#### **Pro**Mariner<sup>™</sup>

#### **Recreational Marine/Industrial Grade**



#### Recreational Marine & Industrial Grade On-Board Battery Chargers

ProMar1 DS Generation 3 reflects a new outward design taken to the next level in performance with all Digital Charging Technology. Fully Automatic with a 4-Stage Charging algorithm proven to extend battery life. Sequential modes of Analyzing, Charging, Conditioning and built-in Auto Maintain mode, safe for short and long term storage periods. ProMar1 DS features include: Battery Trouble Status LED per charging output identifying battery or installation wiring conditions requiring attention, waterproof inline fuse holder that is easily separated with a threaded two part design, dual mode Charge Status LED indication of each battery being individually charged and maintained.

ProMar1 DS is designed for use in harsh outdoor environments with industrial grade jacketed DC cables, JTOW outdoor rated AC power cable for maximum wiring protection, in addition to fully encapsulated IP68 waterproof and shock proof construction.

Designed and certified to UL Marine 1236, the new energy efficient CEC (California Energy Commission) and DOE (Department of Energy) requirements.

Industry standard power ratings for moderate charge times and a single preset charging algorithm, safe for Flooded (Lead Acid) or Gel batteries.

Fully Automatic 4-Stage Charging

Dual Mode Charge Status Indicator

**Battery & Wiring Fault Detection** 

**Rugged Shockproof Construction** 

Auto Maintain/Energy Saver Mode Extends Battery Life

Safe for Long and Short Term Storage

Pre-Wired with Waterproof Inline DC Fuses and Nickel Plated Copper Ring Terminals

Built-in Safety Reverse Polarity, Ignition, Over-Current, Over-Voltage and Over-Temperature Protection

Quiet EMI Design Meets US FCC Emissions Requirements



Built for harsh environments





Flooded Lead Acid & Gel Batteries



Energy Saving



Battery Trouble Status

Dual Mode Charge Status LED Indicator Red: Charging Green: Auto Maintain/Energy Saver 🜌

#### Battery & Wiring Fault Detection



Pre-Wired with Waterproof Inline DC Fuses and Nickel Plated Copper Ring Terminals Industrial Grade Jacketed DC Cables, JTOW Outdoor Rated AC Power Cable for Maximum Wiring Protection Dual Inline Safety Fuses for all Multi-Bank Models

#### **Pro**Mariner<sup>™</sup>

#### **Recreational Marine/Industrial Grade**

# ProMar<sup>1</sup>



Built for harsh environments

#### Available in Three Models...



5 Amp 1 Bank

Volts 14

12

**Fully Automatic 4-Stage Charging** 

1 Analyzing

2 Charging

3 Conditioning

OAmp 2 Bank

Auto Maintain/Energy Saver 🜌

### 15 Amp 3 Bank

## **Stage 1 - Analyze Mode:** AC Power is applied. ProMar1 DS's red Charging LED will light indicating it is analyzing individual wiring connections for proper connection/polarity and that each battery is over 4.0 VDC and capable of accepting a precharge. When completed, any errors will trip a battery specific red fault LED, or if no faults are present the red Charge LED will remain solid red.

**Stage 2 & 3 - Charge / Conditioning Mode:** During this mode the red charging LED will be solid on indicating each battery is being charged in constant current mode as controlled by temperature until the battery voltage is raised to 14.1 VDC and will hold at 14.1 VDC in constant voltage mode for 2 to 3 hours to condition each battery. When completed, the red Charging LED will shut off.

**Stage 4 - Energy Saver Auto Maintain Mode:** During this mode the blue AC Power and green Auto Maintain LED will be solid on indicating each battery is being monitored while the charger is in standby mode consuming little to no power until the battery drops under 12.8 VDC (fully charged) and the charger outputs will turn on and auto maintain the battery in a fully charged state. This is fully automatic and safe for short and long term storage.

Part No.   Mod	lel [	DC Sytem Voltage	Amps	No. Batteries	Charging	Auto Maintain	Cable Length	Size (H x W x D)	Weight	AC In	AC Plug
31505 ProN	1ar1DS 5 1	12	5	12V	up to 14.1 VDC	12.8-13.5 VDC	6'	6.4" x 4.1" x 2.4"	4.0 bs	110-120 VDC, 50/60Hz	NEMA 5-15
31510 ProN	Nar1DS 10 1	12/24	5/5	12V 12V	up to 14.1 VDC	12.8-13.5 VDC	6'	9.2" x 5.7" x 2.4"	7.0 bs	110-120 VDC, 50/60Hz	NEMA 5-15
31515 ProN	Mar1DS 15 1	12/24/36	5/5/5	12V 12V 12V	up to 14.1 VDC	12.8-13.5 VDC	6'	10.5" x 6.5" x 3.0"	11.0 <b>b</b> s	110-120 VDC, 50/60Hz	NEMA 5-15

Operating **↓** -20°C to 50°C\* \*output derates at 50°C Storage **↓** -40°C to 70°C

Note: For use with Group 24 through 31 Flooded (lead-acid) and GEL batteries. Not for use with AGM (Absorbed Glass Matt) or 4D or 8D large capacity batteries **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov.