GS HUB
SMART ENERGY FOR LIFE

durapower

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.

We have selected a Swiss made precision system that features extraordinary peak load stability and does not consume any power itself.

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 memory modules and thereby ensures a long service life and perfect performance of the HomeHub.

Modularity

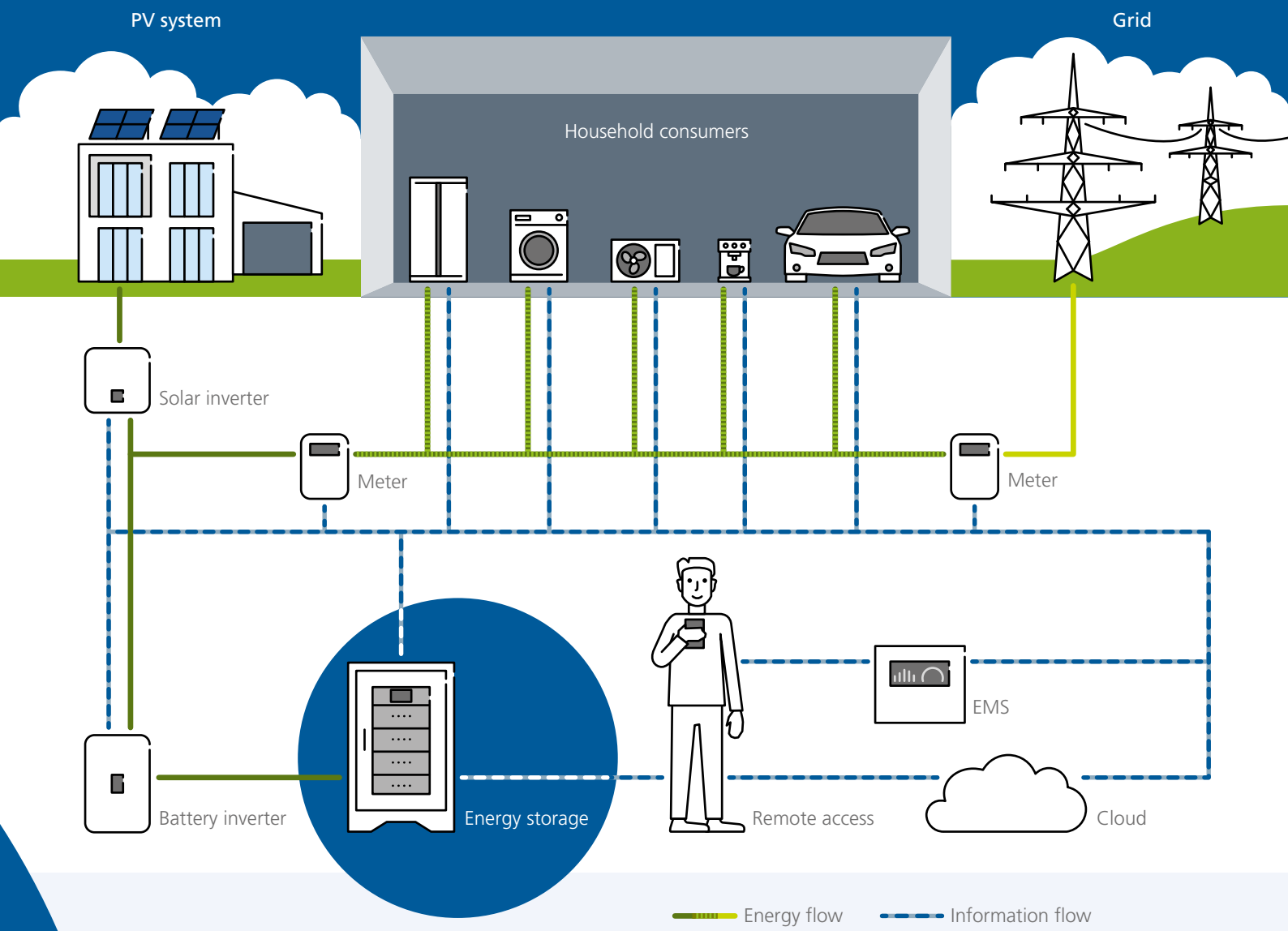
You can start with a small system and add additional modules as your requirements grow.

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 system will take over the power supply of your connected devices at lightning speed, within 15 milliseconds, making sure that computers, for example, can continue to operate reliably **(UPS function)**.

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 memory 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.

System characteristics	Max. energy content	10 kWh
	Max. capacity	200 Ah
	Max. charging current	200 A (1 C @ 25 °C)
	Max. discharge current	200 A (1 C @ 25 °C)
	Min. charging time	1 h
	End-of-charge voltage	57.6 V_{dc}
	End-of-discharge voltage	43.2 V_{dc}
	Max. number of battery modules	4
	IP rating	IP 55
	Communications ports	CAN, Ethernet
	BMS	Yes
	Protection Class	III (SELV_PELV)
	Backup power	Yes
	Material	Stainless steel
	Dimensions (length x width x hight)	(690 x 550 x 1,100) mm
	Weight (cabinet)	80 kg
	Max. weight	208 kg
Battery module	Cell chemistry	Lithium iron phosphate (LiFePO4)
	Nominal voltage	51.2 V_{dc}
	Energy content	2.5 kWh
	Nominal capacity	50 Ah
	Recommended charging current	10 A (0,2 C @ 25 °C)
	Max. charging current	50 A (1 C @ 25 °C)
	End-of-charge voltage (cell)	3.60 V_{dc}
	Nominal voltage (cell)	3.20 V_{dc}
	End-of-discharge voltage (cell)	2,70 V_{dc}
	Dimensions (length x width x hight)	435 x 502 x 117 mm
	Weight	28 kg
Ambient conditions	Operating temperature	-10 to +55 °C
	Storage temperature	-20 to +60 °C
	Relative humidity	0 to 95 %
Warranty	6,000 cycles (80% depth of discharge - DOD) or 10 years*	
Conformity	CE, RoHS, IEC 62619:2017/AS IEC 62619:2017, YDB 032-2009, UN38.3	

*subject to operating conditions

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