

# Sine wave inverter-chargers

Applications



## Xtender Series

The Xtender series provides unmatched freedom of use due to its many functions. In a basic application, it offers a total package: the functions of inverter, battery charger, transfer system and assistance to the source. These functions can be combined and controlled in a totally automatic way for exceptional ease and optimal management of available energy.

The Xtender is equipped with a command entry and 2 configurable auxiliary contacts. This allows an automatic control of the genset or a loadshedding when the battery voltage is too low. The flexibility then obtained makes it possible to implement special functionalities, often necessary for a good energy management in standalone systems.

**Xtender XTS**  
XTS 1000-12  
XTS 1200-24  
XTS 1400-48



**Xtender XTM**  
XTM 1500-12  
XTM 2000-12  
XTM 2400-24  
XTM 2600-48  
XTM 3500-24  
XTM 4000-48

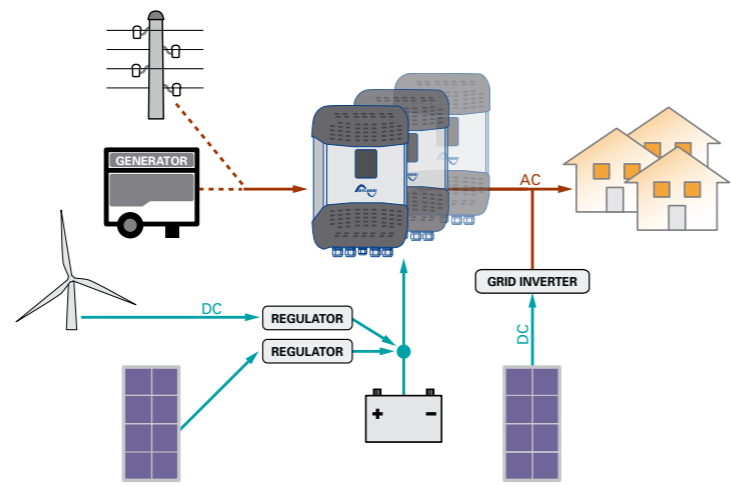


**Xtender XTH**  
XTH 3000-12  
XTH 5000-24  
XTH 6000-48  
XTH 8000-48



### Features and performances

- Outstanding efficiency and overload.
- Perfect management and limitation of AC sources.
- Power shaving of the consumption peaks.
- Automatic allocation of the power available.
- Active filtering of the load steps on the genset.
- Automatic protection of the sources against overload.
- Battery priority (or to renewable sources).
- Parallel and three-phase setting, up to 9 units (72kVA).
- Powerful multi-stage PFC charger.
- Ultra-short transfer time (from 0 to 15ms max.).
- Automatic and efficient stand-by.
- 2 programmable auxiliary contacts (optional on the XTS).
- Compatible with AC coupling.
- XTS electronically protected against reverse polarity.
- Display, programming and data logging integrated in the remote control RCC.
- Interactive with the Battery Status Processor (BSP).
- RS-232 communication for remote supervision.



The Xtender series offer an optimal use of all sources that can be found in hybrid systems, whatever their connecting mode (AC or DC bus), up to the nominal power of the Xtender system (single, parallel and/or three-phase).

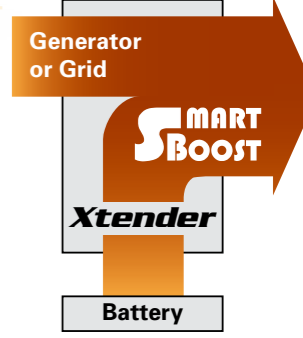
Xtender range	Battery voltage	AC voltage	Output power P30/Pnom	Power Smart-Boost	Charge current	Transfer current
<b>XTS 900-12</b>	12V	230Vac*	900VA** / 500VA	900VA**	0 - 35A	16A
<b>XTS 1200-24</b>	24V	230Vac*	1200VA** / 650VA	1200VA**	0 - 25A	16A
<b>XTS 1400-48</b>	48V	230Vac*	1400VA** / 750VA	1400VA**	0 - 12A	16A
<b>XTM 1500-12</b>	12V	230Vac*	1500VA / 1500VA	1500VA	0 - 70A	50A
<b>XTM 2000-12</b>	12V	230Vac*	2000VA / 2000VA	2000VA	0 - 100A	50A
<b>XTM 2400-24</b>	24V	230Vac*	2400VA / 2000VA	2400VA	0 - 55A	50A
<b>XTM 2600-48</b>	48V	230Vac*	2600VA / 2000VA	2600VA	0 - 30A	50A
<b>XTM 3500-24</b>	24V	230Vac*	3500VA / 3000VA	3500VA	0 - 90A	50A
<b>XTM 4000-48</b>	48V	230Vac*	4000VA / 3500VA	4000VA	0 - 50A	50A
<b>XTH 3000-12</b>	12V	230Vac*	3000VA / 2500VA	3000VA	0 - 160A	50A
<b>XTH 5000-24</b>	24V	230Vac*	5000VA / 4500VA	5000VA	0 - 140A	50A
<b>XTH 6000-48</b>	48V	230Vac*	6000VA / 5000VA	6000VA	0 - 100A	50A
<b>XTH 8000-48</b>	48V	230Vac	8000VA / 7000VA	8000VA	0 - 120A	50A

\* For the 120Vac/60Hz version, -01 is added to the model designation.  
\*\* These features are valid only when using the cooling module ECF-01. Complete technical specifications on page 28.

### Function Smart-Boost and active filtering

With this function it is possible to interact directly with the AC source (Genset or grid) and to implement some basic functions such as:

- Efficient and immediate limitation of the current of the source, including fore non linear or inductive/ capacitive loads, protecting efficiently the breakers during connection to shore power or to a camping power counter with limited current (function of power shaving and of power assistance) **(more information on our website and in the Application Note AN001/www.studer-innotec.com)**.
- Power shaving of load steps on the generator allowing therefore an optimal sizing of the generator and assuring the best possible efficiency of the fossile fuels (function of filtering and of power assistance).



The function of assistance to the source enables also to implement advanced functions such as the priority use of renewable energy, even when the grid is available **(more information on our website and in the Application Note AN002/www.studer-innotec.com)**.



The new alpine cabin of Monte-Rosa with a system Xtender