

## Ultra-compact, high performance charger for worldwide charging

Available in:

10 A  
24 V

20 A  
24 V

30 A  
24 V



Building on the success of the TRUECharge2 12-volt battery chargers, Xantrex now offers 24-volt battery chargers designed to meet the specific needs of marine and commercial markets. Available in 10 A, 20 A and 30 A versions, each model packs a powerful universal charger (90-240Vac, 47-63 Hz) in an ultra-compact, lightweight package.

TRUECharge2 battery chargers are highly versatile and can be mounted in multiple positions, thanks to their inherent drip-free design characteristics. TRUECharge2 delivers outstanding low electrical interference, coupled with efficient, power factor corrected, multistage charging capability. Installation is a breeze, thanks to the easy-access AC and DC wiring compartments. The easy-to-read display can be augmented with an optional remote panel.

### Performance Features

- » TRUECharge2 20 A, 40 A and 60 A are equipped with PARALLEL STACKING feature. This allows two chargers to work together to combine the output current, achieving up to 120 A for large battery banks. This requires the optional Remote Panel (part #808-8040-01)
- » 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
- » Power factor corrected, temperature-compensated charging
- » Battery-equalization feature
- » Ability to charge batteries drained to extremely low voltage
- » Optional Battery temperature sensor (Part #808-0232-01)
- » Optional Remote Panel (Part #808-8040-01)



### Protection Features

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

Also available in 12-volt models: 10 A, 20 A, 40 A and 60 A.

### Applications:



Recreational vehicles



Marine



Heavy duty trucks



Work vehicles



Specialty vehicles



ETL listed to CSA Standard C22.2 No. 107.1 and UL 458\* with Marine supplement

\*For marine supplement compliance drip shield in specific mounting orientation is required. See installation guide



# TRUECHARGE™2

## BATTERY CHARGER

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

Models	TRUECHARGE2 10 / 20 / 30
Output current (nominal)	10 A / 20 A / 30 A
Output voltage (nominal, depending on battery type settings)	
Charge	28.4 - 31.0 Vdc
Float	26.8 - 27.6 Vdc
Equalize	32 Vdc
DC output connections	Three
AC input voltage <sup>1</sup>	90-265 Vac 47-63 Hz 120 Vac, 230 Vac, 240 Vac nominal
Temperature compensation	Three settings
Charger efficiency	> 80%
Battery type	Gel, Flooded, AGM, Pb-Ca
Minimum recommended battery bank size	40 Ah / 80 Ah / 120 Ah

### General specifications

Models	TRUECHARGE2 10 / 20 / 30
Operating temperature <sup>2</sup>	0 to 60°C
Storage temperature	-40 to 80°C
Battery connection	Three positive terminals One negative terminal
Dimensions (H x W x L)	10 A & 20 A - 2.8 x 6.7 x 9.8" (70 x 170 x 250mm) 30 A - 3.5 x 6.7 x 13.4" (90 x 170 x 340 mm)
Weight	10 A & 20 A - 4.8 lb (2.2 kg) 30 A - 9.9 lb (4.5 kg)
Warranty	Two year
Part Numbers	804-2410 / 804-2420 / 804-2430

### Accessories

Remote panel	808-8040-01
Battery temperature sensor	808-0232-01

### Regulatory and environmental compliance

CSA E60335-2-29, UL1564, and UL1236 including the Marine Supplement, drip test, and Ignition Protection ratings. 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 ± 4 Vac output de-rated to 80% of full load current

<sup>2</sup> For all three models, the output current may derate above 50°C.

Highly Accelerated Life Tested (HALT) to -20°C.

Note: Specifications subject to change without notice.

### Three-Stage Charging

Multistage charging helps ensure 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