



## 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 also help extend the life of expensive batteries. All Truecharge battery chargers come with a one year warranty.

### Truecharge 10/10TB

- ▶ 10 amp DC output
- ▶ Microprocessor controlled, multistage charging
- ▶ Charges up to two battery banks simultaneously (Truecharge 10TB)
- ▶ Covered terminal block with screw terminals for safe and easy connection (Truecharge 10TB)
- ▶ Easy battery connection with clip leads (Truecharge 10)
- ▶ Three settings for temperature compensation (Truecharge 10)
- ▶ Settings for flooded or gel lead-acid batteries
- ▶ Wide voltage range operation (90-135 VAC, 50/60 Hz)
- ▶ Automatic 21-day top-up program

### Truecharge 20+/40+

- ▶ 20 and 40 amp output
- ▶ Microprocessor controlled, multistage charging
- ▶ Charges up to three battery banks simultaneously
- ▶ Independent settings for AGM, flooded or gel 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 (10TB, 20+ and 40+)
- ▶ 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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## 10, 20 and 40-amp Multistage Battery Chargers

## Electrical Specifications

Models	Truecharge 10/10TB	Truecharge 20+/40+
Output current	10 A @ 14.5 V nominal	20 A @ 14.5 V nominal/40 A @ 14.5 V nominal
Output voltage (nominal, depending on settings)		
• Charge	13.8-14.8 VDC/14.2-14.4 VDC	13.8-14.8 VDC
• Float	13.1-14.2 VDC/13.5-13.8 VDC	13.1-14.2 VDC
• Equalize		15.5 VDC @ 5 A maximum
DC output connections	Clip leads/dual	Three
AC input voltage	90-135 VAC, 50/60 Hz	90-135 VAC, 50/60 Hz
Temperature compensation	3 settings/none	3 settings or optional remote sensor
Charger efficiency	85% approx.	85% approx.
Recommended battery type	Gel and flooded	Gel, flooded and AGM
Recommended battery size	25 to 100 Ah	100 to 200 Ah/200 Ah and up

## General Specifications

Models	Truecharge 10/10TB	Truecharge 20+/40+
Operating temperature	0°C to 30°C/0°C to 40°C	0°C to 30°C
Storage temperature	-25°C - 70°C	-25°C - 70°C
Battery connection	Alligator clip leads/2 separate pos. terminal, 1 common neg. terminal	3 pos. terminals, 1 neg. terminal
Dimensions (HxWxL)	2.75 x 6.5 x 9.0" (7 x 16.5 x 23 cm)	2.75 x 6.7 x 15.1" (7 x 17.2 x 38.5 cm) 2.75 x 6.5 x 10.65" (7 x 16.5 x 27 cm)
Weight	3.0 lb (1.4 kg)	6.9 lb (3.1 kg)
Warranty	One year	One year
Part Number	804-0100 (Truecharge 10)	804-0220 (Truecharge 20+)
	804-0111 (Truecharge 10TB)	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 10	CSA/NRTL approved to <b>CSA 107.2, UL 1236</b>
Truecharge 10TB	CSA/NRTL approved to <b>CSA 107.2, UL 1236</b> , including the Marine Supplement and ignition protection
Truecharge 20+/40+	CSA/NRTL approved to <b>CSA 107.2, UL 1236, UL 458, UL 1564</b> , 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.