

# TRUECHARGE™ 2 Battery Chargers – 12-volt

xantrex™



## Redesigned, High Performance, Worldwide Charging

Xantrex™ TRUECHARGE™ 2 Battery Chargers lead the industry with a small footprint and ultra-compact design. In addition to meeting global safety and regulatory standards, TRUECHARGE2 Battery Chargers feature low electrical interference and efficient, power factor corrected multistage charging. TRUECHARGE2 Battery Chargers can be mounted in a variety of positions, given their drip-proof design. TRUECHARGE2 Battery Chargers enable quick installation with easy-to-access AC and DC wiring compartments.

Designed primarily for marine and commercial applications worldwide, TRUECHARGE2 Battery Chargers are unmatched for reliability. Available in three 12-volt models, they are versatile enough to be used in a wide variety of conditions and locations. Auto-ranging AC input voltage capability (90 - 265 volts AC) makes traveling abroad and handling poor-quality power a breeze. The easy-to-read display can be augmented with an optional remote panel.

## Performance Features

- ▶ 12-volt models available in 20 A, 40 A and 60 A
- ▶ Microprocessor-controlled, multistage charging algorithms
- ▶ Settings for two and three-stage charging
- ▶ Settings for flooded, gel, AGM or lead-calcium batteries
- ▶ Auto-ranging universal input voltage (90-265 Vac, 47-63 Hz) is also compatible with a generator or other low-quality power sources
- ▶ Temperature-compensated charging
- ▶ Power factor corrected for efficient charging
- ▶ Battery-equalization feature
- ▶ Ability to charge 'dead' batteries
- ▶ Battery temperature sensor available (Part #808-0232-01)
- ▶ Optional Remote Panel (#808-8040-00 for 60 A & #808-8040-01 for 20 A and 40 A)

## Protection Features

- ▶ Reverse battery polarity protection
- ▶ Drip-proof design
- ▶ Over and under-temperature protection
- ▶ DC over-voltage protection
- ▶ Battery overcharging protection

## TRUECHARGE™ 2

20A

40A

60A

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## 20, 40 and 60 amp 12-volt Multistage Battery Chargers

### Electrical Specifications (@ 25°C unless otherwise noted)

Models	TRUECHARGE2 20 / 40	TRUECHARGE2 60
Output current (nominal)	20 A / 40 A	60 A
Output voltage (nominal, depending on settings)		
• Charge	14.2 - 15.5 Vdc	14.2 - 15.5 Vdc
• Float	13.4 - 13.8 Vdc	13.4 - 13.8 Vdc
• Equalize	16 Vdc	16 Vdc
DC output connections	Three	Three
AC input voltage <sup>1</sup>	90-265 Vac 47-63 Hz 120 Vac, 230 Vac, 240 Vac nominal	90-265 Vac 47-63 Hz 120 Vac, 230 Vac, 240 Vac nominal
Temperature compensation	Three settings or optional remote battery temperature sensor	
Charger efficiency	> 80%	> 80%
Battery type	Gel, Flooded, AGM and Pb-Ca	Gel, Flooded, AGM and Pb-Ca
Minimum recommended battery bank size	40 Ah for 20 A / 80 Ah for 40 A	120 Ah for 60 A

### General Specifications

Models	TRUECHARGE2 20 / 40	TRUECHARGE2 60
Operating temperature <sup>2</sup>	0 to 65°C	0 to 65°C
Storage temperature	-40 to 80°C	-40 to 80°C
Battery connection	Three positive terminals One negative terminal	Three positive terminals One negative terminal
Dimensions (H x W x L)	2.8 x 6.7 x 9.8" (70 x 170 x 250mm)	3.5 x 6.7 x 13.4" (90 x 170 x 340 mm)
Weight	4.8 lb (2.2 kg)	9.9 lb (4.5 kg)
Warranty	Two year	Two year
Part Numbers	804-1220-02 / 804-1240-02	804-1260

### Accessories

Remote panel	808-8040-00 (60 A charger)
Remote panel	804-8040-01 (20 A and 40 A charger)
Battery temperature sensor	808-0232-01

### Regulatory Compliance

CSA E60335-2-29, UL1564, and UL1236 including the Marine Supplement and drip test. CE Marked for the Low Voltage Directive (safety) and the EMC Directive. Complies with IEC 60335-2-29 including Australian deviations. Ingress protection rating IP32 per EN/IEC 60529. Complies with FCC Part 15B and Industry Canada ICES-003 Class B emissions limits. Complies with ABYC A-31

<sup>1</sup> 90 - 104 Vac  $\pm$  4 Vac output de-rated to 80% of full load current

<sup>2</sup> For 20A and 40A charger, output current derates above 50°C. For 60 A charger, output current derates above 40°C. Highly Accelerated Life Tested (HALT) to -20°C.

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 maintain batteries at a full charge.

### Power Factor Corrected (PFC)

Less shorepower is required for charging batteries, freeing up more usable AC power for running electrical devices and appliances and reducing the likelihood of tripping shorepower breakers.