

## TRUECHARGE3 BATTERY CHARGER DATASHEET



AVAILABLE IN:

**10A/24V**  
**20A/24V**  
**30A/24V**

### ULTRA-COMPACT, HIGH PERFORMANCE CHARGER FOR WORLDWIDE CHARGING

TRUEcharge3 battery chargers lead the industry with a small footprint and ultra-compact design. In addition to meeting global safety and regulatory standards, TRUEcharge3 battery chargers feature low electrical interference and efficient, power factor corrected multistage charging. Thanks to their inherent drip-proof design characteristics, the TRUEcharge3 chargers can be mounted in multiple positions. Unlike its predecessors, **TRUEcharge3 is Lithium-ion battery compatible.**

Designed for recreational and commercial applications worldwide, TRUEcharge3 accepts 90–265 Vac, 47–63 Hz which makes traveling abroad and handling poor-quality power a breeze. The easy-to-read display of the TRUEcharge3 12 V models can be augmented with an optional remote panel. Each models comes with built-in protection against surges and spikes on the AC power line.



Lithium-ion Battery Compatible



Automatic 3-stage Battery Charger



Parallel Stacking for up to Two Chargers



Higher Quality & Reliability

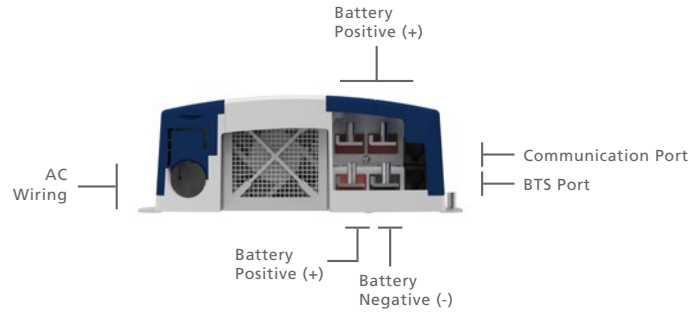
#### APPLICATIONS:



[www.xantrex.com](http://www.xantrex.com)  
CUSTOMER CARE: 1.800.670.0707



FRONT VIEW



BOTTOM VIEW

## PRODUCT FEATURES

- Equipped with parallel stacking (remote panel required)
- Microprocessor-controlled, multistage charging algorithms
- Settings for two and three-stage charging
- Settings for flooded, gel, AGM or Lithium-ion batteries
- Battery-equalization feature
- Ability to charge batteries drained to extremely low voltage
- Added quiet mode

## PROTECTION FEATURES

- Reverse battery polarity protection
- Drip-proof design
- DC over-voltage protection
- Overheating protection
- Short circuit protection

## 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 the remaining 20–30% of charge, bringing the battery to a full charge at a slow, safe rate

## POWER FACTOR CORRECTED (PFC) CHARGING

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

### TRUECHARGE3 BATTERY CHARGER DIMENSIONS



TRUECHARGE3 24V 10A &amp; 20A

TRUECHARGE3 24V 30A

**ELECTRICAL SPECIFICATIONS (@ 25°C unless otherwise noted)**

|                                                 | TRUEcharge3 10                                            | TRUEcharge3 20                                            | TRUEcharge3 30                                            |
|-------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------|
| Output Current (nominal)                        | 10 A                                                      | 20 A                                                      | 30 A                                                      |
| Output Voltage (nominal, depending on settings) |                                                           |                                                           |                                                           |
| Charge                                          | 28.4–31.0 Vdc                                             | 28.4–31.0 Vdc                                             | 28.4–31.0 Vdc                                             |
| Float                                           | 26.8–27.6 Vdc                                             | 26.8–27.6 Vdc                                             | 26.8–27.6 Vdc                                             |
| Equalize                                        | 32 Vdc                                                    | 32 Vdc                                                    | 32 Vdc                                                    |
| DC Output Connections                           | Three                                                     | Three                                                     | Three                                                     |
| AC Input Voltage*                               | 90–265 Vac; 47–63 Hz<br>120 Vac, 230 Vac, 240 Vac nominal | 90–265 Vac; 47–63 Hz<br>120 Vac, 230 Vac, 240 Vac nominal | 90–265 Vac; 47–63 Hz<br>120 Vac, 230 Vac, 240 Vac nominal |
| Temperature Compensation                        | Three settings                                            | Three settings                                            | Three settings                                            |
| Charger Efficiency                              | > 80%                                                     | > 80%                                                     | > 80%                                                     |
| Battery Type                                    | Gel, Flooded, AGM, LiFePO <sub>4</sub>                    | Gel, Flooded, AGM, LiFePO <sub>4</sub>                    | Gel, Flooded, AGM, LiFePO <sub>4</sub>                    |
| Minimum Recommended Battery Bank Size           | 20 Ah                                                     | 40 Ah                                                     | 60 Ah                                                     |

**GENERAL SPECIFICATIONS**

|                               | TRUEcharge3 10                                    | TRUEcharge3 20                                    | TRUEcharge3 30                                    |
|-------------------------------|---------------------------------------------------|---------------------------------------------------|---------------------------------------------------|
| Operating Temperature Range** | 0–60°C (32–140°F)                                 | 0–60°C (32–140°F)                                 | 0–60°C (32–140°F)                                 |
| Storage Temperature           | -40–80°C (-40–176°F)                              | -40–80°C (-40–176°F)                              | -40–80°C (-40–176°F)                              |
| Battery Connection            | Three positive terminals<br>One negative terminal | Three positive terminals<br>One negative terminal | Three positive terminals<br>One negative terminal |
| Dimensions (H x W x L)        | 70 x 170 x 250 mm (2.8 x 6.7 x 9.8")              | 70 x 170 x 250 mm (2.8 x 6.7 x 9.8")              | 90 x 170 x 340 mm (3.5 x 6.7 x 13.4")             |
| Weight                        | 2.2 kg (4.8 lb)                                   | 2.2 kg (4.8 lb)                                   | 4.5 kg (9.9 lb)                                   |
| Part Number                   | 804-2410-10                                       | 804-2420-10                                       | 804-2430-10                                       |

**REGULATORY APPROVALS**

Meets CSA 60335-2-29, UL1564, IEC 60335-2-29, IP32 per EN.IEC 60529, FCC Part 158, Canada ICES-003 Class B emissions limits, ABYC A-31, and DOE/CEC energy efficiency compliant.

Specifications are subject to change without notice.  
Highly Accelerated Life Tested (HALT) to -20°C.

\*90 – 104Vac ± 4Vac output de-rated to 80% of full load current  
\*\*For all three models, the output current may derate above 50°C.

**ACCESSORIES**

| Mfg Part #  | Description                      |
|-------------|----------------------------------|
| 808-0232-01 | BTS (battery temperature sensor) |
| 808-8040-10 | TRUEcharge3 Remote Panel         |

NOTE: Contact Xantrex or your dealer to order these accessories.

**CONTACT****CUSTOMER SERVICE**

1.800.670.0707  
customerservice@xantrex.com  
Hours of operation:  
6:30am - 4:30pm PST, Monday to Friday



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