

PTMP Chargers - 24V Modular Programmable



24 Volt, 150 Amp

- **Programmable:**
 - Battery Types
 - Operating & Alarm Parameters
- **Self-Monitoring/Diagnosis Reported On-Screen:**
 - Operational Data
 - Out of Limit Conditions
 - Component Fault Identification
- **Form C Remote Monitor Relay Outputs:**
 - AC Fail, DC Voltage Low/High
- **Onboard Serviceability:**
 - Plug-In Replacement Components
 - Charger Remains Installed On Vessel



The PTMP represents a new level of functionality, reliability, and serviceability in very smart battery charging for critical 24 volt systems aboard work boats, military, commercial, and recreational craft. A menu of pre-programmed battery type charge profiles as well as custom settings option allow user to select or program optimal three step charging voltages and operating parameters. The chargers interact with batteries providing the ideal profile for replenishment and conditioning, resulting in maximum performance and extending service life.

LCD screen diagnostics and system status and alarm conditions, plus remote alarm contacts improves reliability as operators are kept apprised and forewarned of potential system issues. The LCD monitor indicates nature of the service required, yet the charger will rarely need to be removed from the vessel! The front panel hinges upward allowing access to the power module and controller circuits which can be easily removed, and a replacement quickly plugged back in place, specialized techs not required, minimizing down time and service labor expense.

Reliability is further enhanced on the 100 and 150 amp systems via use of multiple power modules, should one fail the system will signal a fault but continue to operate at reduced power output.

Features

- User selection of Pre-programmed charge profiles for multiple battery types. Plus full customization for special requirements
- On-screen status and system diagnostics, with audio alarm
- Independent temperature sensors, 3 battery banks
- 3 step charging for long battery life
- Equalization program
- Remote Status monitoring via Form C relay contacts
- ABS Type Approval Battery Charger and Power Supply. Multiple modules qualifies as redundant ABS essential service device
- Easy front panel access to plug-in modules for quick field service, no need to remove charger from vessel, high tech personnel not required
- IP45 solids and water ingress protection

PTMP Model	24-100	24-150
Input Amps (115V/230V AC)	26/17	42/24
Output Amps @ 24V	100	150
Banks	3	3
Size (Inches)	24 x 10 x 7	24 x 12 x 7
Weight (Lbs.)	28	35

Preliminary Specifications



DC Power Onboard



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Operation Status Screen

A 2" x 2.6" Front panel LCD screen provides system status information:

Battery program selections include:

- Flooded Cell 1
- AGM
- Flooded Cell 2 (AGM 2)
- Gel
- TPPL (Thin Plate Pure Lead)

Custom settings include:

- Absorption & float voltage
- Absorption stage time
- Absorption stage end amps
- Bulk stage time out
- Max charge amps (AC input limit)
- End of Absorption condition
- Hi/Low DC alarm voltages

Programmable

Enter charge profile for multiple battery types, and monitoring parameters via front panel key pad, LCD screen or by laptop connection.

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Self-Monitoring/Diagnosis

Displayed on-screen with audio alarm when critical condition detected:

- AC Failure
- Charger Over Temp
- Battery Over Temp
- High Charger Voltage Output
- Low Charger Voltage
- Internal Power Module over temp
- Internal Power Module Failure
- Fan failure
- Output Fuse Failure

Form C Remote Monitor Relay Outputs

- AC Fail
- DC Voltage Low/High
- Controller Communication Fail

Reliable

Hardened for marine environment:

- Redundant power modules ensure continued operation should one fail
- IP 45 rating: protected from dust and water jets
- Cooling air flow ducted to minimize contact with power circuit components
- Conformal coated circuit boards
- High temperature rated circuits to 50° C
- Automatic power reduction in high temp environments

On-Bulkhead Serviceability

On-screen diagnostic define fault conditions. Hinged front panel access to internal modular plug-in circuits makes replacement easy without removing charger from installed location.

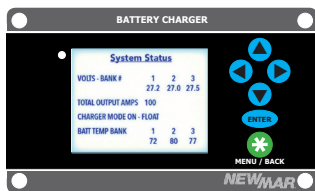
- Module change-out takes only minutes via plug and play configuration
- Technical personnel not required
- No need to remove the charger case from the boat

Options

- Remote installation of LCD display and touch pad.
- Battery Temperature Sensors.



Battery Temp. Sensor



Remote Panel

System Status			
VOLTS - BANK #	1	2	3
	27.2	27.0	27.5
TOTAL OUTPUT AMPS	100		
CHARGER MODE	ON - FLOAT		
BATT TEMP BANK	1	2	3
	72	80	77

System Normal Screen

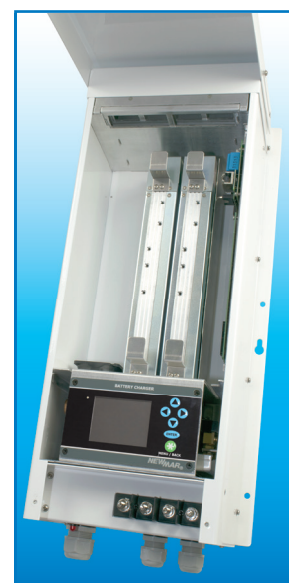


Programmable by key pad

System Status			
VOLTS - BANK #	1	2	3
	22.0	24.8	25.0
TOTAL OUTPUT AMPS	0		
CHARGER MODE	OFF/FAULT		
BATT TEMP BANK	1	2	3
	128	72	80

Battery # 1 Over Temp

Alarm Condition Screen



Front panel pivots up providing access to plug-in modules allowing easy onboard service

