# POMERMANIA®







Marine Product Catalogue

Innovation

Precision

Powermania

## TURLOME-SERIES

Marine. The Turbo ME Series battery chargers from Powermania are rugged, waterproof, and offer the best overall value among all the onboard chargers on the market today. Available in five models, ranging from M106E (1-Bank, 6-Amp) to M312E (3-Bank, 12-Amp), these chargers are fully epoxy-potted for true, long-term waterproofing and shock-resistantance – ideal for recharging and maintaining 12V DC batteries in marine applications and other harsh environments. Featuring 3-Stage Smart Charge and Adaptive Loading, the Turbo ME's charging process not only fully charges all connected batteries in full automation, but also completes charging cycles in the shortest time possible. The Turbo ME also comes equipped with extensive safety features, including Ignition Protection, Over-Current Protection, Overheat Protection, Over-Voltage Protection, Reverse Polarity Protection, and Short Circuit Protection.















M106E / M108E / M208E 61/2" (L) x 41/2" (W) x 21/2" (H)

M212E / M312E  $8^{1/4}$  (L) x  $5^{3/4}$  (W) x  $2^{3/4}$  (H)

Fully Epoxy-Potted – For true, long-term waterproofing Automatic 3-Stage Smart Charge Adaptive Loading – More power to weaker batteries Selectable Charge Profile – Lead-acid/AGM, GEL, AGM+





Model #	Manufacturer's P/N	Max. Output	# 12V Output	Battery System	Weight
M106E	57101	6 Amps	1	12V DC	4.5 lb
M108E	57102	8 Amps	1	12V DC	4.6 lb
M208E	57103	8 Amps	2	12/24V DC	5.2 lb
M212E	57104	12 Amps	2	12/24V DC	6.2 lb
M312E	57105	12 Amps	3	12/24/36V DC	6.7 lb







# TURLOMV2-SERIES

he Turbo MV2 is the upgraded version of the Turbo ME's. Based on the same compact and waterproof construction, the more powerful V2 delivers unparalleled performance and durability. Highlighted by its ability to charge deeply depleted batteries, to maintain 100% consistent output power even at inadequate 90V AC input, the new V2 is lighter and runs even cooler and more efficiently thanks to the new, proprietary waterproof active cooling. The enhanced Turbo MV2 also adds an individual Charge Status and Connection Check LED indicator to each DC output. The best has just gotten better.

























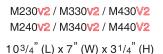


All the features from Turbo ME Series

- + Universal (120/240V) AC Input
- + 100% Consistent Output @ 90V AC Input
- + Charges deeply depleted batteries
- + Individual Charge Status Light
- + Individual DC Connection Check Light









Model #	Manufacturer's P/N	Max. Output	# 12V Output	Battery System	Weight
M212V2	58201	12 Amps	2	12/24V DC	6.5 lb
M220V2	58203	20 Amps	2	12/24V DC	7.7 lb
M320V2	58204	20 Amps	3	12/24/36V DC	8.2 lb
M230V2	58205	30 Amps	2	12/24V DC	13.0 lb
M330V2	58206	30 Amps	3	12/24/36V DC	13.5 lb
M430V2	58207	30 Amps	4	12/24/36/48V DC	14.0 lb
M240V2	58208	40 Amps	2	12/24V DC	13.5 lb
M340V2	58209	40 Amps	3	12/24/36V DC	14.0 lb
M440V2	58210	40 Amps	4	12/24/36/48V DC	14.5 lb





# 3-STAGE SMART CHARGE 15 Bulk Absorption Float 14.5 13.5 13

### 1st Stage - Bulk

The charger provides its maximum constant current to fast charge the battery. The battery's voltage rises as it absorbs the charge. When the battery's voltage reaches 14.5V (Flooded mode), it is about 80% recharged. The charger then moves to the second stage.

### 2nd Stage - Absorption

The charger continues to charge the battery at 14.5V (Flooded mode) while the charging current slowly decreases as the battery charges up to 100%. When the battery is fully charged, the charger then moves to the third stage.

### 3rd Stage - Monitor / Float

The charger drops its voltage to 13.4V (Flooded mode). It is safe to leave the charger connected to the battery indefinitely to maintain the battery's full charge. If the battery loses a significant amount of charge from usage, the charger will start a new charge cycle.

Line	LED	Charge Mode	Voltage (Absorption)	Voltage (Float)
	L. Acd AGM	Flooded, Lead-Acid / AGM Mode	14.5 V DC	13.4 V DC
	GEL	GEL Mode	14.1 V DC	13.8 V DC
	AGM+	AGM+* Mode	14.7 V DC	13.6 V DC

AGM+ Mode is designed for recharging high power AGM batteries. Factory setting is Flooded (Lead-Acid) / AGM Mode.

### Feature Highlight: Adaptive Loading (available in both TURLOTO and TURLOTO)



The Adaptive Loading feature dynamically adjusts the charger's output level on each output bank. More charging power is allocated to battery that is low in charge, and less charging power to battery that is closer to being fully charged.

In Scenario 1 (left chart), two batteries have similar charge level. The Adaptive Loading feature allocates approximately equally 50% of its total output to each battery. In Scenario 2 (right chart), the first battery is close to be fully charged and the second battery is discharged. The Adaptive Loading feature allocates only 10% of its charging power to the first battery and the other 90% to the discharged one.

Notice that in both scenarios the charger utilizes its full output capacity (100%). In contrast to the other chargers with fixed output-per-bank constraints, the Turbo MV2 & ME charges all connected batteries to their fullest charge in the shortest time.

### Feature Highlight: Active Cooling & Individual Charge Status and Connection Check (available in TURLOTTVE)



### Active Cooling

The Turbo MV2 comes equipped with a proprietary waterproof cooling fan in 20 amp and higher models. The fan is turned on and off automatically, and it runs at a quiet 34dB when spinning.



Individual Charge Status & Connection Check

Each DC output of a Turbo MV2 has its own individual Charge Status / Connection Check light. Red means charging, and green means the battery is fully charged. If the LED displays amber, it means that particular output is not being properly connected to a battery.

### Accessory: AC Plug Port (compatible with both TURLOME)



The Powermania AC Plug Port is designed to work with only Powermania charger's AC plug. It provides a thru-hull AC connection between the charger and AC extension cord. The installation does not require any cutting or stripping of the AC cord. The AC Plug Port's cover seals the AC plug from water and corrosion when it is not in use. The AC Plug Port is available in black and white.