

Pro Charge Ultra

Award Winning Global Digital Battery Chargers

Winner of numerous awards



One of the world's most efficient chargers. This is courtesy of **active power factor correction** (PFC 0.99-1). The Pro Charge Ultra is rated at over 90% efficient. PFC is an extremely important feature please refer to **Page 51**. Non-active PFC chargers are approximately 65% efficient.

Models:
12V / 10-60A
24V / 20-30A
36V / 20A
48V / 15A

Remote Control shall operate all models.

Truly Global Application and perfect for generators. The Pro Charge Ultra shall work at **AC voltages (80-270VAC and 40-70Hz)** and **DC voltages (130-320V)**.

World's Best Seller

This charger's design is the charger of choice by the world's largest production boat builders. It is fitted to more new boats than any other charger in the world.

UL 1236 SB listed, the highest build standard.
California Energy Commission CEC.

Power Pack / Power Supply. This charger works effortlessly as a power supply to DC loads to prevent depletion of your battery capacity.

Comprehensive 32 LED front panel. The user is provided with a **voltmeter, ammeter and output power display**. The panel also includes charging profile statuses and warning statuses.

Battery Temperature compensation sensor included.

Multi Lingual. The Pro Charge Ultra now comes with **front labels, Remote control and instructions in different languages:** English, French, German and Spanish.

Automatic Desulphation mode: 7-10 days cycle with anti-stratification program to keep batteries rejuvenated.

11 pre-programmed charging profiles for AGM, Gel, sealed/flooded and calcium batteries. We also include a **customizable** option to allow the user to programme their own profile via the front panel.

Larger voltage / current requirements? The Pro Charge Ultra series can be put in series or parallel with other Pro Charge Ultras. This is enabled by the chargers have dynamic charging ability.

Perfect for generator use. Due to its active PFC tolerance of AC input it shall run from crude sine wave forms - typical from generators. **Also, % Power Reduction** you can set the charger to run at lower power outputs to complement a wider range of generators and low shore power connections.

STANDARDS AND ADVANCED SPECIFICATIONS



RoHS compliant



UL 1236 SB	12V / 60A model, all other units pro rata
CEC listed	Input voltage range 80-270V 40-70 Hz
CSA C22.2-107.2	Power Factor at 230V 0.976
Tested to CE standards	Efficiency 90.4%
	Full load current (110/230V) 9.8/4.6A
EN61000-3-2	Total Harmonic Distortion 2.4% voltage
EN61000-3-3	Total Harmonic Distortion 2.4% current
EN55014-1	Ripple noise (R.M.S.) 14mV
EN 55014-2	Ground leakage 0.5 mA
EN60335-2-29	Generator/ mains power (watts)
EN ISO 13297	12V 20A approx 350W
EN 6100-3-2 Class A	12V 30A approx 500W
	12V 40A approx 600W
	12V 50A approx 750W
	12V 60A approx 900W
	24V 20A approx 600W
	24V 30A approx 900W
	voltmeter accuracy +/- 1%
	ammeter accuracy +/- 1%



Up to 3 isolated outputs. Each output can carry the full current rating of the charger. However, not all simultaneously - the total current is the charger's rating.

Cables not included with charger.

Additional Specification

–**USA California Energy Commission (CEC) listed:** CEC regulation stipulates that the charger is only on when necessary. This reduces AC power consumption and lowers operational costs while maintaining healthy batteries. (default setting is on, CEC can be turned off)

–**Synchronized Rectification:** Mosfet technology, increases overall efficiency over diode based chargers by approximately 8 percentage points.

–**Automatic Desulphation / Equalization mode:** 7-10 days cycle with anti-stratification program to keep batteries rejuvenated.

– **Voltage + Current LED display:** 2 LED matrix displays. Left side is the voltmeter and the right side is the ammeter.

– **Performance monitoring LED bar:** An LED display to show what rate the charger is operating at.

– **Redundant safety system:** In event of failure, the processor provides another system to shut off device, doubling security. The primary emergency backup is digital, the secondary system is analogue both are totally independent of one other.

– **High temperature ambient operation rating:** Most chargers are only continuously rated at 20 deg C (if even) this unit is rated at continuous operation at 40 deg C ambient.

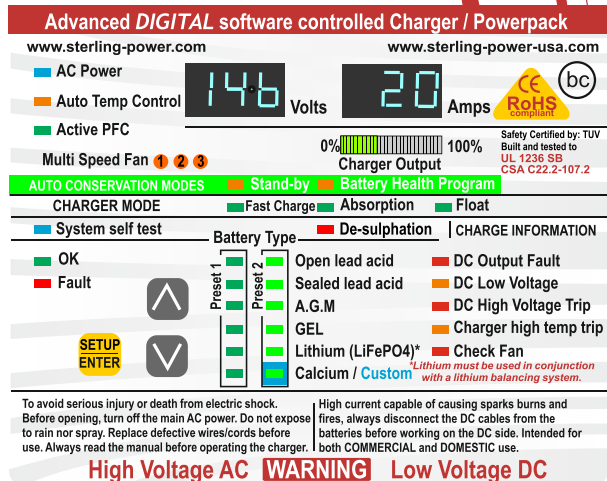
– **Multiple speed fan control:** This reduces unnecessary fan noise experienced by the customer, even though the new extreme efficiency reduces the need for fans. At high ambient temperatures (40-50 deg C), however, fans would still be required to ensure operation.

– **Thermostatically controlled force draft cooling:** To ensure that when the cooling is actually required the noise level is as low as possible for the environmental and power conditions.

– **The printed circuit boards are conformal coated:** For high humidity and salt air operations.

– **% power reduction:** To allow unit to work with restricted power available (available on local control or remote control panel).

– **Multiple chargers:** Multiple chargers can be put in parallel to increase current rating. This is also great for redundancy.



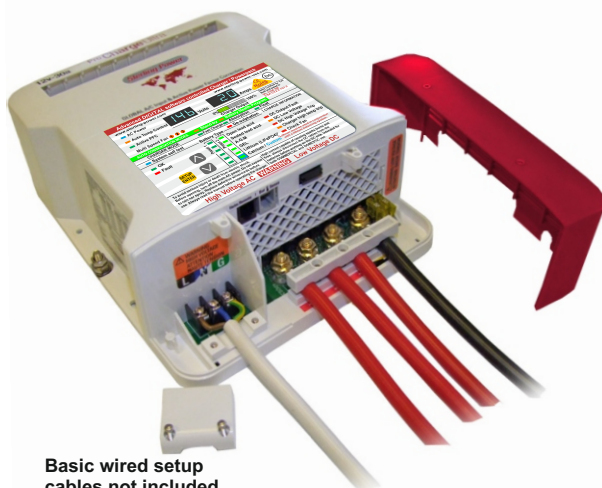
32 LED display. The front panel provides information regarding:

- Voltmeter
- Ammeter
- Charger output display bar
- Charging statuses
- Battery chemistry select,
- Temperatures
- Voltage warnings.
- Multi Lingual over lay labels available.



Optional Remote Control

- Charging voltage (V) and charge current (A)
- Multi lingual - English, Spanish, French, German and Italian.
- Charging stage and duration
- Configured Battery Type
- Temperature of the charger
- Temperature of the battery
- Error Messages
- 110 x 68 x 20 mm
- 10 meters of cabling
- Remote housing - surface / recess / flush mounted



Basic wired setup cables not included
photo courtesy of MDSbattery.co.uk

Pro Charge Ultra						
DC voltage	Rating (A)	Weight (KG)	L x W x D mm	Weight KG	SKU	
12	10	2	260 x 215 x 90	2.0	PCU1210	
12	20	3	260 x 215 x 90	2.0	PCU1220	
12	30	3	260 x 215 x 90	2.0	PCU1230	
12	40	3	260 x 215 x 90	2.0	PCU1240	
12	50	3	315 x 215 x 90	3.0	PCU1250	
12	60	3	315 x 215 x 90	3.0	PCU1260	
24	20	3	260 x 215 x 90	2.0	PCU2420	
24	30	3	315 x 215 x 90	3.0	PCU2430	
36 *	20	3	315 x 215 x 90	3.0	PCU3620*	
48 *	15	3	315 x 215 x 90	3.0	PCU4815*	
Remote control with 10m cable			110 x 68 x 20	0.05	PCUR	

* Built to UL1236 and CEC but not listed
Multi language main label overlay sticker

German main label overlay sticker **PCULG**

French main label overlay sticker **PCULF**

Spanish main label overlay sticker **PCULS**

Mixing battery types or voltages

Battery Chemistry Module

You may have a requirement to mix your battery types (chemistry). I.e. AGM, Traction, 12V or 24V. In this case please look at our new range of **Battery Chemistry Modules** designed to simply add to this product and achieve the perfect battery mixture.
PLEASE TURN OVER.

