

# The smart way of power storage management



Simply save  
electricity costs!



## Future-proof & clever – for account, network and environment

### The new smart battery storage

The new b-CUBE battery storage system is the compact solution for the direct storage of electrical energy from PV systems and AC grids, in conjunction with innovative integrated storage management.

### Dynamic electricity tariff, small bill

When the wind is blowing strongly or the sun is shining brightly, energy is particularly green and cheap. Why not buy your electricity and store it? The b-CUBE battery storage system makes it possible: you pay for electricity at the current, low electricity market price and use it later.

## Installation made easy

### Modular, compact and ready to connect

The b-CUBE is available as a compact and ready-to-connect device. This minimizes on-site installation costs and is less prone to failure than alternative products. The battery module is delivered separately and only placed in the prepared cabinet at the end of the installation. This weight reduction ensures easy transport and on-site assembly.

### Using without changing the residual current device

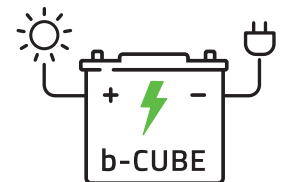
Due to the integrated isolating transformer, the type A RCD already installed in the house installation can continue to be used. This eliminates the otherwise expensive subsequent conversion to type B switches – as is the case e.g. competitive products often demand.



### Intelligent storage management

The b-CUBE uses artificial intelligence to control the interaction between the charging station, solar system and dynamic electricity tariff – you can keep monitor of everything via app control.

**Invest now in our complete power storage & solar solution and always get the best out of your PV power. This will give you maximum energy independence and considerable financial benefits.**



### Integrated interfaces for various consumers

By default, the b-CUBE has an additional contact for controlling additional consumers such as a charging station, heat pump, heating element or similar. Thus e.g., charging of the electric car can be started via the STROMAT Wallbox if excess electricity is detected.

Due to the different performance sizes available, there is a suitable storage solution for every need. The b-CUBE can be used both at home and in business.



# Innovation – ideal for retrofitting

Due to its integrated inverter and intelligent power management system, the b-CUBE battery storage system is also ideal for retrofitting existing PV systems.

## Always everything in view

### Easy access via smartphone and PC

If the b-CUBE is connected to the Internet via a LAN interface, the device can be accessed directly. For this, the b-CUBE app is simply called up with a smartphone or PC and you will get directly to the information of your storage system.



prices or the saved electricity costs can be seen. The external consumers, such as e.g. the connected wallbox, can also be controlled in terms of function.

### Control management

In a simple way, the current energy flows, the state of charge of the battery, the predictive electricity

Give the individual statistics on the energy values an overview and help to effectively optimize your own power consumption.

## Maximizing self-consumption

### Integrated Consumption and Purchase Management

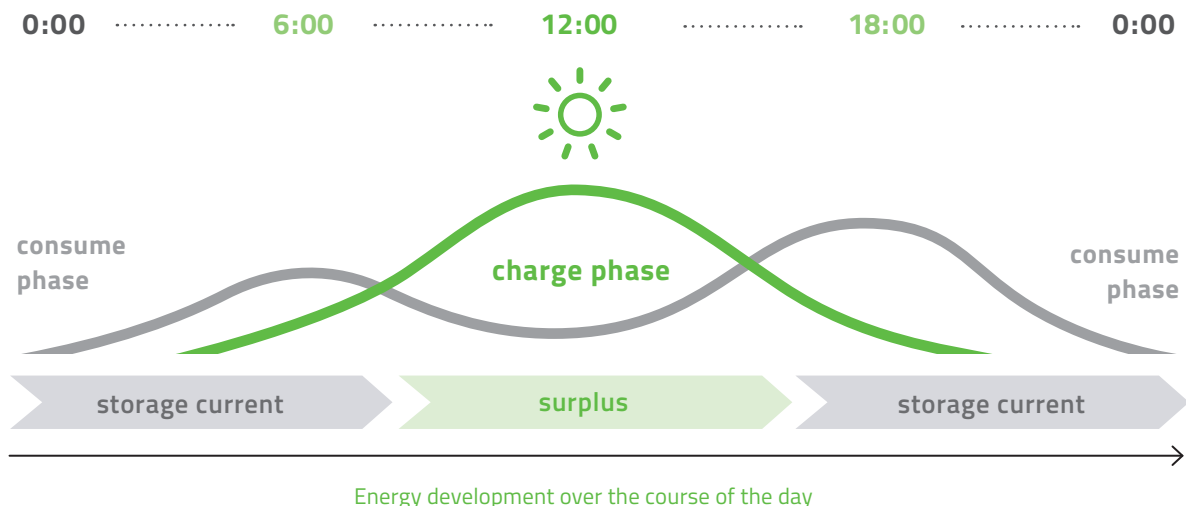
The b-CUBE is the ideal solution for storing excess self-produced energy from CHPs, wind turbines and in particular photovoltaic systems.



energy from the storage system. This ensures maximum self-sufficiency and prevents the otherwise necessary purchase of electricity.

The integrated energy management recognizes the surplus and directs the energy not required to the battery system. If the self-generated energy is reduced or goes out, the house continues to be supplied with

The b-CUBE also offers a clever solution for the necessary purchases. The integrated purchase management ensures that grid power is only purchased when it is particularly cheap.



## The “little broker” is there

### Automatic electricity purchase with stock market knowledge

There are more and more electricity tariffs whose pricing is based on the market principle of supply and demand. These so-called dynamic tariffs take into account the overall energy balance: variable amounts of electricity produced from PV and wind energy compared to fluctuating electricity consumption.

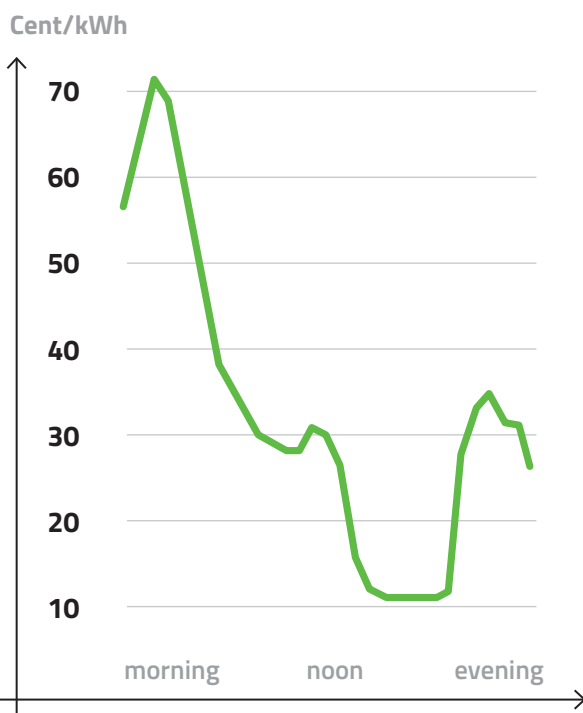
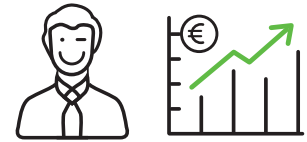
### In view: price fluctuations and electricity price forecasts

If the b-CUBE is connected to the manufacturer portal via the Internet, he cyclically receives the current exchange electricity prices as well as forward-looking electricity price forecasts for the next 36 hours.

### Buy grid power only when it is cheap

Based on this information in combination with the forecast local energy consumption, the system determines optimal charging times where energy is actively drawn from the energy supplier and temporarily stored in the battery.

The goal here is to charge the battery with purchased electricity when prices are low so that the energy required in the house can be drawn from the battery again later when prices are high.



Daily price example Leipzig electricity exchange

## Cleverly save electricity costs

### Low purchase prices with falling daily rates



Thus, the b-CUBE power management can contribute to a significant reduction in electricity procurement costs in connection with dynamic electricity tariffs.

Type		ALC-BCW-1P2-8KWH	ALC-BCW-1P4-14KWH
Battery	Maximal battery capacity	8.2 kWh	14.4 kWh
	Usable battery capacity	7.7 kWh	13.5 kWh
	Efficiency	max. 98 %	
	Technology	Lithium ions, 48 V	
	Cycles*	min. 6.000	
Electrical data	Connection	3-Ph 400 V, 50 Hz, L1, L2, L3, N, PE, max. 63 A	
	Terminals	max. 35 mm <sup>2</sup>	
	Maximal charge/discharge power*	2.0 kW	4.0 kW
Mechanical data	Dimensions (W x H x D)	1.200 x 600 x 300 mm	
	Weight housing	74 kg	85 kg
	Weight battery	67 kg	98 kg
	Protection class	IP33	
Ambient conditions	Max. ambient temperature	-5.. +40 °C	
	Recommended ambient temperature	+5.. +35 °C	
	Storage temperature	-10.. +45 °C	
	Humidity	up to 85 % (without condensing)	
	Rules	VDE-AR-N 4105, IEC 62619, IEC 62040-1, Directive 2014/30/EU	
Connections	Interfaces	USB, Ethernet, CAN	
	NO-contact	Wallbox (STROMAT), Heating element, Heat pump,...	
Visualisation	Technology	Webserver, Internet	
	Showing	Current values for energy flows and performance, battery capacity, charging cycles, saved electricity costs, etc. Trends for forward-looking electricity prices, forecast energy flows, etc.	
Functions	General	Storage of self-generated energy to increase self-consumption	
		Processing of time-variable electricity tariffs to reduce electricity procurement costs	

\* when operating within the recommended ambient temperature

## How the b-CUBE works

The energy is buffered in high-performance lithium-ion batteries. An intelligent battery management system in conjunction with a bidirectional inverter system ensures efficient and long-lasting use of the battery system. The integrated energy meter records the energy balance of the house and cyclically communicates this information

to the energy management so that it can react as quickly as possible even in the event of load changes. In conjunction with the high charging and discharging capacity of the system, these are the prerequisites for a high level of self-sufficiency and thus minimal amounts of expensive-purchased energy.

## Four good reasons for the b-CUBE



### Save electricity

#### Avoid high electricity costs!

Electricity prices have been rising for years – become independent of them. The b-CUBE can minimize your electricity bill in a variety of applications.



### Buy electricity smartly

#### Obtain cheap exchange electricity!

In conjunction with a variable electricity tariff from your energy supplier, your b-CUBE ensures that you always purchase your electricity at the best possible conditions.



### Use electricity yourself

#### Enjoy your energy freedom!

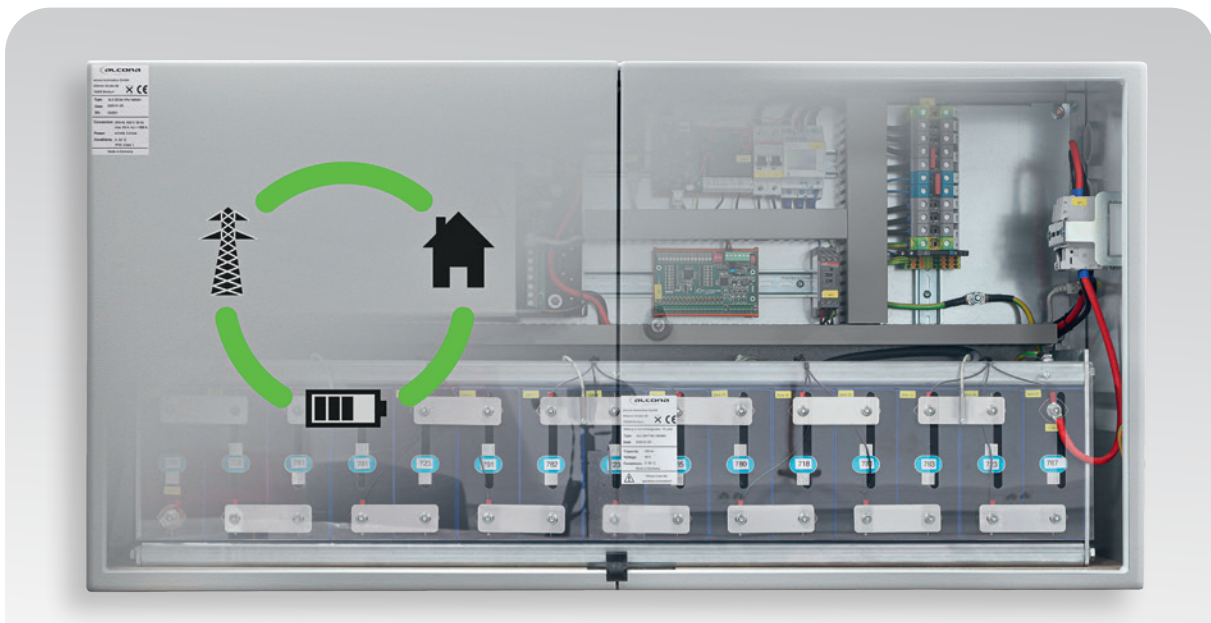
Supply yourself reliably with sustainably generated electricity using the battery storage system. By temporarily storing excess solar power, you increase your own self-consumption and become sustainably more independent from your electricity provider.



### Charge electricity

#### Optimize the charging process for a sustainable mobility change!

Based on the current power generation, the current charge level of the battery and the stock exchange electricity prices, the b-CUBE calculates the ideal charging process for your vehicle.



### Made in Germany

We research and develop exclusively in Germany. With our local production, we guarantee our customers comprehensive support with consistently first-class quality.