

VARTA residential storage systems

Energy the way you like it



VARTA ENERGY STORAGE SYSTEMS GIVE YOU COMPLETE INDEPENDENCE.



SOLAR ENERGY YOU CAN TAP AROUND THE CLOCK

► The energy transition starts within your own four walls with energy generated sustainably using photovoltaics or wind power or at combined heat and power plants. Generating your own electricity is an important step in the direction of gaining independence from the energy utilities. The sun and the wind aren't in the habit of sending electricity bills. But even the best solar and wind power systems can only generate electricity for as long as the elements continue to play their part – but for the rest of the day, you are still reliant on grid electricity.

VARTA's energy storage systems are the ideal solution for anyone who wishes to use the electricity they generate themselves all day long. This can boost your self-consumption to 70% or more and is the key to being truly independent from the energy utilities and electricity price hikes.

VARTA. PUT YOURSELF IN SAFE HANDS.

RELY ON QUALITY MADE IN GERMANY.

► Investing in high-quality energy storage systems will pay off – sooner rather than later, depending on how electricity prices continue to develop. The key arguments for it making sense in the long term are future security and durability.

You're in safe hands with the VARTA brand. We have stood for innovative, safe and reliable energy solutions for more than 125 years. The quality ethos that made us the provider of energy for the first moon landing in 1969 is what sets the VARTA energy storage system that you have at home apart from the rest, both now and in the future.

Only high-quality thermally stable lithium-ion cells are used in VARTA energy storage systems, resulting in high efficiency and a long life without a performance-decreasing 'memory' effect. We offer a ten-year warranty on our battery cells!

When it comes to safety, VARTA sets the industry benchmark – with a multistage concept comprising everything from special cell chemistry to an energy and battery management system. Don't compromise on such an important part of your home's power supply!



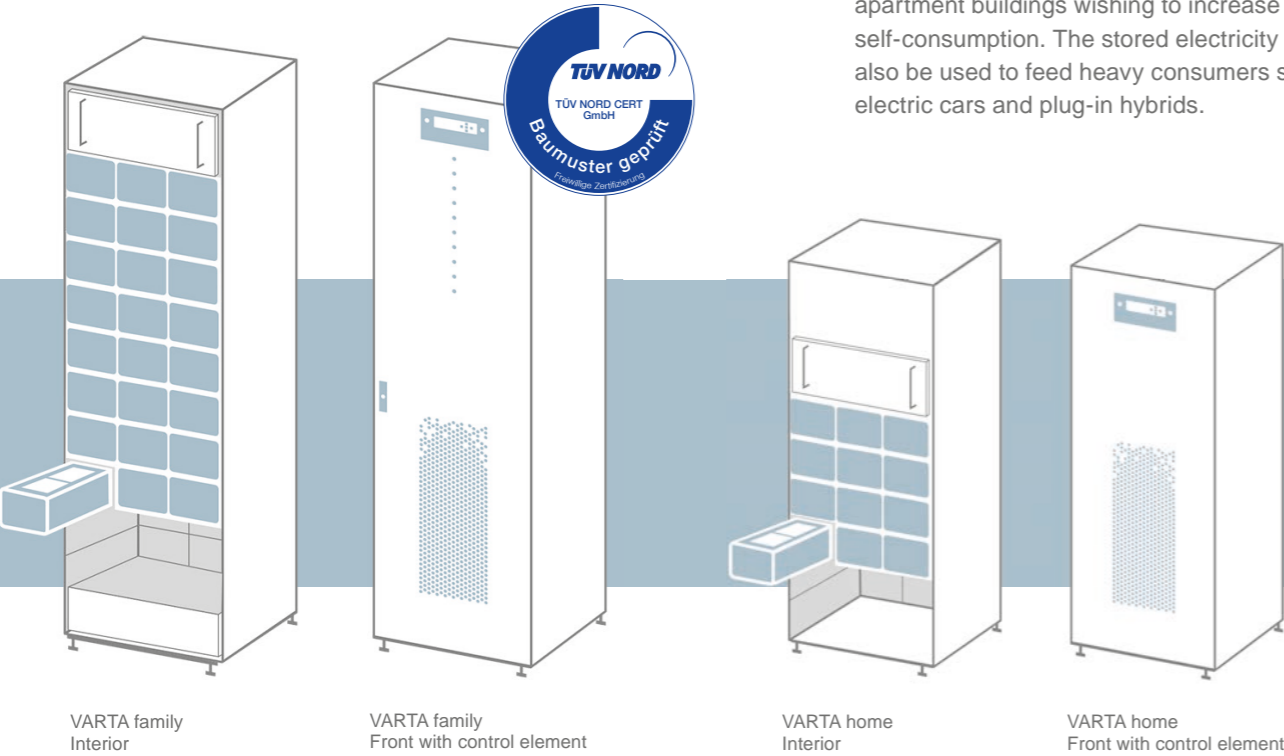
ENERGY STORAGE SYSTEMS THAT GROW WITH YOU.

MODULAR SYSTEMS

▶ VARTA home and VARTA family are modular in design, so their capacities can be brought into line with your specific needs whenever necessary, including after installation. No matter which expansion level you choose, you will benefit from high-performance, reliable VARTA battery technology that allows you to achieve a high degree of self-consumption and boasts quick charging and discharging times.

VARTA home
VARTA home offers power ranging from 2.8 kWh to 6.9 kWh. The system is designed for small to medium-sized households with the usual electrical appliances that wish to increase their self-consumption.

VARTA family
With power ranging from 3.7 kWh to 13.8 kWh, VARTA family is ideal for larger households and apartment buildings wishing to increase their self-consumption. The stored electricity can also be used to feed heavy consumers such as electric cars and plug-in hybrids.



FACTS AND FIGURES

	VARTA FAMILY	VARTA HOME
SYSTEM		
Nominal battery capacity	▶ 3.7–13.8 kWh, modularly expandable	▶ 2.8–6.9 kWh, modularly expandable
Battery inverter	▶ 4.0 kW*	▶ 2.4 kW*
Energy management system	▶ EMS VS-Pro	▶ EMS VS-Pro
Dimensions (WxHxD) in mm	▶ 600x1.850x400	▶ 600x1.320x400
Location	▶ Indoors	▶ Indoors
Temperature range	▶ +5°C to +30°C	▶ +5°C to +30°C
Grid connection	▶ 400 V AC, 3-phase	▶ 400 V AC, 3-phase
Emergency power mode	▶ Power failure	▶ Power failure
Charging/discharging	▶ Optimised for self-consumption	▶ Optimised for self-consumption
System warranty**	▶ 7-year maintenance warranty	▶ 7-year maintenance warranty
FUNCTION		
Energy management	▶ Integrated, fully automatic	▶ Integrated, fully automatic
Power measurement	▶ 3-phase via current sensor	▶ 3-phase via current sensor
Readout functions/ service	▶ Ethernet	▶ Ethernet
BATTERY		
Electrochemical cell	▶ Lithium iron phosphate	
Warranty on battery cells**	▶ 10 years***	
Nominal module capacity	▶ 461 Wh	
Battery module depth of discharge	▶ 90%	
Module power	▶ 162 W	
Cell monitoring	▶ Integrated	
Weight	▶ 6 kg	
Module charging/discharging time	▶ ~3 h (to max. charge)	

* Power depends on number of battery modules
** In accordance with the terms and conditions of the manufacturer's warranty (available to download at varta-storage.de/downloads.html)
*** 80% residual capacity

AS COLOURFUL AS YOUR LIFE.



PERFORMANCE. DESIGN. CHOICE.

► VARTA element

Top quality at an entry-level price! VARTA element is available in three power capacities (3.2 kWh/6.4 kWh/9.6 kWh (VARTA element 3 and VARTA element 6 are extendible up to 9,6 kWh whenever needed) that cater for all storage needs, from small to big.

Like all VARTA energy storage systems, VARTA element features high-quality lithium-ion cells. These can be charged and discharged quickly without any memory effect – the ideal conditions for a high level of self-consumption and therefore cost-effectiveness. VARTA technology is also impressively durable, reliable and safe.

And it's not just the performance which is impressive! The design housing in six trendy colours makes VARTA element a veritable eye-catcher that will look good anywhere in the home.



FACTS AND FIGURES

VARTA ELEMENT 9
VARTA ELEMENT 6
VARTA ELEMENT 3

SYSTEM

Nominal battery capacity	<ul style="list-style-type: none"> ► 3.2 kWh* ► 6.4 kWh* ► 9.6 kWh
Battery inverter	► maximal 3 kW
Power expansion**	► 3,6 kW
Energy management system	► EMS VS-Pro
Dimensions (WxHxD) in mm	► 600x1.176x500
Location	► Indoors
Temperature range	► 5°C to +30°C
Grid connection	► 400 V AC, 3-phase
Charging/discharging	► Optimised for self-consumption
System warranty***	► 7-year maintenance warranty

FUNCTION

Energy management	► Integrated, fully automatic
Power measurement	► 3-phase via current sensor
Readout functions/service	► Ethernet

BATTERY MODULE

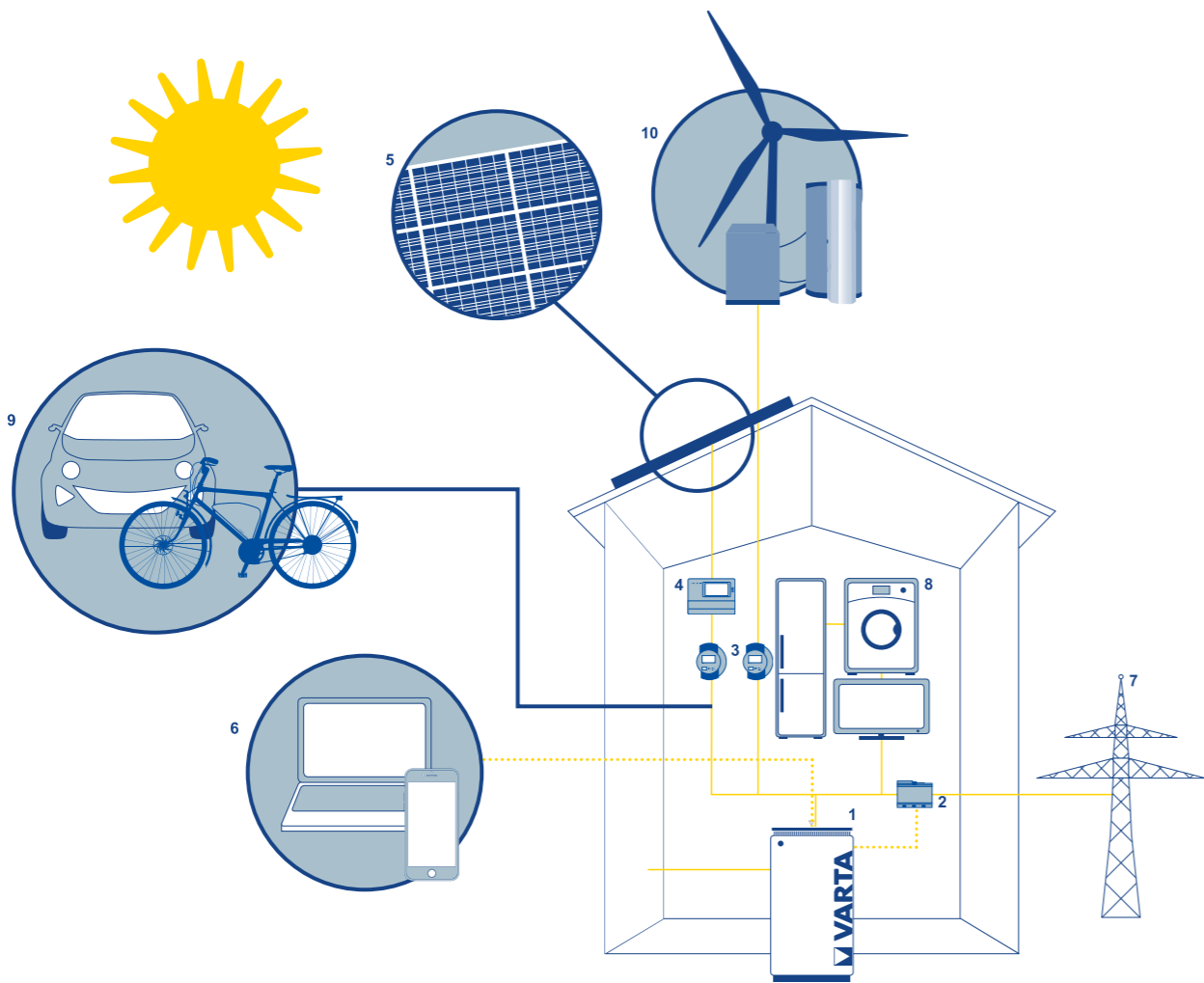
Electrochemical cell	► Lithium-ion
Cell monitoring	► Fully integrated
Charging/discharging time	► ~2–3 h to max. charge
Warranty on battery****	► 10 years or 4,000 cycles***

* Can be expanded to 9.6 kWh at any time with an upgrade set
 ** 6-minute discharge in a single discharge cycle only with VARTA element 9
 *** In accordance with the terms and conditions of the manufacturer's warranty (available to download at varta-storage.de/downloads.html)
 **** 80% residual capacity

SMART MANAGEMENT.

VARTA CONNECT

► Your VARTA energy storage system is a safe and reliable component of modern building automation. It can be interconnected simply, flexibly and intelligently in all sorts of different configurations. Efficient energy management is therefore made simple with VARTA Connect.



- 1 VARTA energy storage system
- 2 Electricity meter
- 3 Electricity generation meter
- 4 PV inverter

- 5 Photovoltaic system
- 6 Remote monitoring
- 7 Public electricity grid
- 8 Electrical appliances

- 9 Energy supply for electric car/e-bike
- 10 CHP/wind power



ANSWERS THAT THINK AHEAD.

Is there government or regional funding of energy storage?

There are numerous funding options. Some select examples (e.g. KfW 275 in Germany) and further information can be found on our homepage www.varta-storage.com.

Why lithium-ion and not lead?

Lead batteries have a lifespan of a mere five to ten years and a lower depth of discharge of a maximum of 60%. They are also heavy and take up a lot of space.

In contrast, lithium-ion batteries keep working for up to 20 years, have four times the energy density of lead batteries and boast a 90% depth of discharge. They are smaller, lighter and more reliable.

Why choose VARTA?

VARTA guarantees you a future-proof system from a manufacturer who has stood for innovation, quality and safety for 125 years.

How are old battery modules disposed of?

VARTA Storage GmbH collects and professionally disposes old modules and covers the costs incurred.

Why are VARTA systems so safe?

Our multistage safety concept and the intensive testing that all the models undergo make VARTA storage systems reliable and safe. The battery system is protected by the integrated safety electronics, automatic deactivation and the high-grade metal housing, guaranteeing uninterrupted functionality, even in the event of faults. In the case of the VARTA family storage system, this safety is attested to by TÜV Nord and the Karlsruhe Institute of Technology (KIT).

Where can I find out more about VARTA energy storage systems?

You will find everything you ever wanted to know about our systems on our homepage varta-storage.com. Additionally, the advisors who man our service hotline will be happy to personally answer any questions you may have.

BECOME YOUR OWN ELECTRICITY PROVIDER!

INDEPENDENCE. SAFETY. FLEXIBILITY.

► VARTA energy storage systems – the decisive step from being a consumer to an energy provider. Not only do you generate your own electricity – you can also use a great deal of it around the clock. Become an independent self-provider – we would be happy to advise you.



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Dealer's stamp