



High Performance, Multistage Charging

Truecharge multistage battery chargers are microprocessor controlled for fast and accurate charging of all deep-cycle 'house' batteries. A wide AC input voltage range enables proper delivery of a full three-stage charge, even when charging from less than perfect quality shorepower or generator power. Smart features, such as adjustable temperature compensation and independent settings prevent battery damage due to overcharging and help extend the life of expensive batteries. All Truecharge battery chargers come with a one-year warranty.

Truecharge 20 + / 40 +

- ▶ 20 and 40 amp output
- ▶ Microprocessor-controlled, multistage charging
- ▶ Charges up to three battery banks simultaneously
- ▶ Independent settings for AGM, flooded, gel or lead-acid batteries
- ▶ Wide voltage range operation (90-135 Vac, 50/60 Hz)
- ▶ Automatic 21-day top-up program
- ▶ Durable and corrosion resistant chassis
- ▶ Optional remote LED panel to indicate battery and charge status
- ▶ Optional battery temperature sensor

Protection Features

- ▶ Over-temperature shutdown and overload protection
- ▶ Ignition-protected for installation in gas engine compartments
- ▶ Transformer isolated for safety and to protect against electrolysis
- ▶ Reverse-polarity protection
- ▶ Short-circuit and surge protection



NRTL/C

CSA/NRTL Certified to UL and CSA Standards

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20 and 40 amp Multistage Battery Chargers

Electrical Specifications

Models	Truecharge 20+ / 40+
Output current	20 A @ 14.5 V nominal / 40 A @ 14.5 V nominal
Output voltage (nominal, depending on settings)	
• Charge	13.8 - 14.8 Vdc
• Float	13.1 - 14.2 Vdc
• Equalize	15.5 Vdc @ 5 A maximum
DC output connections	Three
AC input voltage	90-135 Vac, 50/60 Hz
Temperature compensation	Three settings or optional remote sensor
Charger efficiency	85% approx.
Recommended battery type	Gel, flooded and AGM
Recommended battery size	100 Ah to 400 Ah / 400 Ah and up

General Specifications

Models	Truecharge 20+ / 40+
Operating temperature	0°C to 30°C
Storage temperature	-25°C to 70°C
Battery connection	Three pos. terminals, one neg. terminal
Dimensions (H x W x L)	2.75 x 6.5 x 10.65" (70 x 165 x 270 mm) 2.75 x 6.5 x 10.65" (70 x 165 x 270 mm)
Weight	6.9 lb (3.1 kg)
Warranty	One year
Part Number	804-0220 (Truecharge 20+) 808-0200 (Truecharge 20+ Remote Panel) 804-0440 (Truecharge 40+) 808-0400 (Truecharge 40+ Remote Panel) 808-0231 (Truecharge 20+ / 40+ Temperature Sensor)

Regulatory Approvals

Truecharge 20+ / 40+ CSA/NRTL approved to **CSA 107.2, UL 1236, UL 458, UL 1564**, including the Marine Supplement and ignition protection

Note: Specifications subject to change without notice.

Three-stage Charging

Multistage charging ensures batteries receive optimum charging, but with minimal wear and tear, regulating the voltage and current delivered to the batteries in three automatic stages:

- ▶ **Bulk:** Replaces 70-80% of the battery's state of charge at the fastest possible rate.
- ▶ **Absorption:** Replenishes the remaining 20-30% of charge, bringing the battery to a full charge at a slow, safe rate.
- ▶ **Float:** Voltage is reduced and held constant in order to prevent damage and keep batteries at a full charge.