



La MARCHÉ[®]

La Marche Manufacturing **Marine Power Solutions**

Battery Chargers

Uninterruptible Power Supply

Isolation Transformers



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U.S. Company

Marine Power Solutions

La Marche Manufacturing Company has been a long-standing industry leader in AC/DC solutions for over 75 years. Specializing in innovative battery chargers, UPS systems, and power conversion products, La Marche remains dedicated to delivering high-performance power solutions across diverse industries such as Marine, Engine Start, Utility and more. Our commitment ensures consistent fulfillment of our customers' critical power requirements.

La Marche Marine Solutions are tailored to meet the distinct demands of maritime operations. Our comprehensive lineup includes durable **battery chargers**, reliable **UPS systems**, and robust **isolation transformers**. Encased in resilient, non-corrosive materials, these products excel in delivering exceptional performance even in the most challenging maritime conditions. Specifically engineered for the maritime industry, certain chargers in our range feature water resistance, corrosion and rust resistance, meeting stringent ABS and USCG standards. This ensures their reliability and durability in demanding marine environments.



Commercial Ships
Cargo, Container, Oil Tankers, Bulk Carriers



Ferries and Passenger
Cruise Ships, Passenger Ferries



Offshore Support Vessels
Oil and Gas Exploration, Maintenance



Tugboats and Workboats
Involved in Towing, Salvage, Marine Works



Fishing Vessels
Critical for Fishing Operations, Refrigeration



Research Vessels
Scientific Research, Exploration, Surveys



Yachts and Pleasure Crafts



Coast Guard & Naval Vessels
Military Naval Applications

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Power Solutions on Board

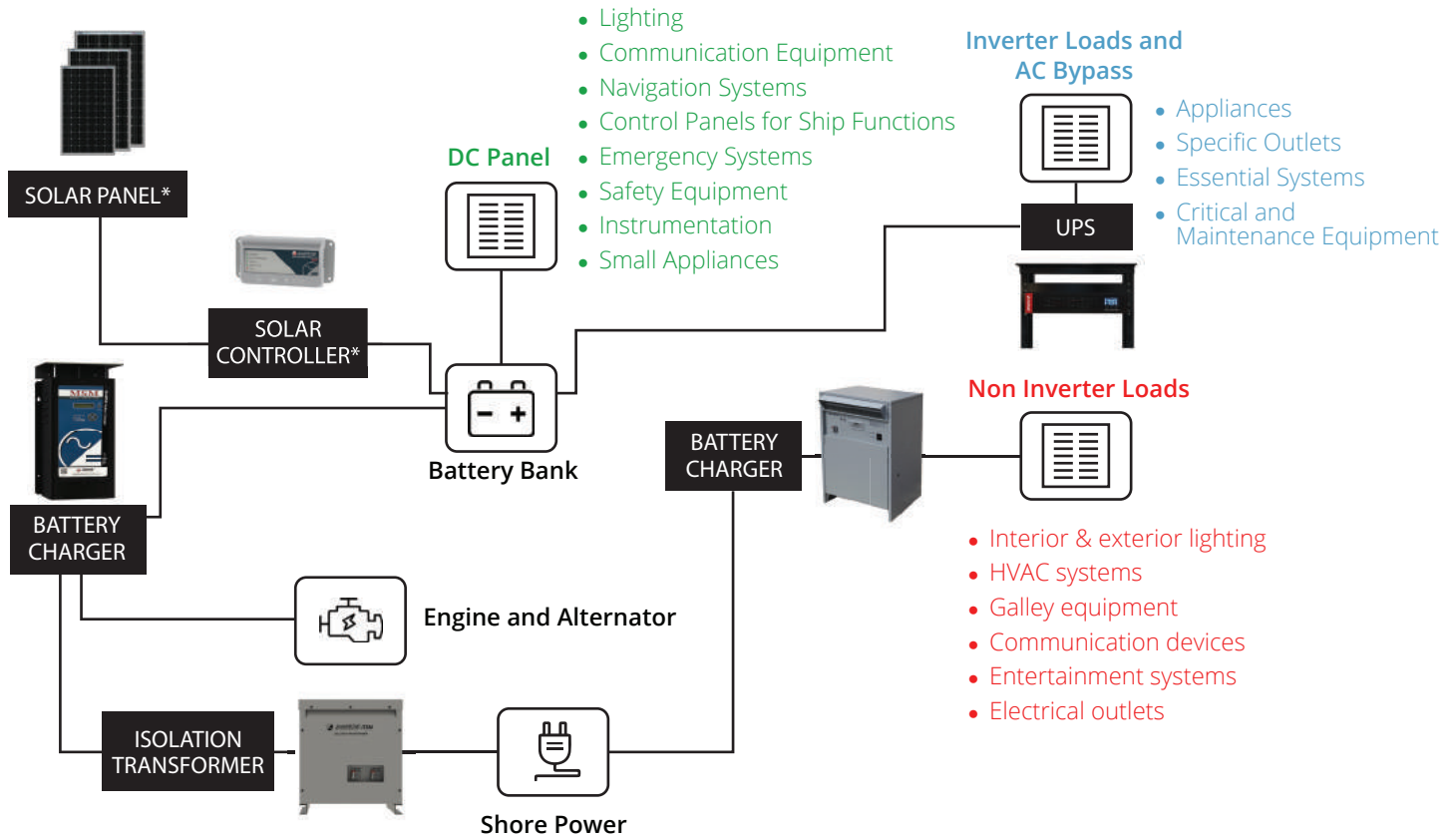
Emergency Generator Room: La Marche battery chargers play a vital role in maintaining and charging the batteries within the emergency generator room on vessels. They ensure that the backup batteries are consistently prepared to supply power during emergencies, supporting the seamless operation of the vessel's emergency power system.

Engine Room: La Marche battery chargers are actively utilized to maintain and charge batteries in or near the engine room of vessels, ensuring that auxiliary power sources remain consistently operational. This proactive approach supports the readiness of backup power sources in case of main generator failure or power loss on board.

Battery Rooms or Compartments: La Marche battery chargers are responsible for charging and maintaining the batteries located in dedicated compartments on vessels. These batteries serve as critical backup power sources for emergency lighting systems, navigation equipment, communication devices, and essential machinery aboard the vessel.

UPS Systems in Critical Areas: La Marche UPS Systems are strategically installed in critical areas such as control rooms, bridge, and navigation centers on vessels. UPS systems from La Marche play a pivotal role in providing immediate backup power to vital systems, ensuring uninterrupted operation during power disruptions or fluctuations while at sea.

Redundant Power Distribution Systems: Integrating La Marche components (Chargers, UPS, Isolation Transformers) into redundant power distribution systems significantly enhances their reliability and efficiency on vessels. Chargers diligently maintain backup batteries, UPS systems promptly offer immediate backup power, and isolation transformers effectively safeguard critical equipment from electrical disturbances, significantly contributing to a more robust redundant power setup aboard the vessel.



*Visit our website to learn more about La Marche Solar Power Solutions. We provide solar panels, solar controllers, and solar inverters: www.lamarchemfg.com



Reliable MSM Battery Charger



The La Marche MSM battery charger excels in the marine industry with its **SMART HIGH FREQUENCY CHARGING TECHNOLOGY**, versatile design, and robust construction. Featuring Power Factor Correction (PFC) and a three-stage charging cycle, it optimizes battery performance for dependable power on marine vessels. Its rugged, non-corrosive build meets strict safety and regulatory standards, including ignition protection, making it a top choice for marine power needs.



Complete Isolation from AC to DC

This is crucial for safety and reliability. It ensures that there is no electrical interference between the AC and DC circuits, reducing the risk of electrical hazards and protecting both the charger and the connected batteries.



Internal or External Temp. Compensation

Temperature-based battery charging adjustments are vital for maximizing battery life, especially in a marine environment where temperature fluctuations can be significant. This feature helps optimize battery performance and longevity.



Audible Charger Failure Alarm

An audible alarm and LED indicator are essential for timely maintenance. Customers can quickly identify any issues with the charger, allowing them to address problems promptly and prevent potential battery or system damage.



Input & Output Fuses

The inclusion of input and output fuses provides an added layer of protection, safeguarding the charger and connected batteries from electrical faults or overloads. This feature is critical for maintaining the reliability of the charging system and the safety of the vessel.

MSM Battery Charger Ratings

DC Output 12 or 24 VDC, 10-100 Amps

AC Input 1P: 102-264 VAC
45-65 Hz

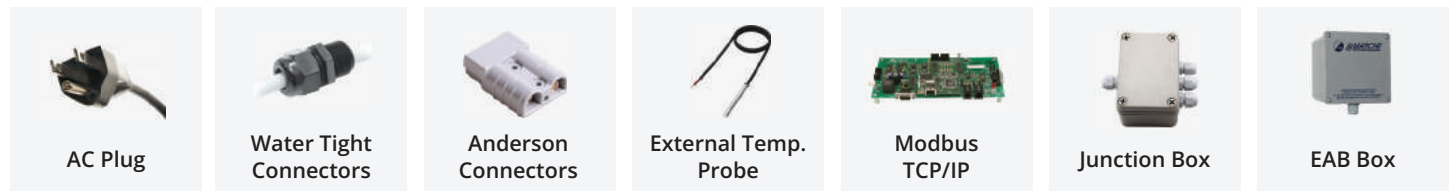
MSM

Battery Charger Specifications



Nominal Output Voltage	12/24 V	12/24 V	12/24 V	24 V
Adjustable Float Voltage	10.4 to 14.1 (12V) 20.8V to 28.2V (24V)	10.4 to 14.1 (12V) 20.8V to 28.2V (24V)	10.4 to 14.1 (12V) 20.8V to 28.2V (24V)	20.8V to 28.2V
Adjustable Equalize Voltage				
Total Output Current	10/20 Amps	25/30/35/40 Amps	50/60/65/80 Amps	100 Amps
Nominal Input Voltage	120/240 V (90-264 V) 50/60 Hz	120/240 V (90-264 V) 50/60 Hz	120/240 V (90-264 V) 50/60 Hz	120/240 V (90-264 V) 50/60 Hz
Number of battery connections	3	3	3	3
Recomended Battery Capacity	50-200 AH	125-400 AH	250-800 AH	1000 AH
Weight	5lb/2.3kg	11lb/5kg	18lb/8.2kg	32.6lb/14.8kg
Dimensions	14.20x9.63x6.16" 360x244x156mm	18.30x9.63x6.16" 464x244x156mm	18.30x9.3x69.85" 464x244x250mm	18.30x13.63x8.57" 464x346x217mm
Display	LCD			
Charging Algorithm	3 Step Charging, Li-Ion, NiCad, Gel-Cell, AGM, Flooded, Supercapacitor			
Temperature Compensation	3mV/°C/cell			
Voltage Compensation	+10% to -12% from Nominal			
Load Regulation	± 0.25% of Setting from No Load to Full Load Over the Specified Input Voltage, Frequency and Ambient Temperature Ranges			
Temperature Range	-20° to 50°C (-4° to 122°F)			
Cooling	Fan Assisted			
Protection Degree	IP22/NEMA Type 2 (with Dripshield)			
Input Protecion	Fuse with Surge and Transient Protection, AC Over Voltage Protection			
Output Protection	Current Limit Protection, Fuse with Surge Protection, Reverse Current Polarity Thermal Protection, Short Circuit Protection			
Approvals	UL 1236, ABS, USCG, CE, ABYC, ANSI/IEEE C62. 41			

Optional Accessories



Corrosion Resistant A12B Battery Charger



A12B battery chargers are designed for reliability in harsh conditions, featuring protective elements and incorporating well-established **MAGNETIC AMPLIFIER TECHNOLOGY**. Safety is of utmost importance, with integrated AC/DC breakers and blocking diodes, while ground detection technology safeguards against hull erosion. Seamlessly integrating with advanced vessel monitoring and control systems, A12B chargers support multiple communication protocols, providing a comprehensive solution for efficiently managing vessel electrical systems.



Conformal-Coating for Circuit Boards

This feature enhances the charger's durability and reliability, protecting the circuit boards from moisture and contaminants, which is crucial in the marine environment.



Water-tight connectors, and a Drip Shield

These features prevent issues like electrical short circuits, corrosion, and equipment malfunction in environments prone to water exposure. This results in longer lifespans for components, enhanced reliability, reduced downtime, and compliance with safety standards, making them particularly valuable for applications like marine vessels where reliable electrical systems are essential.



AC/DC Breakers

AC/DC breakers are essential for electrical safety, providing protection against overloads and electrical faults.



Multiple Communication Protocols

The support for multiple communication protocols, such as Ethernet Web Server, DNP3, MODBUS, SNMP, and IEC 61850, allows for seamless integration with sophisticated vessel monitoring and control systems, enhancing convenience and efficiency in managing vessel electrical systems.



A12B Battery Charger Ratings

DC Output 12, 24, 48, 130 VDC, 10-400 Amps

AC Input 1P: 120/208/220/240/480/600 VAC
3P: 208/240/480/600 VAC



A12B

Battery Charger Specifications








**Most Customizable
Battery Charger on the Market**

Nominal Output Voltage	12, 24, 48 and 130 VDC
Adjustable Output Voltage	Float (V/Cell) 2.12 - 2.35 Equalize(V/Cell) 2.2 - 2.45
Total Output Current	10-400Amps
Nominal Input Voltage	120, 208, 240 and 480VAC
Number of Battery Connections	1
Display	LCD
Charging Algorithm	3-Stage Charging
Temperature Compensation	3mV/°C/cell
Voltage Compensation	+10% to -12% from nominal
Load Regulation	±0.5% from No load to Full Load
Temperature Range	-40°C to 50°C
Cooling	Convection
Protection Degree	IP22
Input Protection	Surge Suppression and Breakers
Output Protection	Surge Suppression and Breakers
Compliance	UL, ABS, USCG
Weight	Varies by model, see A12B data sheet for details
Dimensions	Varies by model, see A12B data sheet for details

The A12B battery charger distinguishes itself as the **most customizable charger on the market**, presenting a versatile array of options. The following optional accessories render this charger ideal for the vessel industry. This extensive customization ensures unparalleled adaptability, making it an outstanding choice for the marine industry. It offers robust protection against diverse environmental challenges while managing electrical systems with precision and reliability.

Optional Accessories

 Glyptol Sealed Transformer and Choke	 Conformal Coated PCB's	 Drip Shield	 Water Tight Connectors	 AC and DC Breakers
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ABS and USCG



A46F Battery Charger

The La Marche 46F battery charger features advanced **MAGNETIC AMPLIFIER TECHNOLOGY**, ensuring unparalleled reliability crucial for the uninterrupted operation of emergency standby equipment aboard vessels. By consistently maintaining batteries at an optimal charge, it eradicates common starting issues, guaranteeing peak performance and extending battery life in maritime environments. Furthermore, these chargers can be tailored to meet the standards set by the American Bureau of Shipping (ABS) and the United States Coast Guard (USCG), making them the perfect solution for offshore vessels.



Reliable Performance

The controlled magnetic amplifier technology ensures high reliability for emergency standby equipment, eliminating common starting issues and guaranteeing consistent performance critical for maritime operations.



Customization to Maritime Standards

The charger can be tailored to meet strict ABS and USCG standards for offshore and onboard vessels, ensuring compliance with rigorous maritime regulations, thereby enhancing suitability and reliability in marine environments.



Advanced Control and Monitoring

The Accessory Package offers a range of features including selectable LCD display, current monitoring, alarm indicators, mode selection, and comprehensive early warning systems. These features provide users with extensive control and monitoring capabilities, ensuring optimal battery health and proper charging conditions.



Enhanced Safety and Durability

With safety features such as automatic voltage regulation, surge suppression, DC current limiting, and various fusing and isolation mechanisms, the charger not only protects itself and the batteries but also prevents potential hazards, ensuring safety and longevity even in demanding marine conditions.

A46F Battery Charger Ratings

DC Output 12, 24, 32 or 36 VDC, 6-40 Amps

AC Input 1P: 120, 208 or 240 VAC
50 or 60 Hz

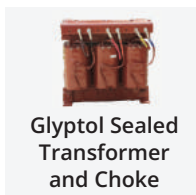
A46F

Battery Charger Specifications

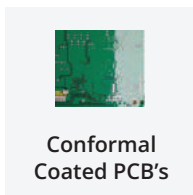


Nominal Output Voltage	12, 24, 32, or 36 VDC
Adjustable Output Voltage	Float (V/Cell) 2.12 - 2.35 Equalize(V/Cell) 2.2 - 2.45
Total Output Current	6-40 Amps
Nominal Input Voltage	120, 208 and 240 VAC
Number of Battery Connections	1
Display	LCD (Option)
Charging Algorithm	3-Stage Charging
Temperature Compensation	3mV/°C/cell
Voltage Compensation	+10% to -10% from nominal
Load Regulation	±2% from No load to Full Load
Temperature Range	-40°C to 50°C
Cooling	Convection
Protection Degree	IP22 (with optional Dripshield)
Input Protection	Surge Suppression and Fuses
Output Protection	Surge Suppression and Fuses
Compliance	UL, cUL
Weight	Varies by model, see A46F data sheet for details
Dimensions	Varies by model, see A46F data sheet for details

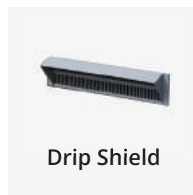
Optional Accessories



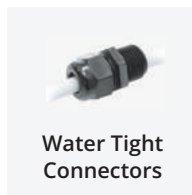
Glyptol Sealed Transformer and Choke



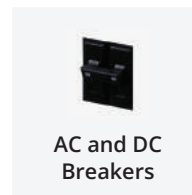
Conformal Coated PCB's



Drip Shield



Water Tight Connectors



AC and DC Breakers

Uninterrupted Power **CUPS** UPS System

UL

2 YEAR
WARRANTY



Reliable Power Supply

The CUPS operates as an online double-conversion UPS, crucial for consistent power in maritime settings, featuring specialized functions like true double-conversion topology, programmable load share, and hot-swappable batteries, meeting industry standards as a reliable power solution for marine applications.



Versatility and Flexibility

Its configurable output allows for the operation of critical and non-critical loads through different outlets. Additionally, the system's capability to connect multiple battery packs offers flexibility in accommodating various load types, sizes, and backup requirements on board vessels, enhancing adaptability in diverse situations.



Efficiency and Energy Savings

The inclusion of an ECO mode improves operational efficiency by up to 96%, maintaining safe load operations while conserving energy. This feature is particularly advantageous for vessels seeking to optimize power usage without compromising on reliability.



Seamless Transfer and Safety

The CUPS incorporates a static transfer switch, ensuring uninterrupted transfer to alternate bypass sources, guaranteeing continuous power supply without disruption. The system also comes with surge protection and complies with safety standards like UL1778, ensuring the safety of both equipment and personnel.

CUPS UPS System Ratings

DC Output 120 VAC or 230 VAC

AC Input 1P: 120 VAC or 230 VAC

Rated Power 1 kVA, 2 kVA or 3 kVA

The La Marche Compact 2U (CUPS) system offers a versatile setup for critical and non-critical loads, accommodating various outlets and multiple battery packs to suit diverse load types and sizes, meeting sea-related backup needs. Equipped with a static transfer switch, this unit ensures seamless and uninterrupted power transfer to alternative bypass sources, serving as an **UNINTERRUPTIBLE POWER SYSTEM (UPS)**. These combined attributes make the La Marche Compact 2U (CUPS) a dependable and flexible UPS solution, tailored to meet the unique demands of marine vessels, guaranteeing a consistent and secure power supply for critical operations at sea.

CUPS

UPS System Specifications



Rack Mount



Tower Mount



Cabinet Mount

Nominal Output Voltage	120VAC or 240VAC
Total Output Current	16Amps
Nominal Input Voltage	120 or 240VAC
DC Input Voltage	48VDC
Number of Battery Connections	1
Display	LCD
Charging Algorithm	3-Stage Charging
Temperature Compensation	3mV/°C/cell
Transfer Time	< 4
Harmonic Distortion	2 % THD (Linear Load); 4 % THD-(Nonlinear Load)
Temperature Range	0°C to 50°C
Cooling	Fan
Protection Degree	IP20
Input Protection	Surge Suppression and Fuses
Output Protection	Surge Suppression and Fuses
Compliance	UL
Weight	Varies by model, see CUPS data sheet for details
Dimensions	Varies by model, see CUPS data sheet for details



Shock Protection



ITSM Isolation Transformer

The La Marche **ISOLATION TRANSFORMER** Series (ITSM) is designed for installation in industrial and harsh environment applications where reliable power is required. The La Marche ITSM transformer protects circuits, equipment, and people from electric shocks and short circuits. The transformers are designed per UL safety requirements and manufactured using insulated copper windings with Class H insulation system. ITSM transformers are specifically engineered to operate at full load and full harmonic rating providing years of trouble free service.



Earth & Ship Ground Galvanic Isolation

Essential for preventing galvanic corrosion between dissimilar metals in contact with seawater, safeguarding the vessel's metallic parts by eliminating unintentional pathways for galvanic currents.



Ground (Faraday) Shield

Ground (Faraday) Shield: Acts as a protective barrier between power windings, preventing harmful energy transfer and minimizing issues like voltage spikes and fluctuations that could damage onboard electrical equipment.



"Glyptol Dip" Tropicalization

Protects electrical components by applying a corrosion-resistant layer, resisting moisture and harsh marine conditions, ensuring component longevity and reducing the risk of electrical failures due to environmental factors.



Water-Tight Cables Entry

Prevents water from entering cable entry points, maintaining electrical connections and preventing corrosion, short circuits, and malfunctions caused by moisture in the marine environment.



ITSM Isolation Transformer Ratings

AC Input 110 V, 120 V, 208 V, 480 V, 600V

Rated Power 1 kVA - 40 kVA

ITSM

Isolation Transformer Specifications



Rating	1 - 40 kVA
Winding	1 Phase or Three Phase (Delta/Star/3 Wires or 4 Wire)
Input Voltage	110V, 120V, 208V, 480V, 600V (Multi-tap input available)
Output Voltage	110V, 120V, 208V, 480V, 600V (Multi-tap output available)
Frequency	50 or 60 Hz
Efficiency	Up to 99%
Insulation	Class H Insulation
Di-Electric Strength	2500 VAC for 120 Secs
Connectors	IEC Approved
Operatin Ambient Temp.	50°C
Cooling	Convection Cooled
Approvals	UL
Weight	Varies by model, see ITSM data sheet for details
Dimensions	Varies by model, see ITSM data sheet for details

