

batterX[®]



SAFE

SMART

STYLISH



We are not
going to leave
you in the dark!

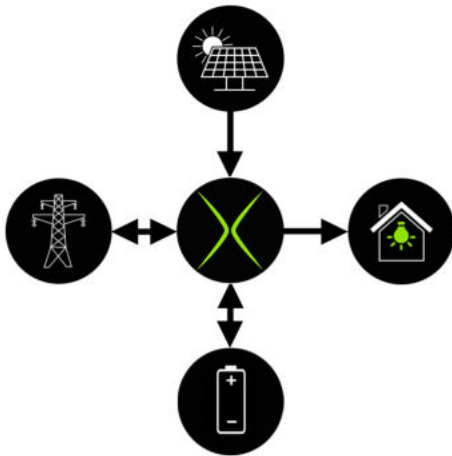
Uninterruptible solar power supply for your home.
All-round protection in the event of a power failure.

www.batterx.io

PROTECTION DURING THE DAY

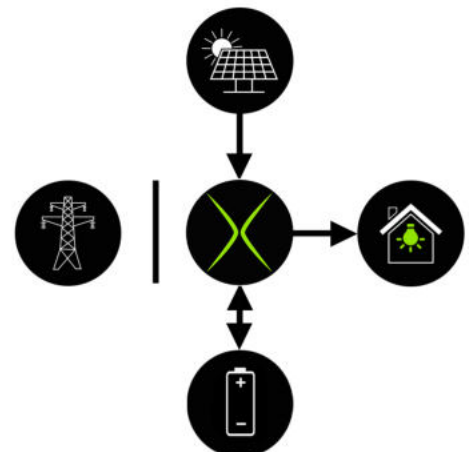
1. Using solar power during the day

The energy-consuming equipment is powered by the photovoltaic system and the battery system. If insufficient energy is available, extra power can be provided by the public grid. Direct consumption of the locally generated solar power always has priority, followed by storing it in a battery. Any energy which is not consumed or stored can be supplied to the public grid.



2. Power failure during the day

If there is a power failure during the day, solar power will be used without any restrictions. The battery system will automatically switch the photovoltaic system to isolated/island mode and provide 3-phase current to the house installation. In isolated/island mode, the photovoltaic system can supply the house installation with solar power whilst also charging the battery. All equipment that consumes power is supplied completely self-sufficiently by the photovoltaic system up to a maximum of 10 kW. If insufficient solar power is available, the battery will switch to UPS mode without any interruptions.

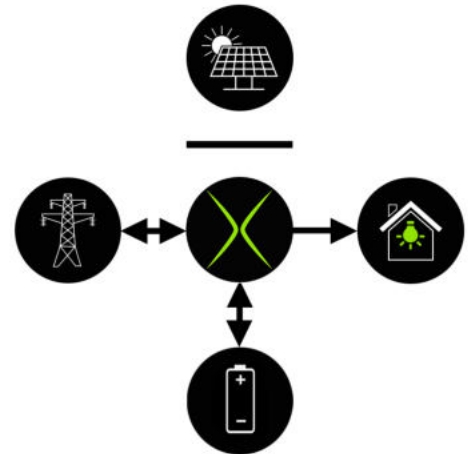


PROTECTION DURING THE NIGHT



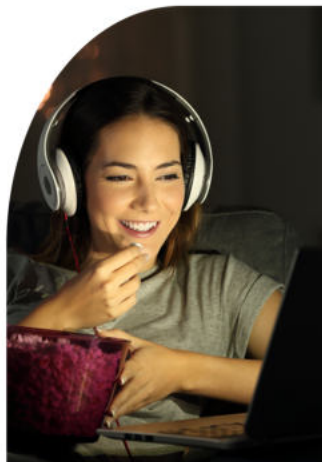
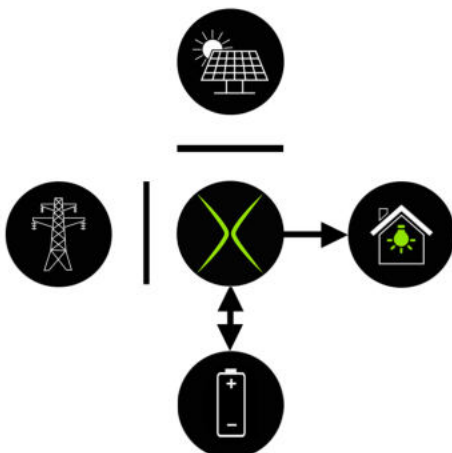
1. Using battery power in the evening

The electricity stored in the battery is used to power the house in the evening. If this energy is not sufficient, the public grid can always be used as well.



2. Power failure in the evening

The batterX system responds to any power outages in the evening in the same way as it would during the day. The battery ensures uninterrupted power supply and thus all-round protection, either in UPS mode or in backup power mode, activated within 5 seconds. In both cases, 3-phase current is supplied to the house installation until the batteries are empty.



THE ALL-IN-ONE SYSTEM

The mobile 19" cabinet

All components of the batterX system are installed in a cabinet. This way we don't have to worry about any problems of crooked or non-load bearing walls. A free space of approx. 60 x 60 cm is all that is needed.



h10 inverter

The inverter turns the DC voltage of the PV system or the battery modules into AC voltage to power your house. PV systems up to a 15 kWp power rating can be connected directly. The hybrid function enables the batteries to be charged via the AC input, e.g. from a CHP or the public grid.



cliX Modul

This module is the "heart and brain" of the batterX system. All PV, inverter and battery lines are connected, without any tools being required, to enable the components to communicate and display the data in liveX monitoring.



Battery module

The 3.5 kWh battery module facilitates modular configuration of 2 to 4 modules in one cabinet. Retrofitting is no problem either.



High capacity

If a bigger PV system is needed, or if there is another power generating system already on site, we have the solution as well. An additional cabinet enables the battery capacity to be increased further. The system can be expanded up to 56 kWh in 14 kWh increments.

Alternatives

Is the basement too low or is there only space available under the staircase? No problem! We also offer a smaller cabinet with a separate inverter.

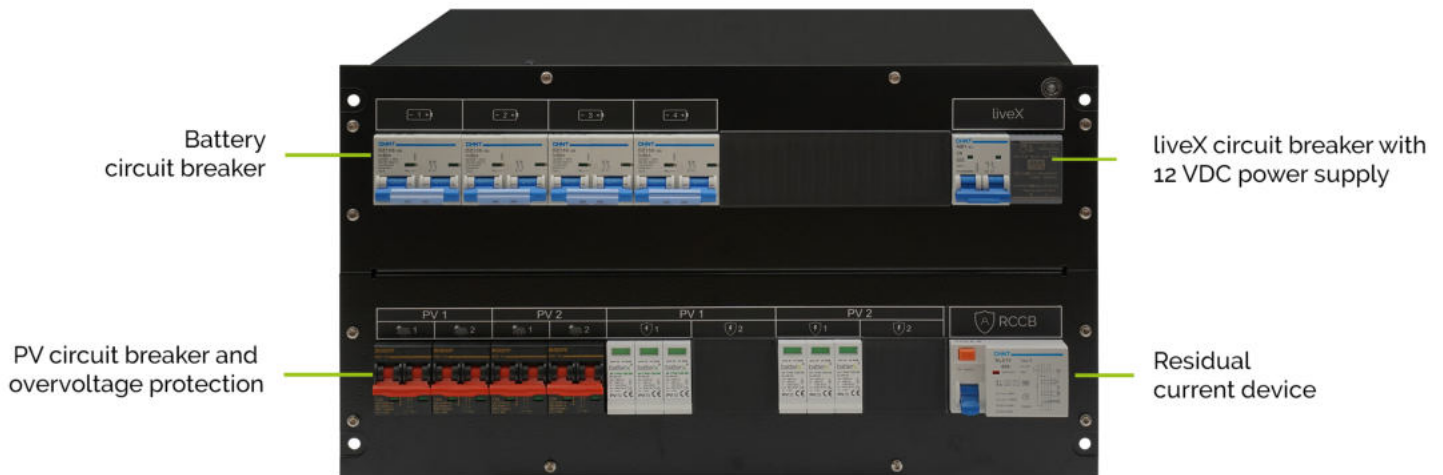


CLIX MODULE

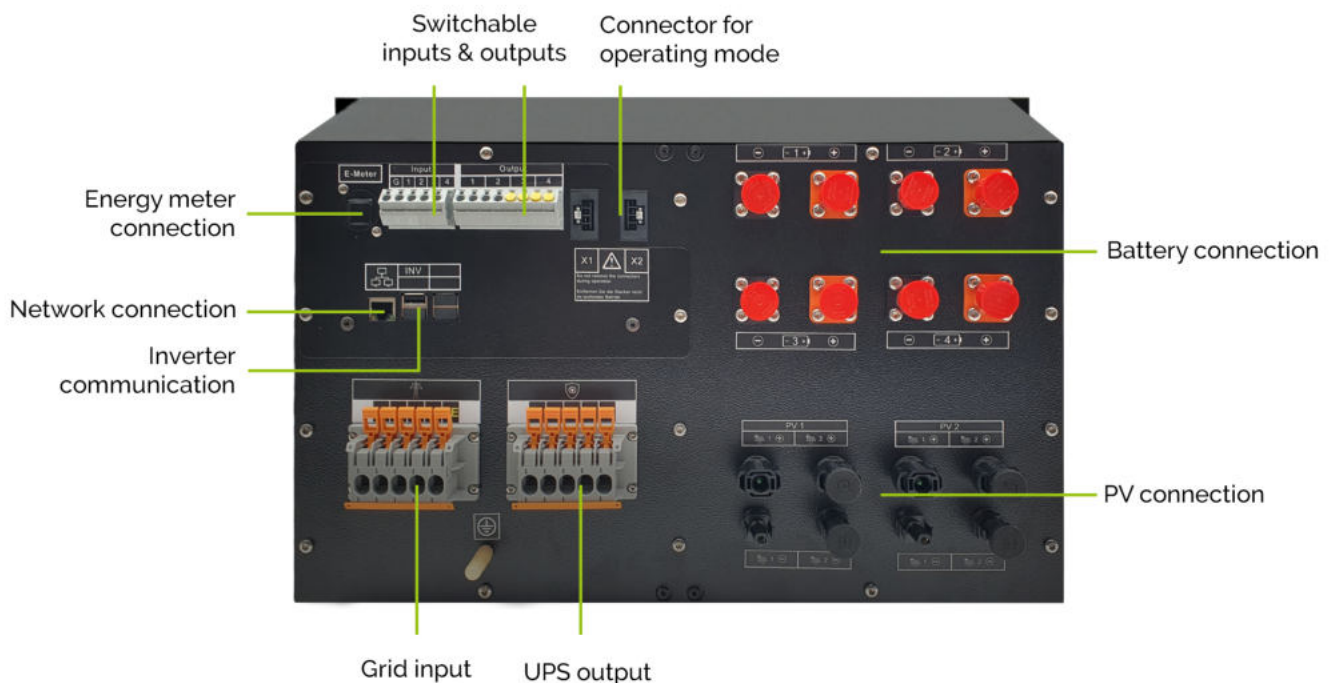
The "heart and brain" of our system: the cliX module

One device, offering optimum protection and intelligence. Plug & play to ensure extremely quick, safe and trouble-free assembly. Thanks to using standardized plugs, all system components are easy to connect by means of a few simple clicks. The subsequent installation routine completes the installation.

All the standard switching elements, like the DC overvoltage protection and the selective RCD are clearly arranged and easily accessible on the front side. If required, the user can carry out the necessary interventions themselves.



All connections can easily be made on the rear side without the use of any tools. However, a professional has to carry out this work to ensure that all necessary safety measures are followed. Installers can connect and mount the batterX system quickly and easily. The installation effort is minimised.



INSTALLATION ROUTINE

The simple, tried and tested installation routine in 5 languages

You get step by step installation instructions. Errors are ruled out as each step is checked by the software. All settings are documented at the end in a commissioning report.

batterX[®] liveX
Commissioning

Select Language



English



Deutsch



Français



Čeština



Español



PV-System

Size of the PV-System



Watt Peak (Wp)

How much percent of solar power can be fed to grid in terms of peak power?



%

Feed-in regulation

The feed-in can be adjusted to any percentage in accordance with local regulations. This includes the possibility to not feed anything back into the public grid.

Higher system outputs up to 25 kWp with auxiliary inverters can also be regulated dynamically without any further installation work being required.

Operating mode

While installing, the installer can always change the operating mode in the hardware and the software.

System mode

UPS



UPS

Backup

System Test

- ✓ Energy Meter
- ✓ Battery Charging
- ✓ UPS Mode

Energy Meter

✓ Performing Test

Battery Charging

✓ Verifying Battery SoC (40%)

✓ Enabling Battery Charging from AC

✓ Performing Test (5 / 5)

✓ Disabling Battery Charging from AC

UPS Mode

✓ Checking if Output is Active

✓ Please turn OFF the solar and input breaker

✓ Performing Test (5 / 5)

System test

A system test is carried out at the end of the installation to ensure optimum safety. The software checks the installation for any errors.

Safety First!

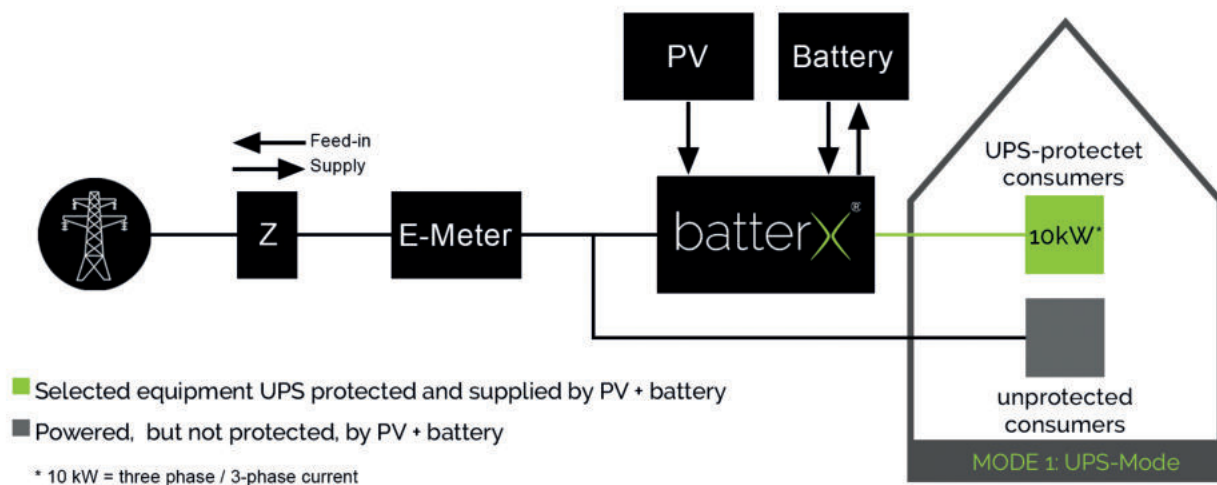


ONE DEVICE FOR 2 OPERATING MODES

Operating mode 1: Uninterruptible Power Supply (UPS)

If there is a power failure, the UPS mode will be activated to supply power to selected equipment within 10 ms. Special equipment and devices which are susceptible to power supply fluctuations, such as servers, precision electronics or medical devices, are generally protected using UPS systems. If there is a power failure, the batterX system will automatically take over.

In this respect it is important that, when preparing the installation, the equipment which should be powered by the UPS system is carefully selected, since the output of 3.3 kW per phase (total = 10 kW) must not be exceeded at the system output at any time. If this selection is made properly, any blackouts will then not be noticeable on the equipment that has been selected.

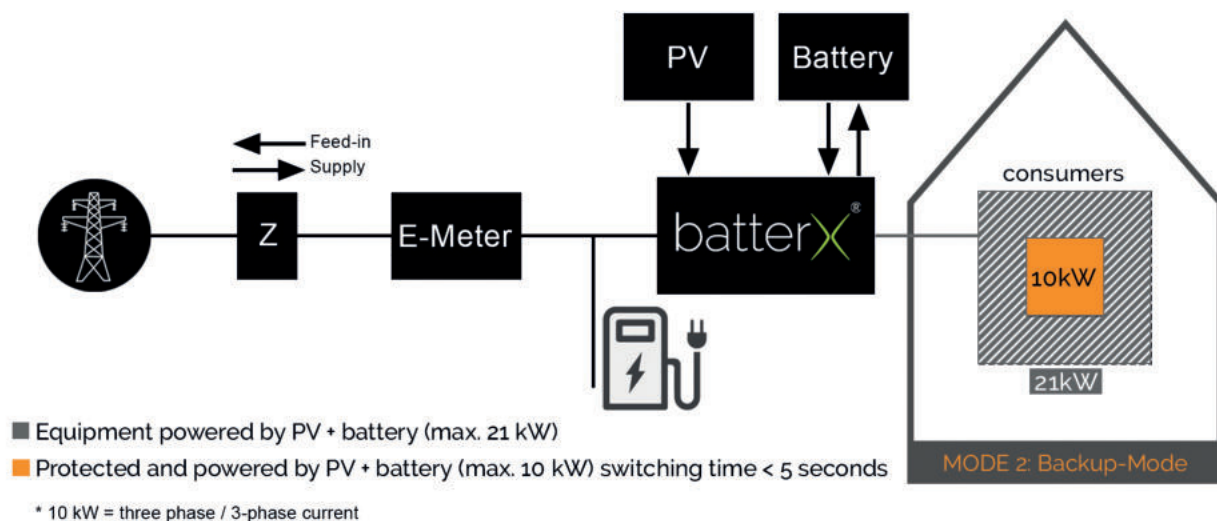


Operating mode 2: Backup power mode

The backup power mode is similar to the UPS mode, but differs from it in several fundamental points.

Generally, the entire house is connected to the batterX system. Thus, in normal mode, up to 21 kW (7 kW per phase) is available and 10 kW (3.3 kW per phase) during a power failure. However, if there is a power failure, there will be a switching time of less than 5 seconds. This switch-over takes place fully automatically so that all equipment will continue to be available to the user.

The fundamental benefit compared with UPS mode is that it is not necessary to select specific equipment in the house.



Monitoring and control module

Our liveX monitoring and control module is compatible with any web browser and end device. You can select a bright or a dark display.

The live dashboard displays the energy flow diagram as well as all relevant parameters for the photovoltaic system, the battery system, the grid and energy-consuming equipment.

Several battery storage settings can be made directly in the portal by a mouse click. An example: the grid operator has informed you that they want to switch off the power for maintenance purposes tomorrow. In this case, you can also increase the battery charge or to stop discharging in order to ensure that sufficient energy will be kept in reserve. It is completely up to you.



Select the emergency electricity reserve and daily use of the battery yourself by simply operating the slider on the dashboard. This enables you to determine that a certain amount of energy in the battery, is reserved as backup for any power failures 365 days a year. You thus ensure your power supply, even in the event of a long period of poor weather.

Reserve for Power Outages

Slider control showing 25 % reserve.

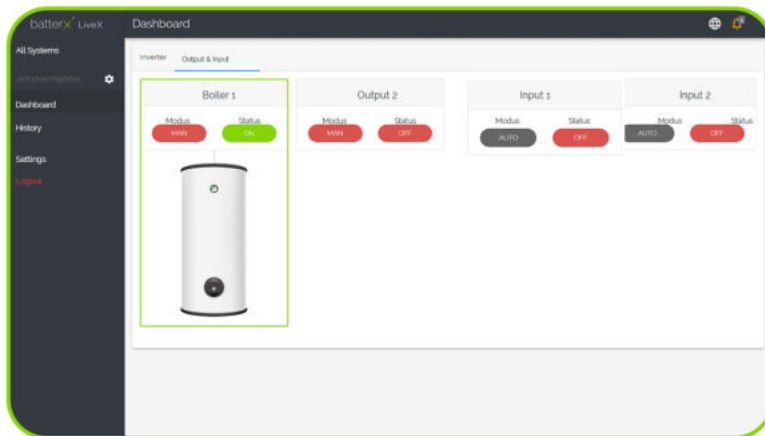
APPLY



Intelligent energy management

Our liveX also enables us to control an energy management system, either through relay contacts or via the existing JSON interface. In this era of networked energy concepts for buildings, controlling compatible wall boxes (EV chargers) is not a problem.

Visualisation in an existing home automation system (e.g. KNX, Loxone, etc.) is also possible.



An intelligent energy management system can be used to control certain devices, e.g. a heat pump (SG Ready compatible) or a heating element for hot water generation, by means of programmable relay contacts. This enables any excess energy that would otherwise be fed to the public grid to be put to intelligent use in the house.

Timing settings for optimised charging can be adapted via the dashboard at any time. This can be used for example to account for the lunchtime peaks.

Battery Charging Delay

08:30



The service history is a comprehensive and meaningful tool for installers. The data required can be selected and analysed from the more than 50 values recorded. This enables extensive remote monitoring and export options, allowing many problems to be remotely localised and solved. This can save the high costs of on-site installer intervention or enable such intervention to be planned correctly in advance.

Discover our online portal now by scanning the QR-code, which gives you access to a demo account with numerous features.



EXPLORE ME

Forgot password?

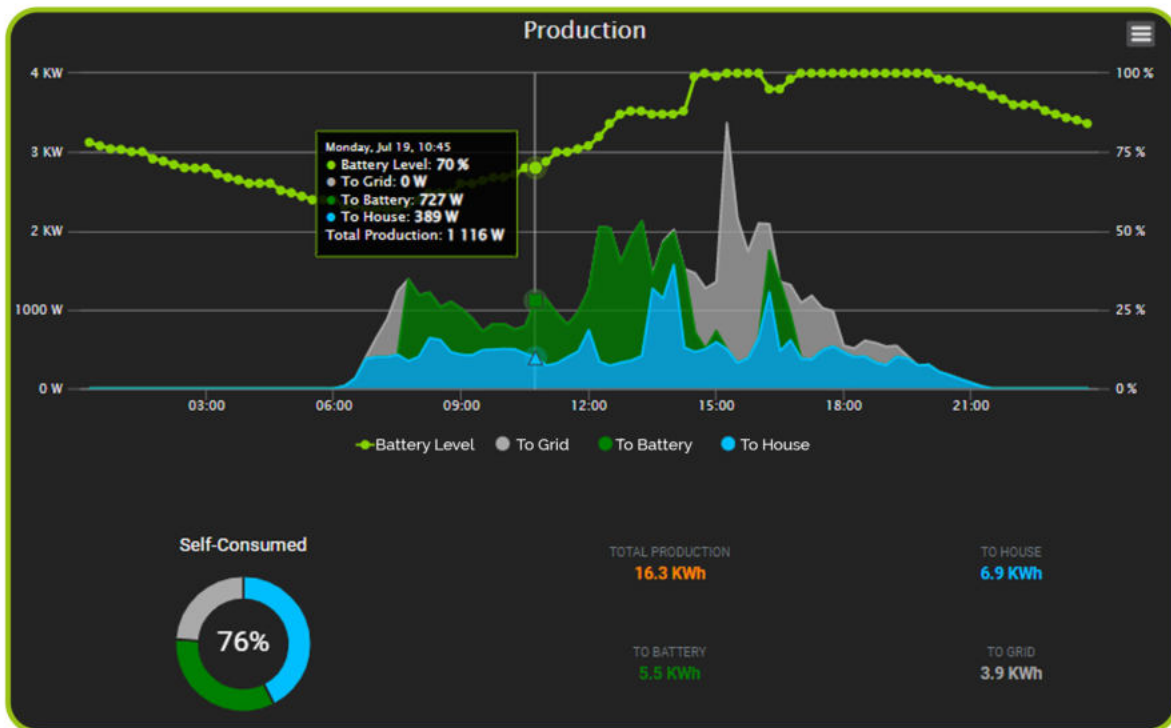
SIGN IN

DEMO ACCOUNT

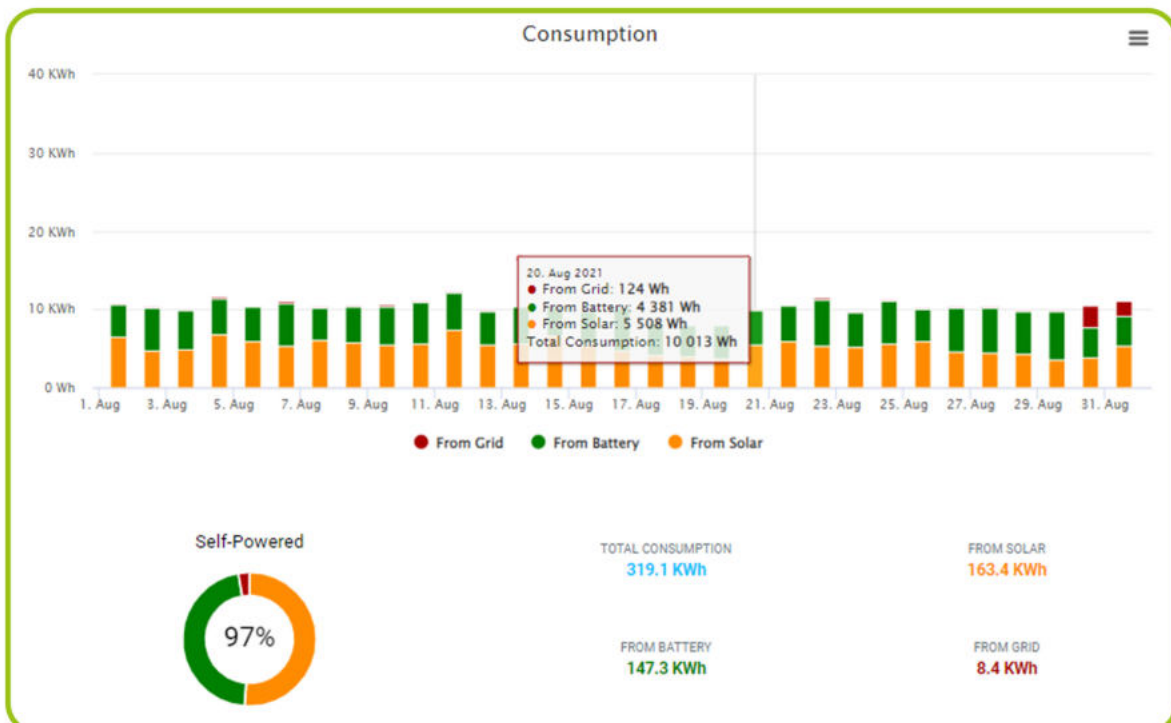


Visualisation with additional measuring devices

In addition to the system's energy meters, up to 4 other measuring devices can be connected for individual analyses. Load profiles can thus be recorded and evaluated flexibly. No matter if you want to see the heat pump demand or charge your employer for the costs of charging the company car: Many applications are possible. Comprehensive export functions and a wide range of export formats enable Excel sheets and graphs to be created directly. Any analysis period can be selected, ranging from daily views to views that cover the total operational lifetime of the system.



Production view with 5-minute values, dark design.



Consumption view with daily values, bright design.



DATASHEET



| Rack mounting Inverter Wall mounting | h10 R - 7 h10 W - 7 | h10 R - 10,5 h10 W - 10,5 | h10 R - 14 h10 W - 14 | h10 R - 28 | h10 R - 42 | h10 R - 56 |
|---|---|------------------------------|--------------------------|-----------------------------------|------------|------------|
| Rack (System R) ¹ | 1.958 x 600 x 600 mm (39U) / 90kg | | | | | |
| Small system cabinet(System W) ² | 1.163 x 600 x 600 mm (22U) / 70kg | | | — | | |
| Battery cabinet extension ³ | — | | | 1.958 x 600 x 600 mm (39U)/ 65 kg | | |
| Gross capacity | 7 kWh | 10,5 kWh | 14 kWh | 28 kWh | 42 kWh | 56 kWh |
| Number of battery modules | 2 | 3 | 4 | 8 | 12 | 16 |
| Nominal charge/discharge power | 3,5 kW | 5 kW | 7 kW | 9,6 kW | 9,6 kW | 9,6 kW |
| Emergency current mode | 3 x 2 kW | 3 x 3,3 kW | | | | |
| Grid operation - UPS mode | 3 x 3,3 kW | | | | | |
| - Backup power mode | 3 x 7 kW | | | | | |
| Hybrid-Inverter | | | | | | |
| Grid operation/UPS output power | max. 10 kW | | | | | |
| max. PV power | 15 kWp | | | | | |
| Dimensions (HxWxD) mm / weight kg | 622 x 500 x 167,5 mm / 45 kg | | | | | |
| PV-Input (DC) | | | | | | |
| MPPT voltage min./max. | 400 - 800 Vdc | | | | | |
| Voc max. | 900 Vdc | | | | | |
| Number of MPPT / current max. | 2 x 18,6 A | | | | | |
| Output (AC) | | | | | | |
| Phases | Three phase / 3-phase current | | | | | |
| Nominal output current | 14,5 A per phase | | | | | |
| UPS mode switching time | < 10 milliseconds | | | | | |
| Backup mode switching time | < 5 seconds | | | | | |
| CLIX-Modul | | | | | | |
| Delivery includes | 4 inputs / 4 outputs*, RCD 63/300 mA, DC overvoltage protection type 2, automatic bypass, energy meter, DC circuit breaker (PV & battery) | | | | | |
| Interfaces | Application Programming Interface, SG ready, network connection | | | | | |
| Battery module | | | | | | |
| Depth of discharge (DOD) | usable cyclically: 90%, usable UPS: 98% | | | | | |
| Cycle stability / cellular chemistry | up to 8,000 cycles depending on the C-rate and DoD / LiFePO4 | | | | | |
| Charge and discharge current | 37 A in inverter mode, 74 A in UPS mode | | | | | |
| Dimensions (HxWxD) mm / weight kg | 132 x 442 x 420 mm / 32 kg | | | | | |
| Operating temperature | 5 - 30 °C | | | | | |
| Certification & standards | | | | | | |
| CE marking & EC Conformity | EMC Directive 2014/30/EU (DIN EN 61000-6-2:2005 DIN EN 61000-6-3:2007 Low voltage directive 2014/35/EU (DIN EN 62040-1:2008) | | | | | |
| Battery safety | IEC 62619:2014; UN38.3; TÜV Süd | | | | | |
| UPS mode | DIN EN 62109-2:2011 | | | | | |
| Grid conformity | VDE-AR-N-4105:2018-11; DIN VDE V 0124-100(VDEV0124-100): 2020-06; CEI 0-21:2016 (IT); ÖVE/ÖNORM E 8001-4-712:2016-11; TOR D4 2.3:2016-07 | | | | | |

*UPS mode: 4 outputs / backup power mode: 2 outputs

All data subject to technical changes (09/2021)

R = Rack mounting (All-in-One)¹

W = Inverter wall-mounting²
(for low room heights)

R = Rack mounting (All-in-One)³
(for high capacities)



www.batterx.io

batterX[®] HOME energy storage for maximum freedom and independence

Benefit from 18+ years of UPS, PV and battery expertise from Luxembourg. The batterX[®] HOME supplies your house with its own power 24/7, also if there is a power failure. This tried and tested and forward-looking technology won't leave you in the dark!

SAFE

- ✕ Uninterruptible power supply, even if there is a power failure (UPS)
- ✕ Avoidance of communication and installation errors (Plug & Play)
- ✕ All switching elements required by standards are integrated (overvoltage protection, fuses, etc)
- ✕ Reduction of electricity costs thanks to optimised own consumption

SMART

- ✕ In-house software portal with "liveX" smartphone APP for full control
- ✕ Future-ready for heat pumps and electric mobility
- ✕ 3-phase hybrid power storage with 10 kW PV and UPS output
- ✕ Selection between emergency power (UPS) and backup power united in one device

STYLISH

- ✕ Top quality and elegant design
- ✕ Modular storage structure 7, 10 or 14 kWh in one cabinet, can be expanded up to 56 kWh
- ✕ Mobile 19" cabinet integrated with all relevant components (All-in-One)
- ✕ Made in Luxembourg and Germany

Discover batterX[®] Home:

maximum freedom, security of supply and sustainability combined with maximum quality and an attractive design for a secure future.




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