



*The AC battery storage
for your home!*

*simply save
electricity costs*



Dynamic electricity tariffs

PV self-consumption increase



The new bCUBE battery storage is the **compact solution** for the direct storage of electrical energy from the one-phase respectively the three-phase grid of the mains connection. The energy is buffered in **high-performance lithium-ion batteries**. An **intelligent battery management system** combined with a bidirectional inverter system ensures efficient and long-lasting use of the **48 V battery system**.

Intelligence pays off

The integrated **MID-calibrated energy meter** records the **energy balance** of the house and cyclically communicates this information to the **energy management**, so that it is possible to react quickly to **load changes**. In conjunction with the **high charging and discharging capacity** of the system, these are the prerequisites for a high degree of **self-sufficiency** and thus for **minimal amounts** of expensively purchased energy.

Installation made easy

The bCUBE 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 pack 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.

Due to the integrated **DC residual current protection**, 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.

By default, the bCUBE 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.

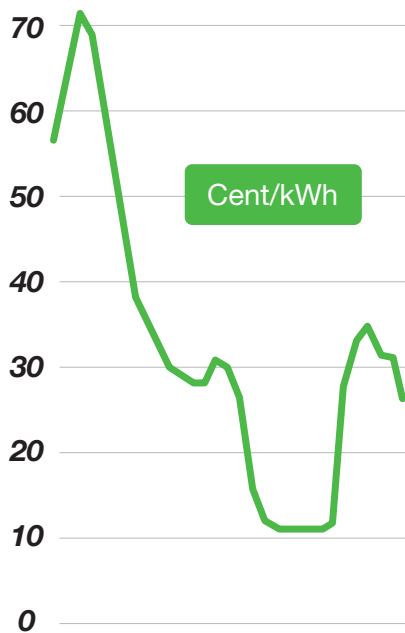
Due to the different **performance sizes** available, there is a **suitable storage** solution for every need. The bCUBE can be used both at **home** and in **business**.



Digital age

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.

The basis for this is the **Leipzig electricity exchange**, where prices are sometimes adjusted every minute.



save
electricity costs
cleverly

If the bCUBE 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 48 hours.

Price example Leipzig electricity exchange from April 9th, 2022

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**.

Thus, the bCUBE can contribute to a significant reduction in electricity procurement costs in connection with dynamic electricity tariffs.

Technical specifications



Type		ALC-BC-1P-7KWH	ALC-BC-3P-14KWH	ALC-BC-3P-28KWH
Battery	Maximal battery capacity	7,6 kWh	14,4 kWh	28,8 kWh
	Usable battery capacity	7 kWh	13 kWh	26 kWh
	Efficiency	max. 95 %		
	Technology	Lithium ions, 48 V, 280 Ah		
	Cycles*	min. 6000		
Electrical data	Connection	1-Ph 230 V, 50/60 Hz L, N, PE, max. 63 A	3-Ph 400 V, 50/60 Hz L1, L2, L3, N, PE, max. 63 A	
	Terminals	max. 16 mm ² flexible, 25 mm ² rigid		
	Maximal charge/discharge power	2,1/1,8 kW	6,6/5,4 kW	
Mech. data	Dimensions (W x H x D)	800 x 600 x 300	1200 x 600 x 300	1200 x 800 x 300
	Weight housing	68 kg	76 kg	91 kg
	Weight battery	67 kg	98 kg	2 x 98 kg
	Protection class	IP43		
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			
Con- nec- tions	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



The **battery system** is modular, so batteries can be **changed individually** at any time.



As a German industrial company, we research and develop **exclusively in Germany**. With extensive warehousing and **local production**, we guarantee our customers a **extensive support** and always **first-class quality**.

Made in
Germany



You can order our products from your energy supplier and at electronics stores. We are happy to help you with the selection your local partner.

Company stamp dealer



alcona Automation GmbH
Ahlener Straße 48 | 59269 Beckum | Germany
Phone: +49 (0) 25 21 / 82 30 40 - 0 | info@alcona.info
www.alcona.info