat projects. Recommended charge voltage: 58.4V.

NOMINAL VOLTAGE 51.2V	CAPACITIES 100 / 200Ah	ENERGY 5.12 / 10.24kWh	WARRANTY 8 Years
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Model	Energy	Reference Size	Weight	Continuous	Housing	Terminal	Ingress	Application
MP48-100 51.2V 100Ah	5.12kWh	640 x 245 x 200 mm	30.6 kg	100A	Black Plastic	M8	IP67	48V Trolling / Light Propulsion
MP48-200 51.2V 200Ah	10.24kWh	480 x 370 x 300 mm	90.0 kg	200A	Metal Housing	M8 HD / Project Connector	Project-defined	Light Propulsion / Workboat

100Ah Platform

Standard black engineering-plastic housing for 48V trolling, electric outboard and light-propulsion applications. 100A continuous discharge and M8 terminal architecture. Well suited to projects where compact packaging and corrosion-resistant enclosure are important. Bluetooth and CAN / RS485 are optional and can be specified to match the vessel system.

200Ah Platform

- Fixed Metal Housing configuration for higher-energy marine systems and workboat / light-propulsion projects.
- 10.24kWh energy and 200A continuous discharge.
- M8 heavy-duty terminal or waterproof high-current project connector depending on vessel design.
- Propulsion projects require current profile, controller, communication and protection architecture confirmation.

Configuration Item	Standard / Available	Project Note
Power Interface	M8 / project connector	Select according to continuous current, cable and installation environment
Communication	CAN / RS485 available	Protocol must be confirmed with inverter / controller
System Protection	Fuse / disconnect / contactor by project	Propulsion architecture defined at engineering stage
Monitoring	Bluetooth / display optional	Useful for vessel operator and service diagnostics
Mechanical	100Ah plastic / 200Ah Metal Housing	200Ah housing is fixed as metal
OEM Integration	Drawing + interface confirmation	Final connector, cable exit and mounting require approval

Project gate: For propulsion application communication protocol, charger, cable / CAN / RS485 optional power, continuous and peak current, controller or inverter model, space and environmental requirements before production.

MP48-100 51.2V 100Ah	MP48-200 51.2V 200Ah	MP72-C / MP96-C Custom Propulsion
Choose for 48V trolling, electric outboard and lighter propulsion / auxiliary loads where 5.12kWh is suitable.	Choose where 10.24kWh and 200A continuous output are required; fixed Metal Housing platform.	Use a custom project when motor power, energy or vessel architecture exceeds the standard 51.2V platforms.

51.2V Project Integration Flow

1	2	3	4	5
Define Load	Choose Platform	Confirm Current	Interfaces	Approve Drawing
Trolling / outboard / workboat	100Ah plastic / 200Ah metal	Controller + peak demand	CAN / RS485 / power connector	Mechanical + electrical release

MP72-C / MP96-C | Marine Propulsion Battery System

Custom project platform for electric sightseeing boats, passenger craft, workboats and other commercial marine applications. Electrical and mechanical specifications are defined from the vessel powertrain.

VOLTAGE PLATFORM 72V / 96V	CAPACITY Project Based	HOUSING Metal Housing	INTERFACE Project Defined
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Project Parameter	Specification Basis
Nominal Voltage	MP72-C: 72V system class / MP96-C: 96V system class; final series configuration and nominal voltage are defined by project.
Capacity / Energy	Defined by required runtime, vessel load profile and installation envelope
Continuous / Peak Current	Defined by motor power, controller / inverter and duty cycle
Dimensions / Weight	Project based; installation envelope confirmed with vessel designer
Housing	Metal Housing / modular project structure
Power Interface	M10 or waterproof high-current connector depending on current and architecture
Communication	CAN / RS485 / project-specific protocol
Protection Architecture	Fuse, disconnect, contactor and pre-charge as required by project
Ingress / Corrosion	Marine enclosure and salt-mist protection target defined by project
Primary Applications	Electric sightseeing boat, passenger craft, workboat, hybrid auxiliary / custom propulsion

Project Information Required - Motor rated power, peak power and controller / inverter model. - Required operating time, range and typical duty cycle. - Nominal / maximum system voltage and charge power. - Continuous / peak current and regenerative charging requirements if applicable. - Available installation space, weight limit and mounting orientation.	Engineering Output from MANLY - Recommended battery voltage, capacity / energy and module architecture. - BMS current, communication and protection-system definition. - Mechanical layout, power connector and cable-interface proposal. - Charging interface and integration notes for vessel electrical system. - Final technical specification and production drawing after project confirmation.
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1	2	3	4	5
Vessel Data	Power Analysis	Battery Architecture	Interface Approval	Final Specification

Important: 72V / 96V systems are project products rather than fixed catalogue batteries. Final electrical and mechanical specifications are issued only after vessel powertrain, installation and compliance requirements are confirmed.

Project Validation Scope - Electrical compatibility: voltage window, current profile, charger and controller interface. - Mechanical compatibility: enclosure, weight, mounting, connector access and cable routing. - Environmental scope: ingress protection, salt-mist exposure and operating environment. - Compliance scope: transport documents and any vessel / project certification required for the application.	Typical Project Deliverables - Final battery technical specification and electrical interface definition. - Mechanical outline drawing after installation envelope is approved. - Communication / protocol definition where CAN or RS485 is required. - Production configuration released after the required project data is confirmed.
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Series Selection & Ordering Guide

A technical reference for selecting the appropriate MANLY standard battery platform for marine house-power, trolling and light-propulsion applications.

MARINE HOUSE MH12-200 12.8V 200Ah	24V SYSTEM MH24-200 25.6V 200Ah	36V TROLLING MT36-100 38.4V 100Ah	48V SYSTEM MP48-100 51.2V 100Ah
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Application	Recommended Platform	Continuous	Selection Logic
Small boat / auxiliary electronics	MH12-100 12.8V 100Ah	100A	Compact Marine House and auxiliary-power platform
Main yacht house bank / refit	MH12-200 12.8V 200Ah	200A	High-output Marine House platform for mainstream yacht and refit applications
Large house bank / higher inverter load	MH12-300 12.8V 300Ah	300A	Higher energy and continuous current
24V house / solar / inverter	MH24-100 / MH24-200	100A / 200A	Choose capacity by energy and load
36V trolling motor	MT36-100 38.4V 100Ah	100A	Single-battery 36V platform
48V trolling / electric outboard	MP48-100 51.2V 100Ah	100A	Plastic-housing standard platform
Light propulsion / workboat	MP48-200 51.2V 200Ah	200A	Metal Housing project-oriented platform
Commercial electric propulsion	72V / 96V Custom	Project	Engineering project required

Project Information for Quotation
Confirm voltage, capacity / operating-time requirement and expected quantity.
Provide installation-space limits if the battery must fit an existing compartment.
Provide inverter, charger, trolling motor or propulsion controller model where applicable.
State whether optional Bluetooth, external display, CAN / RS485 communication or self-heating is required.
For OEM projects, indicate annual volume and whether private label or custom enclosure is required.

Mechanical & Interface Policy
Reference dimensions are the current standard production platform, not a universal hard limit.
Drop-in projects require dimensions to be confirmed before quotation / production.
M8 is the standard terminal platform through the standard 51.2V models; final current-carrying design is evaluated according to the confirmed configuration.
51.2V 200Ah is fixed as Metal Housing; 72V / 96V uses project-defined housing and connector architecture.
Electrical performance and safety take priority over millimetre-level enclosure optimization.
Model code convention: MH = Marine House; MT = Marine Trolling; MP = Marine Propulsion. Model voltage codes identify the system class, while nominal battery voltage is stated separately in the technical specification.

Configuration Item	Standard / Available	Project Note
OEM Branding	Available	MANLY or OEM branding / labeling according to order requirements
Documentation	Specification / drawing / test documents	Final package depends on project and certification scope
Warranty	8 Years	Standard Marine LiFePO4 warranty positioning
Marine Protection	Plastic Housing IP67 / Metal project-defined	inal rating must match confirmed enclosure configuration
Salt-mist Design	Marine-oriented design target	Testing scope to be confirmed where project certification is required
Custom Project	Available	72V / 96V and propulsion systems require engineering review

Voltage	Capacity / Runtime	Quantity	Load / Motor	Installation Space	Options / Protocol
Confirm for quotation	Confirm for quotation	Confirm for quotation	Confirm for quotation	Confirm for quotation	Confirm for quotation