

HomeHub

Modular Residential Energy Storage



Engineered in Germany –
for today's world.

HomeHub – a smart solution:

Technology at the cutting edge, smart, and sustainable.



■ **Human beings need energy for their life. Some sources of energy, such as fossil fuels, are limited in supply and costly. So why not use a form of energy that is available in unlimited quantity, free of charge, and on top of that absolutely clean? The sun is the most powerful source of energy we have – and it is provided for free. It is a powerful, life-giving force that is already captured and used to produce power in many parts of the world. And the potential of the sun to provide energy in our world is infinite. In just three hours, the sun produces the amount of energy the entire world consumes in one year.**

Photovoltaics – or PV – is already being widely used. Many home owners and enterprises have installed PV systems to produce and utilize the energy provided by the sun. HomeHub has been designed specifically for this purpose – to generate and store energy.

The advantage: you can use it whenever you need it. GS HUB GmbH is headquartered in Germany and consists of an international team with years of leadership experience and extensive know-how in the fields of photovoltaics, solar thermal energy, batteries, electronics, and software. Their skill has made it possible to develop an advanced and fully integrated solution from the concept to the final product: the **HomeHub**.

HomeHub – simply more freedom:

Storing energy and using it on demand.

■ We set the highest standards for the performance and design of the HomeHub from the very beginning. The result is a modular system, based on 2.5 kWh modules, which can easily be extended to meet the changing demands of a family or business.

Any storage device requires a corresponding inverter. The choice of inverter is crucial as it converts the direct current (DC) produced by your solar system into alternating current (AC) that is needed to operate all of your devices.

A list of all compatible inverters can be found on our website: www.gs-hub.com



Perfect design

HomeHub was developed in Europe. The main focus was on top performance as well as design and flexibility.

Indoors and outdoors

The HomeHub features a robust and elegant stainless-steel housing and can be used indoors as well as outdoors.

Glass door

A glass door enables you to view all the operating modes of the system at a glance.

Intelligent controller

The intelligent controller manages the storage modules and thereby ensures a long service life and perfect performance of the HomeHub.

Modularity

You can start with a small system and add additional modules as your requirements grow.

Cloud based

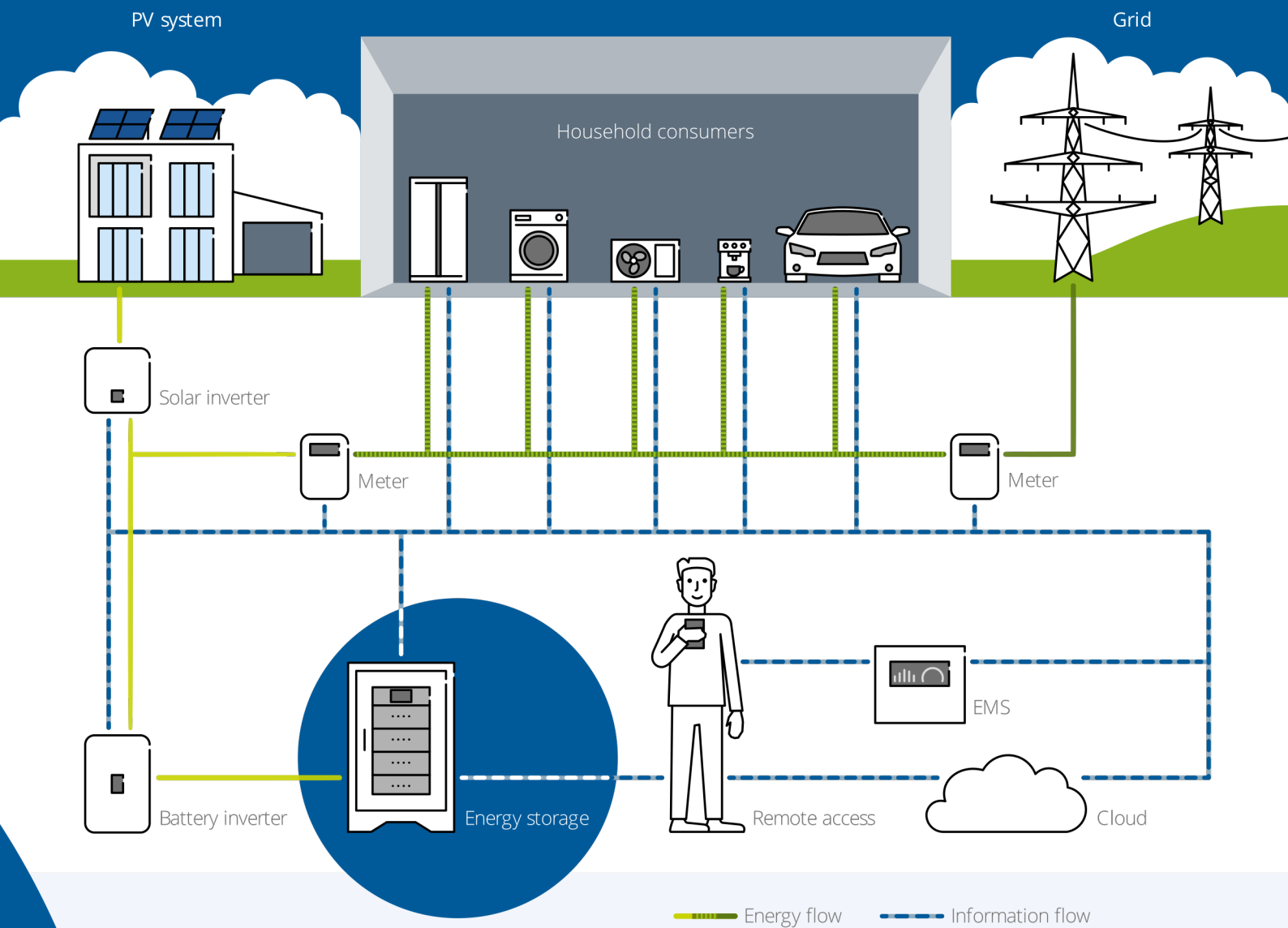
The control unit in the energy management system is the heart of the HomeHub. No matter where you are, you can monitor and control your HomeHub with a smartphone or tablet computer.

The issues of **system safety** and **longevity** are of great importance to us, which is why we have chosen **lithium iron phosphate** battery cells. In the event of a power failure, our battery system reliably provides the

necessary energy to supply your connected devices and ensures that, for example, computers can continue to operate reliably (**UPS function**)*.

*Depending on the installed inverter.

Generation and optimal use of solar energy: smart control and efficiency throughout the entire house



The HomeHub family

HomeHub - Always in control:

The integrated monitoring system.



■ The elegant HomeHub system can do more than simply store energy: the master module with a battery management system (BMS) also provides you with a clear overview of all the processes in the individual storage modules that you can easily expand yourself.

The separate energy management system (EMS) enables the central control of each individual consumer and gives you an overview of the energy you produce and consume.

The HomeHub system allows you to optimize your own energy consumption in such a way that you consume the energy that you produce yourself in order to achieve a higher degree of self-sufficiency and a higher self-consumption rate.

You can operate everything via a touchscreen on site or, regardless of where you are, you can also monitor and control the system performance online at any time via a mobile, web-enabled device.



Technical data overview.

Characteristic	2.5 - 10 kWh system	12.5 - 20 kWh system
Maximum energy	10 kWh	20 kWh
Maximum capacity	200 Ah	400 Ah
Max. charge-/discharge current	200 A (@ 25 °C)	240 A (@ 25 °C)
Max. charge-/discharge power	10 kW (@ 25 °C)	12 kW (@ 25 °C)
Charging time	>1 h	>1.7 h
Voltage range	43.2V _{dc} - 58.4V _{dc}	
Max. number of battery modules	4	8
IP rating	IP55	
Protection class	III (SELV/PELV)	
Communication ports	CAN, Ethernet	
Battery management system	Yes	
Software updateable	Yes	
Uninterrupted emergency power	Yes (for AC depending on battery inverter)	
Adjustable depth of discharge	Yes, battery profiles can be selected between 70% and 97% (Standard and recommended 80%)	
Material	Stainless steel	
Empty weight	80 kg 176 lbs	
Max. weight	208 kg 460 lbs	400 kg 882 lbs
Dimensions (L × W × H)	(690 × 550 × 1100) mm	(690 × 550 × 1100) mm
Cell chemistry	Lithium-Iron-Phosphate (LiFePO ₄)	
Nominal capacity	50 Ah (2560 Wh / 51.5 Ah (2635 Wh)	
Maximum charging current	50 A (1 C @ 25 °C)	
Battery Module weight	28 kg 62 lbs	
Operating Temperature	-10 °C to +55 °C 14 °F to 130 °F	
Storage Temperature	-20 °C to +60 °C -4 °F to 140 °F	
Relative humidity	Up to 95% non-condensing	
Garantie	12 years basic guarantee Optionally expandable up to 20 years*	
Conformity	CE, RoHS, IEC 62619:2017/AS IEC 62619:2017, YDB 032-2009, UN 38.3	

*subject to operating conditions

