



Sigenergy focuses on developing cutting-edge home and business energy solutions, with products ranging from energy storage systems to solar inverters and EV chargers. Our world-class R&D team of hundreds of top industry experts shares the vision of making the world greener via continuous innovation. With global sales and services, we aim to become our customers' most trusted partner on their journey to a more sustainable future.

Disclaimer: The information in this file is provided on an "as is" basis. To the fullest extent permitted by law, Sigenergy Technology Co., Ltd. excludes all representations and warranties relating to this file and its contents or which is or may be provided by any affiliates or any other third party, including in relation to any inaccuracies or omissions in this file.

Version: 20250918

www.sigenergy.com



Home Energy Solution

Let the world enjoy green energy

CONTENTS

01 Brand Story

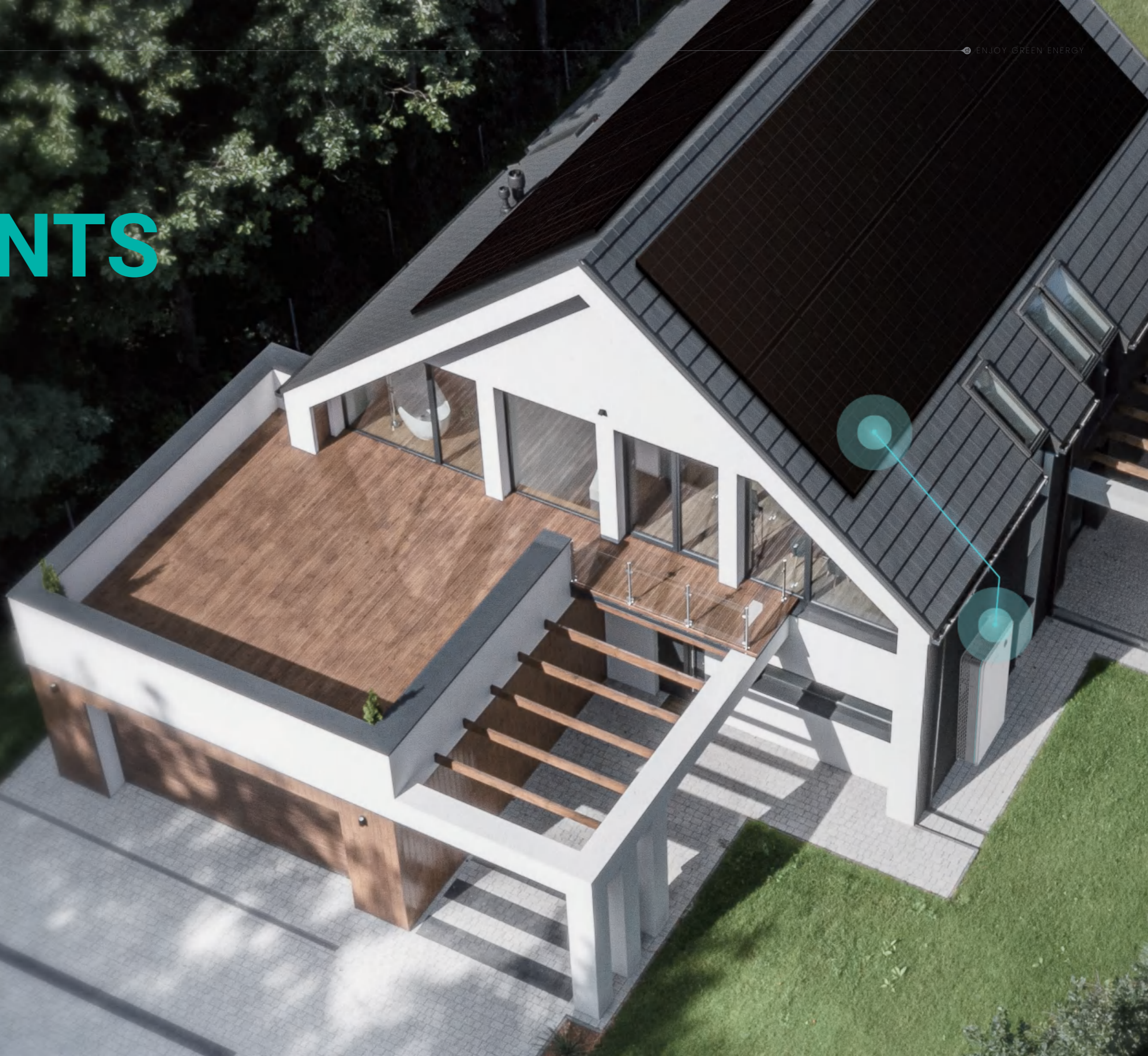
About SIGENERGY

02 Product

Residential Solution
Why Sigenergy?
Product Portfolio

03 Trusted Partner

Solar-powered Manufacturing
Global Cases



ABOUT SIGENERGY

Sigenergy focuses on developing cutting-edge home and business energy solutions, with products ranging from energy storage systems to solar inverters and EV chargers. Our world-class R&D team of hundreds of top industry experts shares the vision of making the world greener via continuous innovation. With global sales and services, we aim to become our customers' most trusted partner on their journey to a more sustainable future.

VISION

Enjoy Green Energy

MISSION

Be a distributed energy pioneer.

Build intelligent energy solutions with superior safety, ultra simplicity, and outstanding performance.

SIGEN

Safe Intelligent Green Efficient New



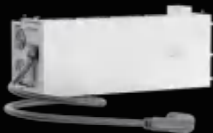
Sigenenergy Home Energy Solutions



5-in-One SigenStor



SigenStor EC
For solar + Energy storage system



SigenStor EVDC
Bi-directional EV charger



SigenStor BAT
Modular BESS

Energy Gateway



Sigen Gateway HomePro
Powerful home energy hub

Micro Inverter



SigenMicro Inverter
Ideal for rooftop and balcony solar

Hybrid Inverter



Sigen Hybrid Inverter
Efficient & elegant



SigenStor BC
Connect Sigen Battery to Sigen Hybrid Inverter



SigenStor BAT
Modular BESS

EV AC Charger



Sigen EVAC Charger
Power drives with smart energy

App & Cloud



Sigen Cloud
A platform for device lifecycle mgmt. and business decision-making



mySigen App
Intelligent energy mgmt. within touches

Why Sigenenergy?

01 Visualize Every Ray of Energy

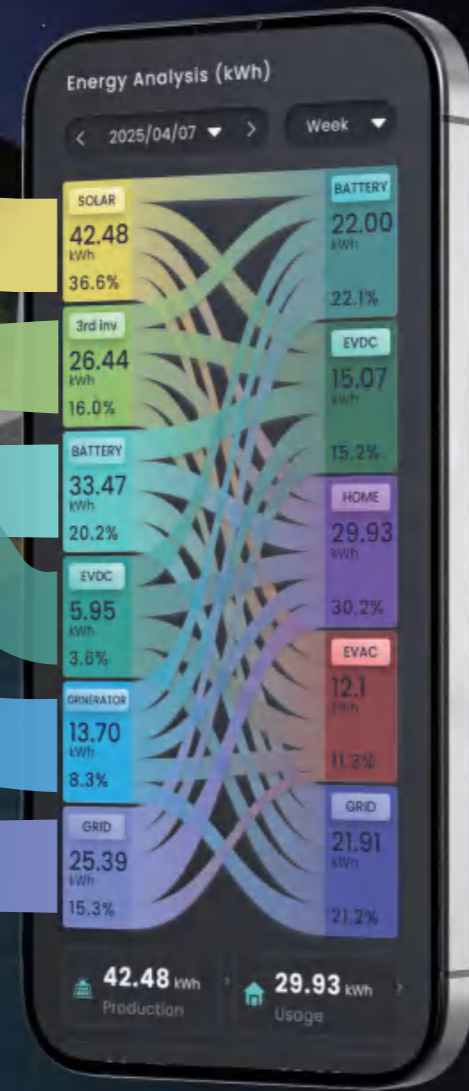
Track energy flow with precision—from power generation to consumption. Gain clear insights into your battery's green energy composition, ensuring transparency and efficiency in every charge.

System-level

Know every watt's source and destination

Load-level

See the power source behind every watt



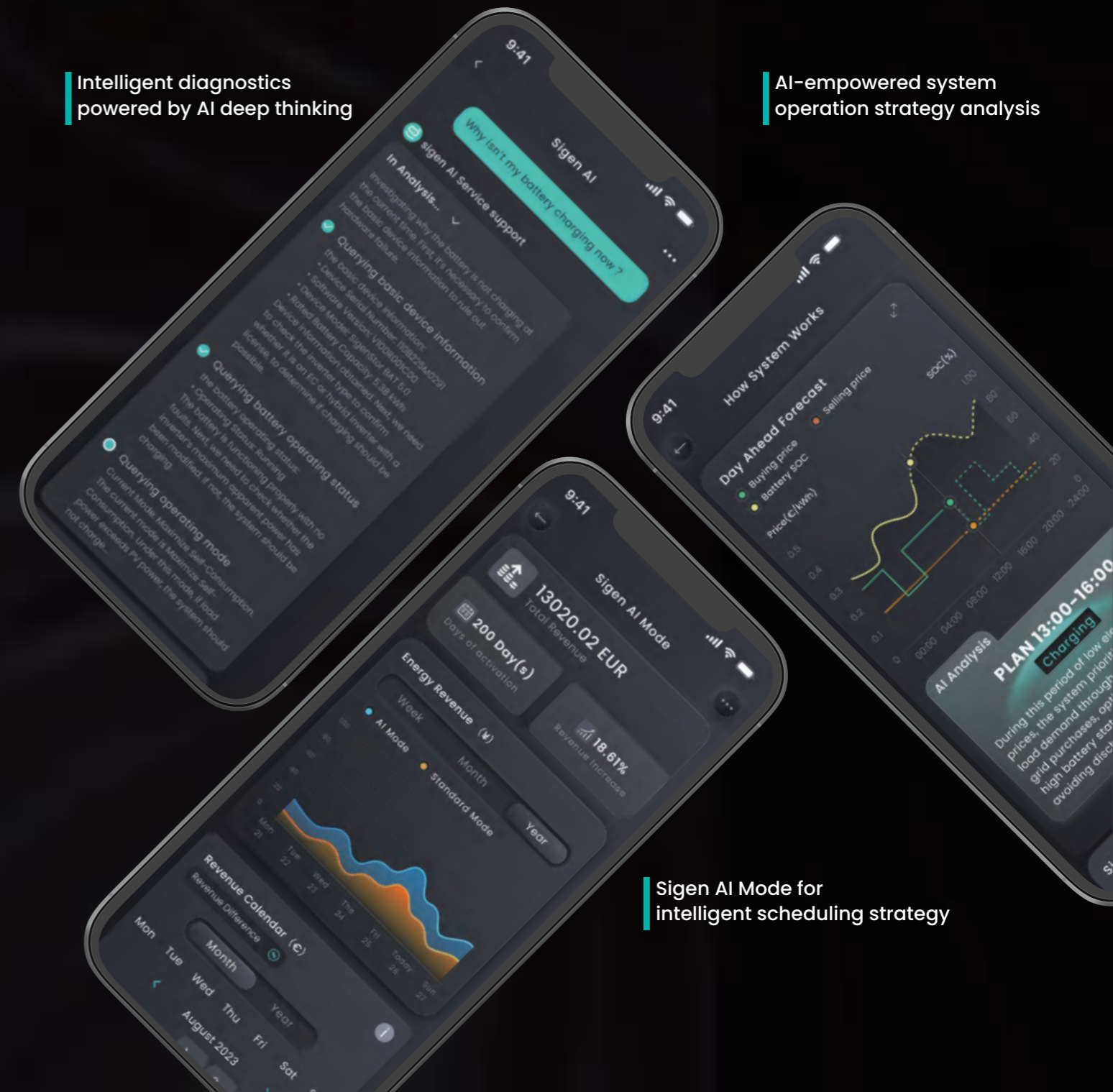
Why Sigenenergy?

02 Let AI Power Your Energy Freedom

mySigen App integrates AI deeply with Sigen AI Mode, AI-driven insights, and a GPT-4o - powered smart assistant, using advanced AI to boost system efficiency, convenience, and performance.

Intelligent diagnostics powered by AI deep thinking

AI-empowered system operation strategy analysis



Sigen AI Mode for intelligent scheduling strategy

Why Sigenergy?

03 Safety Guard Always Reliable

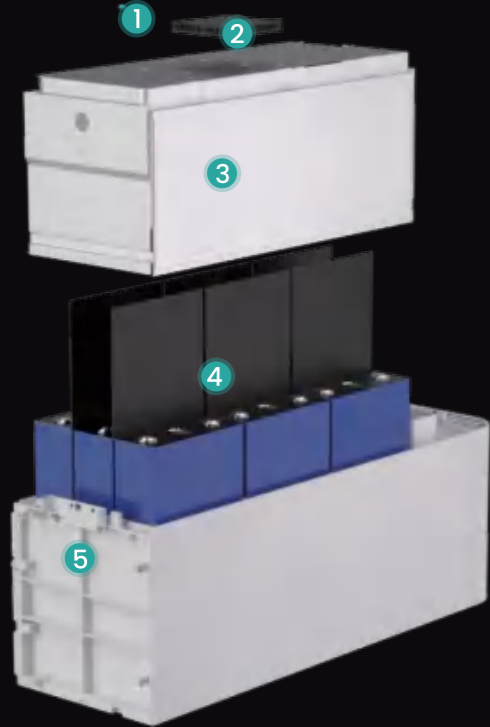
Sigen Battery uses high-reliable LFP cells and features industry-leading protections. Offering 10,000 life cycles* and superior safety. Setting a new benchmark for battery safety.

Why Sigenergy?

04 Goodbye to Power Outage

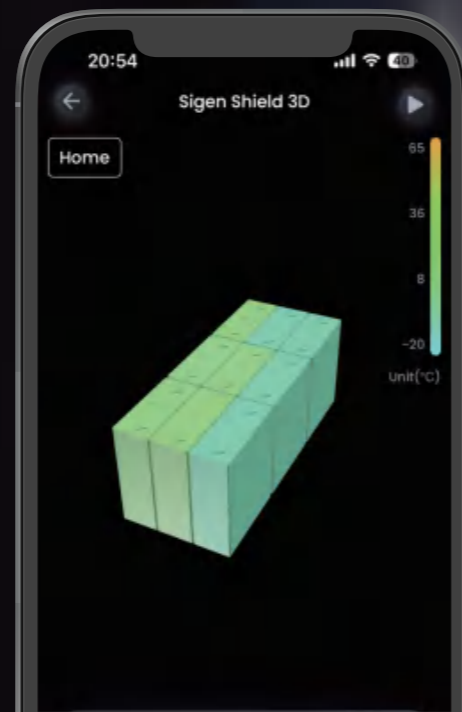
Sigenergy provides the ultimate backup solution. Our patented power control algorithm enables seamless switching among multiple energy, with robust off-grid performance for your home.

5 Layers Battery Safety Protection



- 1 Cell-level temperature monitoring
- 2 Internal fire extinguishing kit
- 3 High-temp. resistance insulated pads
- 4 Aerogel insulated pads
- 5 Decompression valve

Real-time monitoring of battery status on **mySigen APP**



*This is provided by the battery cell manufacturer. Based on cell test condition of 25±2°C, 0.5C charge and discharge rate and SOH=60%.

0 ms Load-side disruption



Why Sigenergy?

05 Innovative DC-Coupled Architecture

Direct DC bus connection among PV, ESS and EV chargers boosts system efficiency and power density. With a smart battery optimizer for each pack, it supports mixed use of new/old batteries and active balancing.



DC BUS
Patented architecture

Optimizer
for each battery

Mixed use
of new/old batteries

Why Sigenergy?

06 V2X Pioneering the Future

The world's first V2X-powered home energy revolution. SigenStor EVDC pioneers 25kw bidirectional EV - Home integration, bringing limitless possibilities to the energy industry.



V2G
Peak shaving and
VPP dispatch

V2H
Backup your home
with your EV

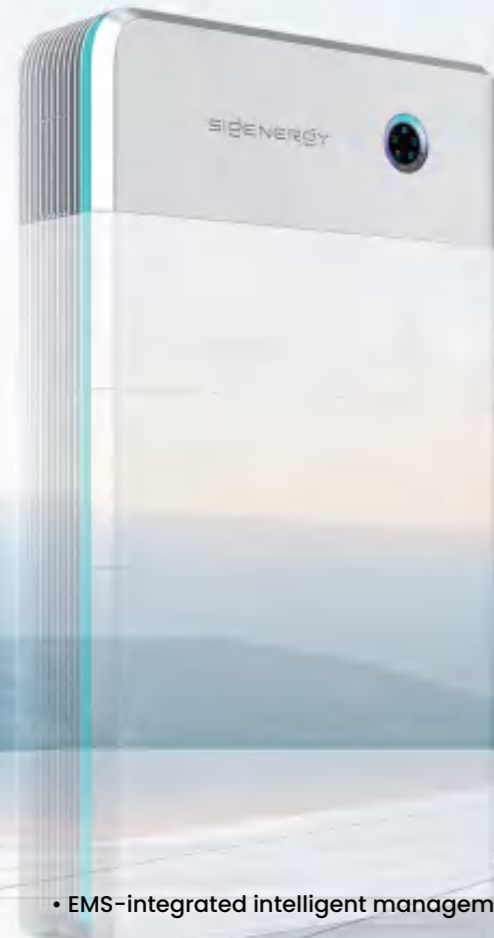
Scan to discover
V2X tested EVs



*V2X functionality is limited by the EV's capabilities. Once the relevant standards are published, V2X feature can be upgraded through the OTA. For the official support of vehicle models and support timelines, please refer to future announcement made on the official website.

Sigen Energy Controller

- 3.0 - 12.0 kW | Single Phase
- 5.0 - 30.0 kW | Three Phase
- 5.0 - 12.0 kW | Three Phase Low Voltage



- EMS-integrated intelligent management for precision control
- Max. 2.0 DC/AC ratio compatibility, higher energy utilization (Single Phase)
- Unbalanced 3-phase power output, ensuring efficient operation
- 150% peak output power in off-grid mode, instant high-power boost
- Up to 4 MPP trackers for maximum solar energy extraction

Sigen Energy Controller 3.0-12.0 kW Single Phase ¹

SigenStor EC	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	8.0 SP	10.0 SP	12.0 SP	Units	
DC Input (from PV)											
Max. PV power	6000	7360	8000	9200	10000	12000	16000	20000	24000	W	
Max. DC input voltage ²										600	V
Nominal DC input voltage										350	V
Start-up voltage										100	V
MPPT voltage range										50 - 550	V
Number of MPP trackers				2				3	4	4	
Number of PV strings per MPPT					1						
Max. input current per MPPT					16						
Max. short-circuit current per MPPT					20						
AC Output (on-grid)											
Nominal output power	3000	3680	4000	4600	5000	6000	8000	10000	12000	W	
Max. output apparent power	3300	3680	4400	5000	5500	6600	8800	11000	12000	VA	
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	36.4	45.5	54.6	A	
Max. output current	15.0	16.0	20.0	22.7	25.0	30.0	40.0	50.0	54.6	A	
Nominal output voltage	220 / 230 / 240						220 / 230			V	
Nominal grid frequency					50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging										
Total current harmonic distortion	THDi < 2%										
Efficiency											
Max. efficiency	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	97.6%	97.6%	97.6%		
European efficiency	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	97.0%	97.0%	97.0%		
AC Output (backup)											
Peak output power (10 seconds)	4500	5520	6000	6900	7500	9000	12000	15000	15000	W	
Nominal output voltage	220 / 230 / 240						220 / 230			V	
Nominal output frequency					50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging										
Total voltage harmonic distortion	THDv < 2%										
Disruption time of backup switch ³	0									ms	
Battery Connection											
Battery module models	SigenStor BAT series										
Number of modules per controller	1 ~ 6									pcs	
Battery module voltage range	300 ~ 600									V	
Protection											
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter ⁴ , AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection										
General Data											
Dimensions (W / H / D)	700 / 300 / 245						700 / 300 / 260			mm	
Weight	18						36			kg	
Storage temperature range	-40 ~ 70										°C
Operating temperature range	-30 ~ 60										°C
Relative humidity range	0% ~ 100%										
Max. operating altitude	4000										m
Cooling	Natural convection						Smart air cooling				
System ingress protection rating	IP66										
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)										
Standard Compliance											
Standard ⁵	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2										

1. Sigen Energy Controller 8.0-12.0 kW Single Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
 2. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
 3. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.
 4. This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
 5. For all standards refer to the certificates category on the Sigenenergy website.

Sigen Energy Controller 5.0–30.0 kW Three Phase ¹

SigenStor EC	5.0 TP	6.0 TP	8.0 TP	10.0 TP	12.0 TP	15.0 TP	17.0 TP	20.0 TP	25.0 TP	30.0 TP	Units
DC Input (from PV)											
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	48000	W
Max. DC input voltage ²	1100										V
Nominal DC input voltage	600										V
Start-up voltage	180										V
MPPT voltage range	160 ~ 1000										V
Number of MPP trackers	2		3			4					
Number of PV strings per MPPT	1										
Max. input current per MPPT	16										A
Max. short-circuit current per MPPT	20										A
AC Output (on-grid)											
Nominal output power	5000	6000	8000	10000	12000	15000	17000	20000	25000	30000	W
Max. output apparent power	5500	6600	8800	11000	13200	16500	18700	22000	27500	33000	VA
Nominal output current	7.6	9.1	12.2	15.2	18.2	22.8	25.8	30.4	38.0	45.5	A
Max. output current	8.4	10.0	13.4	16.7	20.1	25.1	28.4	33.4	41.8	50.0	A
Nominal output voltage	380 / 400, 3W+N+PE										V
Nominal grid frequency	50 / 60										Hz
Power factor	0.8 leading ~ 0.8 lagging										
Total current harmonic distortion	THDi < 2%										
Efficiency											
Max. efficiency	98.1%	98.2%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.4%	
European efficiency	96.1%	96.6%	97.1%	97.5%	97.7%	97.9%	97.9%	97.9%	98.0%	98.0%	
AC Output (backup)											
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	36000	W
Nominal output voltage	380 / 400, 3W+N+PE										V
Nominal output frequency	50 / 60										Hz
Power factor	0.8 leading ~ 0.8 lagging										
Total voltage harmonic distortion	THDv < 2%										
Disruption time of backup switch ³	0										ms
Battery Connection											
Battery module models	SigenStor BAT series										
Number of modules per controller	1 ~ 6										pcs
Battery module voltage range	600 ~ 900										V
Protection											
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter ⁴ , AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection										
General Data											
Dimensions (W / H / D)	700 / 300 / 260										mm
Weight	36										kg
Storage temperature range	-40 ~ 70										°C
Operating temperature range	-30 ~ 60										°C
Relative humidity range	0% ~ 100%										
Max. operating altitude	4000										m
Cooling	Smart air cooling										
System ingress protection rating	IP66										
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)										
Standard Compliance											
Standard ⁵	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2										

- ¹ Sigen Energy Controller 30.0 kW Three Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
- ² The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
- ³ This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.
- ⁴ This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- ⁵ For all standards refer to the certificates category on the Sigenenergy website.

Sigen Energy Controller 5.0–12.0 kW Three Phase Low Voltage ¹

SigenStor EC	5.0 TPLV	6.0 TPLV	8.0 TPLV	10.0 TPLV	12.0 TPLV	Units
DC Input (from PV)						
Max. PV power	8000	9600	12800	16000	19200	W
Max. DC input voltage ²	600					V
Nominal DC input voltage	360					V
Start-up voltage	100					V
MPPT voltage range	50 ~ 550					V
Number of MPP trackers	2	2	3	3	4	
Number of PV strings per MPPT	1					
Max. input current per MPPT	16					A
Max. short-circuit current per MPPT	20					A
AC Output (on-grid)						
Nominal output power	5000	6000	8000	10000	12000	W
Max. output apparent power	5500	6600	8800	11000	13200	VA
Nominal output current	13.2	15.8	21.0	26.2	31.5	A
Max. output current	14.5	17.4	23.1	28.9	34.7	A
Nominal output voltage	220 / 230					V
Nominal grid frequency	50 / 60					Hz
Power factor	0.8 leading ~ 0.8 lagging					
Total current harmonic distortion	THDi < 2%					
Efficiency						
Max. efficiency	98%					
European efficiency	97.3%	97.5%	97.7%	97.8%	97.8%	
Battery Connection						
Battery module models	SigenStor BAT series					
Number of modules per controller	1 ~ 6					pcs
Battery module voltage range	300 ~ 600					V
Protection						
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter ³ , AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection					
General Data						
Dimensions (W / H / D)	700 / 300 / 260					mm
Weight	36					kg
Storage temperature range	-40 ~ 70					°C
Operating temperature range	-30 ~ 60					°C
Relative humidity range	0% ~ 100%					
Max. operating altitude	4000					m
Cooling	Smart air cooling					
System ingress protection rating	IP66					
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)					
Standard Compliance						
Standard ⁴	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2					

- ¹ Sigen Energy Controller Three Phase Low Voltage is only available in specific regions. Please contact Sigenenergy or local distributors for details.
- ² The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
- ³ This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- ⁴ For all standards refer to the certificates category on the Sigenenergy website.

Sigen EV DC Charging Module

- World's first V2X-integrated all-in-one home energy system
- 25kW bi-directional charging, rapid replenishment for EVs
- 150V-1000V charging voltage, universal EV compatibility
- IP66 protection rating, maintenance-free, always reliable
- Support 100% green charging, drive with sun power



Sigen EV DC Charging Module

SigenStor EVDC ¹	12	25	Units
DC Charging			
Max. charging power of charging port	12.5	25	kW
Max. discharging power of charging port	12.5	25	kW
Operation voltage range	150 ~ 1000		V
Max. operation current	40	80	A
Charging interface	CCS2		
Protection			
Short-circuit protection	Supported		
Over / Under voltage protection	Supported		
Overload protection	Supported		
Over temperature protection	Supported		
Reverse polarity protection	Supported		
Welded contactor check	Supported		
General Data			
Dimensions (W / H / D)	700 / 270 / 260		mm
Weight ²	39 (with 7.5m cable) / 41 (with 10m cable)		kg
Storage temperature range	-40 ~ 70		°C
Operating temperature range	-30 ~ 60		°C
Relative humidity range	5% ~ 95%		
Max. operating altitude	4000		m
Cooling	Smart air cooling		
System ingress protection rating	IP66		
Integrated charging cable length ³	7.5 / 10		m
Function			
Authentication	RFID card / App / No authentication		
	Scheduled Charging	The system supports setting the charging start times	
Smart Charging	PV Surplus Charging	The system uses PV Surplus to charge EVs, enabling 100% green power. It also supports Battery Boost Charging with cut - off SOC setting, as well as Grid Charging. Moreover, it has the function of prioritizing Surplus PV power.	
	Fast Charging	The system draws power from the grid and PV simultaneously for the fastest charging speed and also supports additional Battery Boost Charging.	
Application	Bi-directional V2X operation ⁴ , Smart load management		
User interfaces	LED indicator, App, RFID		
Remote function	OTA, Remote diagnostics		
Ocpp protocol	Ocpp 1.6J ED 2		
Standard Compliance			
Standard ⁵	EN IEC 61851-1, EN 61851-23, EN IEC 61851-21-2, ETSI EN 303 645		

¹ Sigen EV DC Charging Module needs to be used together with Sigen Energy Controller.

² The net weight includes the CCS2 cable-assembly also, but excludes the exteriors, wall-mounting fixtures and the related attachments.

³ Integrated charging cable length refers to the length of the cable that extends from the Sigen EV DC Charging Module, not the length of the exposed cable.

⁴ V2X functionality is limited by the EV's capabilities. Once the relevant standards are published and tested, V2X feature can be upgraded through the OTA. For the official support of vehicle models and support timelines, please refer to future announcement made on the official website.

⁵ For all standards refer to the certificates category on the Sigenenergy website.

Sigen Battery

- Premium 314Ah cells with 10,000 cycles, long-lasting & reliable
- 5-layer battery safety protection to define the safety standard
- Battery optimizer inside, mix old and new, upgrade with ease
- Higher energy density, efficient storage, compact design
- 100% depth of discharge, maximum energy utilization

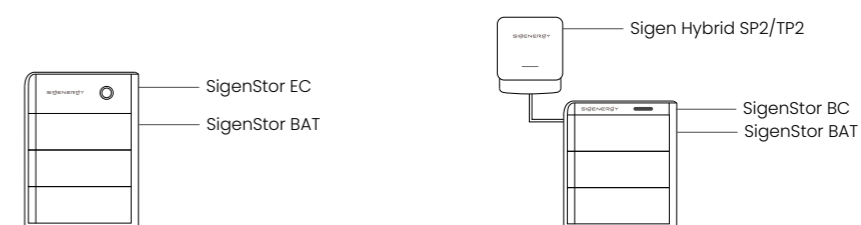


Sigen Battery 6.0 / 10.0

SigenStor BAT	6.0	10.0	Units
Performance Specification			
Battery type	LiFePO4		
Cell capacity	314		Ah
Cycle life ¹	10000		
Total energy capacity	6.02	9.04	kWh
Usable energy capacity ²	5.84	8.76	kWh
Depth of discharge ³	100%		
Max. charge / discharge power	3000	4600	W
Peak charge / discharge power (10 seconds)	4500	6900	W
General Data			
Weight	62	78	kg
Dimensions (W / H / D)	767 / 270 / 265		mm
Storage temperature range	-25 ~ 60		°C
Operating temperature range	-20 ~ 55		°C
Relative humidity range	5% ~ 95%		
Max. operating altitude	4000		m
Cooling	Natural convection		
System ingress protection rating	IP66		
Installation method	Floor standing / Wall-mounted		
Number of modules per controller	1 ~ 6		pcs
Compatible inverters	SigenStor EC series, Sigen Hybrid SP2/TP2 series ⁴		

Standard Compliance	
Standard ⁵	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62477

	SigenStor BC	
Operating voltage range (Single Phase)	300 ~ 600	V
Operating voltage range (Three Phase)	600 ~ 900	V
Weight	8	kg
Dimensions (W / H / D)	765 / 109 / 260 (without decorative cover)	mm
Compatible battery	SigenStor BAT series	
Compatible inverter	Sigen Hybrid SP2/TP2 series	
Communication	CAN	



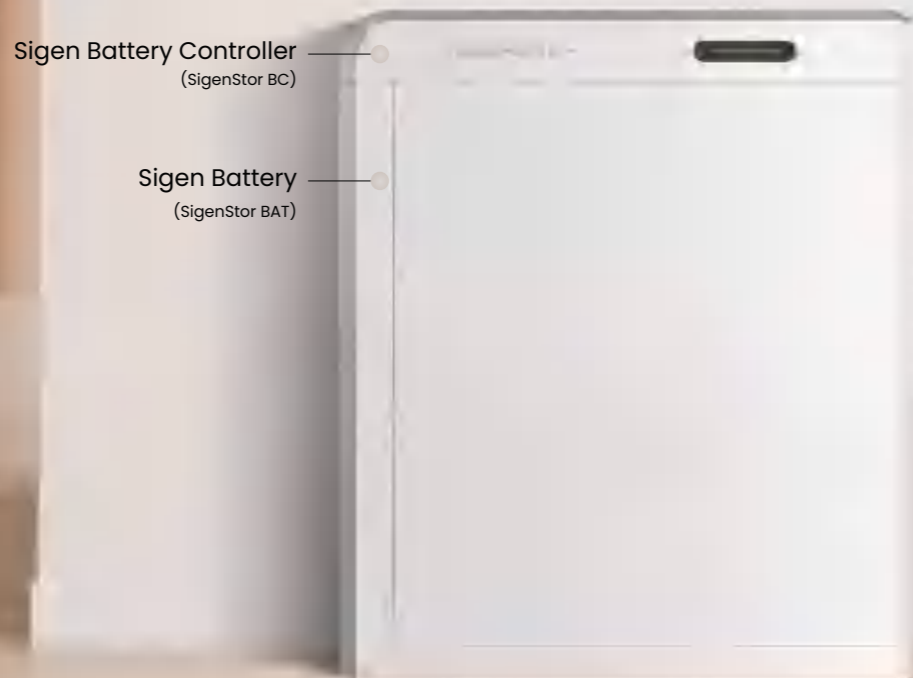
1. This is provided by the battery cell manufacturer. Based on cell test condition of 25±2°C, 0.5C charge and discharge rate and SOH=60%.
2. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.
3. Refers to the usable energy capacity. Battery must be recharged within 7 days after being fully discharged to keep battery healthy.
4. SigenStor BC must be used if Sigen Hybrid SP2/TP2 is to be connected to the Sigen Battery.
5. For all standards refer to the certificates category on the Sigenenergy website.

Sigen Hybrid Inverter

Harmoniously Complementing Your Home



Sigen Hybrid Inverter



Sigen Battery Controller
(SigenStor BC)

Sigen Battery
(SigenStor BAT)



99mm
ultra slim design




25 dB
Super silent



IP66



Wide operating temperature
From -30 °C to 60 °C



99.0%
Industry-leading max. efficiency

200%
Peak output power while off-grid
(Three phase, 10 seconds)

200%
DC/AC ratio for higher yield

Sigen Hybrid Inverter 2.0–6.0 kW Single Phase

Sigen Hybrid	2.0 SP2	3.0 SP2	3.6 SP2	4.0 SP2	4.6 SP2	5.0 SP2	6.0 SP2	Units
DC Input (from PV)								
Max. PV power	4000	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage ¹				600				V
Nominal DC input voltage				350				V
Start-up voltage				100				V
MPPT voltage range				50 ~ 550				V
Number of MPP. trackers				2				
Number of PV strings per MPPT				1				
Max. input current per MPPT				16				A
Max. short-circuit current per MPPT				22				A
Battery Connection								
Battery controller models	SigenStor BC							
Battery module models	SigenStor BAT series							
Number of modules per controller	1 ~ 6							pcs
Battery module voltage range	300 ~ 600							V
AC Output (on-grid)								
Nominal output power	2000	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	2200	3300	3680	4400	5000	5500	6600	VA
Nominal output current	9.1	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	10.0	15.0	16.0	20.0	22.7	25.0	30.0	A
Nominal output voltage	220 / 230 / 240							V
Nominal grid frequency	50 / 60							Hz
Power factor	0.8 leading ~ 0.8 lagging							
Total current harmonic distortion	THDi < 3%							
AC Output (backup)								
Peak output power (10 seconds)	3000	4500	5520	6000	6900	7500	9000	W
Nominal output voltage	220 / 230 / 240							V
Nominal output frequency	50 / 60							Hz
Power factor	0.8 leading ~ 0.8 lagging							
Total voltage harmonic distortion	THDv < 3%							
Disruption time of backup switch ²	0							ms
Efficiency								
Max. efficiency	98.6%							
European efficiency	97.5%	98.0%	98.1%	98.2%	98.3%	98.3%	98.3%	
Protection								
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection							
General Data								
Dimensions (W / H / D)	373 / 473 / 99							mm
Weight	11.5							kg
Storage temperature range	-40 ~ 70							°C
Operating temperature range	-30 ~ 60							°C
Relative humidity range	0% ~ 100%							
Max. operating altitude	4000							m
Cooling	Natural convection							
System ingress protection rating	IP66							
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)							
Installation method	Wall-mounted							
Night consumption	2.5							W
Noise	25							dB

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.

Sigen Hybrid Inverter 3.0–12.0 kW Three Phase

Sigen Hybrid	3.0 TP2	4.0 TP2	5.0 TP2	6.0 TP2	8.0 TP2	10.0 TP2	12.0 TP2	Units
DC Input (from PV)								
Max. PV power	6000	8000	10000	12000	16000	20000	24000	W
Max. DC input voltage ¹				1100				V
Nominal DC input voltage				600				V
Start-up voltage				180				V
MPPT voltage range				160 ~ 1000				V
Number of MPP. trackers	2							
Number of PV strings per MPPT	1					1/2		
Max. input current per MPPT	16					16/32	16/32	A
Max. short-circuit current per MPPT	22					22/44	22/44	A
Battery Connection								
Battery controller models	SigenStor BC							
Battery module models	SigenStor BAT series							
Number of modules per controller	1 ~ 6							pcs
Battery module voltage range	600 ~ 900							V
AC Output (on-grid)								
Nominal output power	3000	4000	5000	6000	8000	10000	12000	W
Max. output apparent power	3300	4400	5500	6600	8800	11000	13200	VA
Nominal output current	4.6	6.1	7.6	9.1	12.2	15.2	18.2	A
Max. output current	5.1	6.7	8.4	10.0	13.4	16.7	20.1	A
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)							
Nominal grid frequency	50 / 60							
Power factor	0.8 leading ~ 0.8 lagging							
Total current harmonic distortion	THDi < 3%							
AC Output (backup)								
Peak output power (10 seconds)	6000	8000	10000	12000	16000	20000	24000	W
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)							
Nominal output frequency	50 / 60							
Power factor	0.8 leading ~ 0.8 lagging							
Total voltage harmonic distortion	THDv < 3%							
Disruption time of backup switch ²	0							ms
Efficiency								
Max. efficiency	98.8%	98.9%	98.9%	99.0%	99.0%	99.0%	99.0%	
European efficiency	97.2%	97.8%	98.1%	98.5%	98.5%	98.5%	98.6%	
Protection								
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection							
General Data								
Dimensions (W / H / D)	477 / 568 / 99							mm
Weight	19.5							kg
Storage temperature range	-40 ~ 70							°C
Operating temperature range	-30 ~ 60							°C
Relative humidity range	0% ~ 100%							
Max. operating altitude	4000							m
Cooling	Natural convection							
System ingress protection rating	IP66							
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)							
Installation method	Wall-mounted							
Night consumption	3							W
Noise	28							dB

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.

Sigen Energy Gateway HomePro

- Seamless switchover, ensuring 0ms load-side disruption
- Built-in bypass circuit for enhanced system reliability
- Supports diesel generator connection & smart control
- Real-time current monitoring with 100ms zero export
- PV / ESS / grid / generator / V2X, multi-source seamless switching
- Whole-house backup & smart prioritized backup supported

Three phase



Single phase



Sigen Energy Gateway HomePro

Sigen Gateway	HomePro SP	HomePro SP-F	HomePro TP	Units
Grid Connection				
Grid connection type	Single Phase		Three phase	
Nominal AC voltage	220 / 230 / 240		380 / 400	
Nominal AC current	54.6	100	45.6	
Nominal AC power	12	22	30	
Nominal AC frequency	50 / 60		Hz	
Disruption time of backup switch ¹	0		ms	
AC Output to Backup Port				
Nominal AC voltage	220 / 230 / 240		380 / 400	
Nominal AC current	54.6	100	45.6	
Nominal AC power	12	22	30	
Nominal AC frequency	50 / 60		Hz	
Overvoltage category	III			
Inverter Connection				
Nominal AC voltage	220 / 230 / 240		380 / 400	
Nominal AC current	54.6 / 32 ²	55	45.6	
Nominal AC power	12 / 6 ²	12	30	
Smart Port Connection				
Generator output voltage	220 / 230 / 240		380 / 400	
Nominal current	54.6	55	45.6	
Nominal AC power	12	12	30	
Generator 2-wire start	Supported			
General Data				
Dimensions (W / H / D)	450 / 570 / 197 (without decorative cover)	450 / 695 / 177 (without decorative cover)	450 / 695 / 163	mm
Weight	25 (without decorative cover)	25 (without decorative cover)	25	kg
Storage temperature range	-40 ~ 70			°C
Operating temperature range	-30 ~ 55			°C
Relative humidity range	0% ~ 100%			
Max. operation altitude	4000			m
Cooling	Natural convection			
Ingress protection rating	IP55			
Communication	Fast Ethernet, RS485, dry contact			
Installation method	Wall mounted (Support rear-wiring)	Wall mounted	Wall mounted	

- ¹ This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the backup loads.
- ² For Sigen Energy single phase inverter products, 8.0-12.0 kW inverters should be connected to the INV1 port, 3.0-6.0 kW inverters should be connected to the INV2 port. The total power of the inverter cannot exceed 12 kW.
- ³ This product is only available in specific regions. Please contact Sigen Energy or local distributors for details.

SigenMicro Inverter

400 W / 500 W 1-in-1 | 800 W / 1000 W 2-in-1

- Innovative DAB Topology, highest efficiency in the industry*
- The world's first WLAN Mesh, more reliable and scalable
- The world's first EMS inside, free from network gateway
- AI layout recognition, 5 minutes fast commissioning
- Whitelisting security, enhanced data protection



SigenMicro Inverter

Preliminary

SigenMicro	400	500	800	1000	Units								
DC Input													
Commonly used module power	320 ~ 540+	400 ~ 670+	(320 ~ 540+) x 2	(400 ~ 670+) x 2	W								
Start-up voltage	20				V								
Min. / Max. PV input voltage	16 ~ 60				V								
MPPT voltage range	16 ~ 60				V								
Number of modules connected	1	1	2	2									
Max. input current	16 x 1	16 x 1	16 x 2	16 x 2	A								
Max. input short-circuit current	25 x 1	25 x 1	25 x 2	25 x 2	A								
AC Output													
Grid type	Single Phase												
Nominal output power	400	500	800	1000	W								
Nominal output current	1.82	1.74	1.67	2.27	2.17	2.08	3.64	3.48	3.33	4.55	4.35	4.17	A
Nominal output voltage	220	230	240	220	230	240	220	230	240	220	230	240	V
Nominal output voltage range ¹	184 ~ 275				V								
Nominal grid frequency	50 / 60				Hz								
Grid frequency range ¹	45 ~ 55 / 57 ~ 63				Hz								
Total current harmonic distortion	THDi < 3% (at nominal power)												
Power factor	0.8 leading ~ 0.8 lagging												
Max. units per branch ² (2.5 mm ² , 20A)	8	9	9	7	7	7	4	4	4	3	3	3	
Max. units per branch ² (4.0 mm ² , 30A)	13	13	14	10	11	11	6	6	7	5	5	5	
Efficiency													
Max. efficiency	97.5%												
European efficiency	96.7%												
Monitoring & Protection													
Grid monitoring	Supported												
Ground fault detection	Supported												
PV module-level monitoring	Supported												
Rapid shutdown	Supported												
Surge protection	Supported												
General Data													
Dimensions (W / H / D)	232 / 186 / 35 (without bracket)				mm								
Weight	2.8				kg								
Storage temperature range	-40 ~ 85				°C								
Operating temperature range	-40 ~ 65				°C								
Relative humidity range	0% ~ 100%												
Max. operation altitude	4000				m								
Cooling	Natural convection												
Topology	High Frequency Transformers, Galvanically Isolated												
Night power consumption	< 50				mW								
Ingress protection rating	IP67												
Display	LED												
Communication	WLAN												
AC connection type	Plug and play connector												
Installation method	Bracket mounted												

1. Nominal output voltage range and grid frequency range can vary depending on local requirements.
2. Limitations may differ by region. For the exact number of microinverters permitted per branch circuit, please refer to local regulations and standards. The current capacity of the cable is under normal temperature environment.
3. SigenMicro is only available in specific regions. Please contact Sigenenergy or local distributors for details.

* At 1 kW level

Sigen Power Sensor

- RS485 or WLAN for communication
- Plug-and-play antenna for easy installation
- -40°C to +65°C wide operation range
- Class 1 direct connection in power sensor
- Perfect for SigenMicro series



Sigen Power Sensor For SigenMicro only

Sigen Sensor ¹	SP-CT100-WI	TP-CT100-WI	Units
Power Supply			
Grid connection type	1P2W	3P3W/3P4W	
AC input voltage range	100 ~ 276	90 ~ 277 (L-N) 156 ~ 480 (L-L)	Vac
Nominal AC frequency		50/60	Hz
Max. operating current		100	A
Measurement Accuracy			
Voltage accuracy		0.5%	
Current accuracy		0.5% (4-120A), 1% (1-4A), 3% (0.06-1A)	
Power accuracy		1%	
Frequency accuracy		0.2%	
Communication			
Interface		RS485 / WLAN	
Baud rate		9600	bps
Protocol		Modbus RTU / Modbus TCP	
General Data			
Dimensions (W / H / D)		19 / 94.5 / 68.5	mm
Weight		0.07	kg
Storage temperature range		-40 ~ 85	°C
Operating temperature range		-40 ~ 70	°C
Relative humidity range		0% ~ 95%	
Ingress protection rating		IP20	
Installation method		DIN Rail 35 mm	
Standard Compliance			
Standard	IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6		

1. For more models refer to the Sigenenergy website.

Sigen EVAC Charger

- 100% Green power charging with Sigenenergy home energy solution
- IP65 & IK10 protection rating, worry-free outdoor usage with easy O&M
- Dynamic load management to prevent overload, user-friendly charging*
- Easy installation with less steps and top/bottom/rear wiring option
- Enable dynamic tariff & Sigen AI mode for smarter scheduling

Type2 socket with shutter

Type2



Sigen EV AC Charger 7 / 11 / 22 kW

Sigen EVAC	7	11	22	Units
AC Input & Output				
Nominal charging power	7	11	22	kW
Nominal output voltage	220 ~ 240 1W+N+PE	220 ~ 240 / 380 ~ 415 3W+N+PE	220 ~ 240 / 380 ~ 415 3W+N+PE	V
Output current range	6 ~ 32	6 ~ 16	6 ~ 32	A
Nominal AC frequency		50 / 60		Hz
Vehicle connection	Type 2 connector / Type 2 socket with shutter			
AC input cable width range	2.5 ~ 6.0			mm ²
Protection				
Integrated RCD-PD fault detection ¹	AC 30 mA + DC 6 mA			
Flame retardant rating	UL94-5VB			
Safety protection	OVP, UVP, OCP, OTP			
PEN protection	Supported			
Randomized charging delay	Supported			
Ground fault protection	Supported			
Surge protection	Supported			
Grounding system	TT, TN, IT			
User Interface & Communication				
Protocol	RS485, Modbus RTU			
Communication	4G / WLAN / Fast Ethernet			
Authentication	RFID card / App / Auto-charge (no authentication)			
Display	LED indicator / App			
Smart Charging ²	Smart Schedule	Schedule your charging time, charging frequency and charging mode which switching between PV surplus charging and Fast charging.		
	PV Surplus Charging	Enable EV charging energy from PV surplus power with Battery boost power priority setting as well as the Battery cut-off SOC setting		
	Fast Charging	The system draws power from the grid and PV simultaneously for the fastest charging speed and also supports additional Battery Boost Charging.		
Metering	External meter with RS485 / Integrated metering IC			
Dynamic load management ³	Supported			
Phase switching	Supported			
Third-parties inverter PV surplus charging ³	Supported			
OCPP protocol	OCPP 1.6J ED 2			
General Data				
Dimensions (W / H / D)	234 / 384 / 139			mm
Weight (case B / case C)	4.5 / 6.4			kg
Storage temperature range	-40 ~ 70			°C
Operating temperature range	-30 ~ 55			°C
Relative humidity range	5% ~ 95%			
Max. operating altitude	4000			m
Cooling	Natural convection			
Ingress protection rating	IP65			
Installation method	Wall-mounted			
Application environment	Outdoor / Indoor			
Standby self-consumption	< 3.6			W
Standard charging cable length	5			m
Cable entries	Bottom, Top and Rear cable entries			
Standard Compliance				
Standard ⁴	EN IEC 61851-1, IEC 62955, EN IEC 61851-21-2, ETSI EN 300 330 V2.1.1, ETSI EN 301 511 V12.5.1, EN IEC 62311, EN50665, ETSI EN 300 328 V2.2.2, EN 18031-1			

1. Residual direct current protective device (RDC-PD) with integrated AC pulsating DC and 6mA DC detection, evaluation and mechanical switching in the Sigen EV AC Charger is tested according to IEC 62955.
2. This function needs to be used with SigenStor.
3. This function needs to be used with Sigen Power Sensor.
4. For all standards refer to the certificates category on the Sigenenergy website.

*This function needs to be used with Sigen Power Sensor.

Sigen Power Sensor

- WiFi halow remote communication functionality (with Sigen Sensor SubIG Kit)
- Efficient and stable data transmission up to 200m (with Sigen Sensor SubIG Kit)
- 1% high-accuracy power detection for precise control
- Compact IP size, plug-in design for easy installation
- Integrate smoothly with Sigenenergy devices, no need for setup

Sigen Sensor SubIG Kit



Sigen Power Sensor



Sigen Power Sensor

Sigen Sensor ¹	SP-DH	SP-CT100 ²	TP-DH	TP-CT100 ²	Units
Power Supply					
Grid connection type	IP2W		3P3W/3P4W		
AC input voltage range	176 ~276	100 ~ 276	173 ~ 480	176 ~ 276 (L-N) 277 ~ 304 (L-L)	Vac
Nominal AC frequency	50 / 60				Hz
Max. operating current	100	-	100	-	A
Measurement Accuracy					
Voltage accuracy	0.5%				
Current accuracy	0.5%	0.5% (4 ~ 100A)	0.5%	0.5% (4 ~ 100A)	
Power accuracy	1%				
Frequency accuracy	0.2%	0.5%	0.2%	0.5%	
Communication					
Interface	RS485				
Baud rate	9,600				bps
Protocol	Modbus RTU				
General Data					
Dimensions (W / H / D)	36 / 100 / 63	19 / 94.5 / 68.5 or 18 / 100 / 65.5	72 / 100 / 66	19 / 94.5 / 68.5 or 18 / 100 / 65.5	mm
Weight	0.20	0.07	0.32	0.08	kg
Storage temperature range	-40 ~ 70				°C
Operating temperature range	-25 ~ 65				°C
Relative humidity range	0% ~ 90%				
Ingress protection rating	IP20				
Installation method	DIN Rail 35 mm				
CT Accessory					
Number of CT	-	1	-	3	pcs
Cable length of CT	-	1	-	1	m
Inner diameter of CT	-	24 / 16	-	24 / 16	mm
Weight of CT	-	0.09 / 0.13	-	0.2 / 0.43	kg
Max. operating current of CT	-	100	-	100	A
Standard Compliance					
Standard	EN 61010-1:2010, EN 61010-2-030:2010				

	Sigen Sensor SubIG Kit	Units
Working mode	AP(master device), STA(slave device)	
Communication method	RS485 / wireless communication	
Protocol	IEEE 802.11ah	
Operating voltage	85 ~ 277	Vac
Power consumption	2	W
Operating temperature range	-25 ~ 55	°C
Dimensions (W / H / D)	18 / 118 / 66	mm
Wireless frequency	868	MHz
Wireless transmission distance ³	≤ 200	m
Installation method	DIN Rail 35 mm	

1. For more models refer to the Sigenenergy website.

2. Sensors from two different manufacturers may be shipped interchangeably as they are functionally identical. Please refer to the actual products received for confirmation.

3. Lab tests have shown a maximum horizontal range of up to 200 metres in open spaces, with shorter communication distances when walls are in the way.

Sigen Communication Module

- IP66 protection rating, more reliable
- Plug & play, easy to use
- Support 2G / 3G / 4G communication



Sigen Communication Module

	Sigen CommMod ¹	Units
Connection interface	USB	
Installation type	Plug-and-play	
Display	LED indicators	
Dimensions (W / H / D)	52 / 112 / 33	mm
Weight	90	g
Ingress protection rating	IP66	
Power consumption (typical)	< 4	W
Supported SIM card	Micro-SIM (12mm x 15mm)	
Supported standards	LTE-FDD B1/3/7/8/20/28A LTE-TDD B38/40/41 WCDMA B1/8 GSM/EDGE B3/8	
Storage temperature range	-40 ~ 70	°C
Operating temperature range	-30 ~ 60	°C
Relative humidity range	0% ~ 100%	
Max. operating altitude	4000	m
Controller / Inverter compatibility	Sigen Energy Controller series Sigen Hybrid Inverter series	

1. To ensure stable data transmission, the mobile signal for 2G signal ≥ 4 bars, 3G/4G signal ≥ 3 bars.

2. This product is only available in specific regions. Please contact Sigenergy or local distributors for details.

mySigen App

Intelligent energy management within touches
Smarter energy life empowered by mySigen App



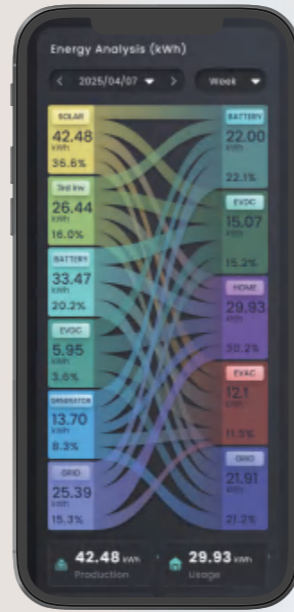
Real-time Monitoring

Monitor real-time energy flow on home screen



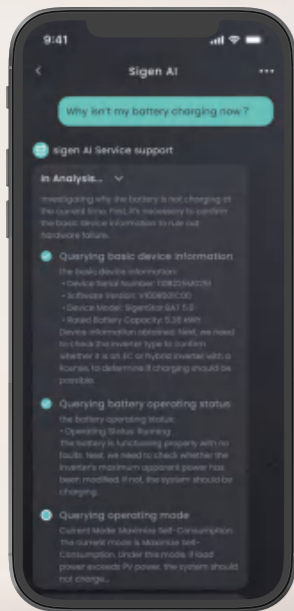
Sigen AI Mode

Smart scheduling that adapts to weather, tariffs, and your energy habits for maximum savings



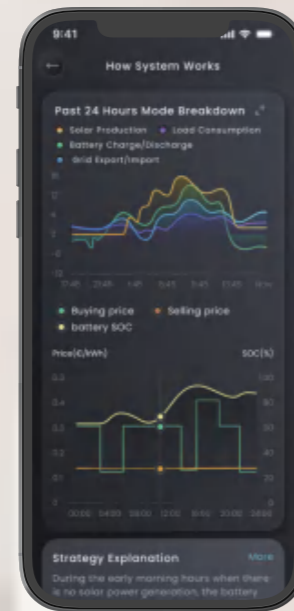
Energy Sankey Diagram

Know where every watt comes from and where it goes



Sigen AI Assistant

Intelligent diagnostics powered by AI deep thinking



Strategy Insight

AI-empowered system operation strategy analysis



Battery Energy Source

Real-time battery power source composition refreshing every 10 seconds



Sigen Cloud

A platform for device lifecycle management and business decision-making.



- Instantly grasp business trends with data visualization and interactive data modules
- Batch remote system parameter configuration and automatic command retry
- Enhanced system operation status monitoring with multi-layer real-time cell-level information
- Real-time system data updates every 10 seconds, offering clear energy insights at a glance
- Sigen AI smart energy assistant, always online to resolve your inquiries instantly



Business Operation

Interactive BI Dashboard
Installer Points Dashboard
Points Redemption Mall



Efficient Maintenance

Alarm Management
System Ownership Management
Group Systems to Manage



System Monitoring

System Status-based Management
10-second Interval System Energy Flow
System Energy Graphs
System Report Search and Download
Sigen Device and Third-party Device Management
Device Management in Category



Device Monitoring

10-second Interval Device Real-Time Information
Parameter Check and Remote Configuration
Device Historical Curves



After-sales Service

Device Warranty Period Lookup



Organization Management

In-organization Member Management
Company Information
Installer Company Hierarchical Management



Value-Added Services

AI Smart Assistant
Third-party VPP Integration
Open Northbound Integration

Runs on Solar by Sigenergy Solutions for a Sustainable Tomorrow

By adopting Sigenergy products and embracing solar energy, our factory has realized green manufacturing. With a 3,000 sqm PV plant on the rooftop, We have significantly reduced our reliance on fossil fuels and effectively cut carbon footprint during the manufacturing process. Our solar-powered production also translates into better efficiency and higher cost savings for our business. We are proud to be making a positive impact on the environment, and are committed to continuing to lead our sustainability practices to help build a better world for future generations.

Additionally, Sigenergy's core production base, the Nantong Smart Manufacturing Hub, is under construction. Once completed, the facility is expected to produce 300,000+ inverters and battery packs yearly, providing strong manufacturing support to meet growing global demand.

Plant Size

🏠 3,000 m² ⚡ 362 kW_p
🌞 240 kW_{ac} 📡 432 kWh

Estimated Annual Generation

📊 398,200 kWh

Community Contribution per Year

🌳 309t CO₂ emission reduced
🌳 269 equivalent of trees planted



Powering Homes Worldwide



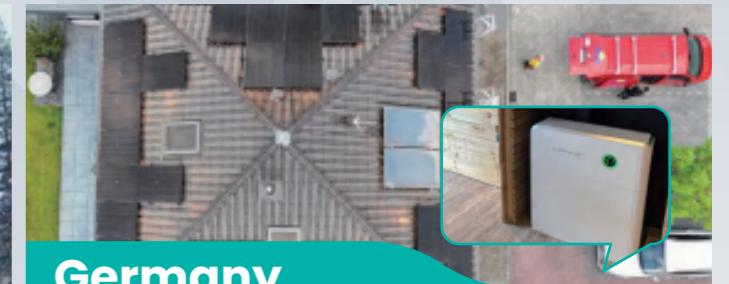
Spain

16 kW AC output 24 kWh ESS capacity



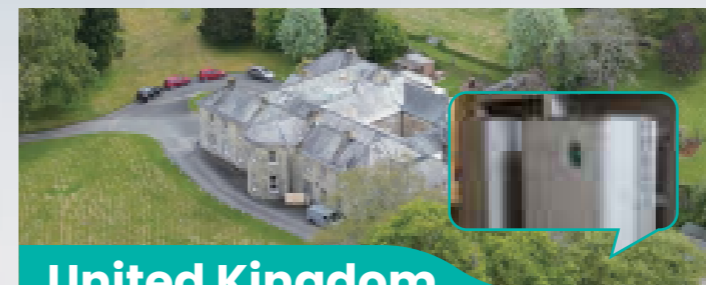
Sweden

6 kW AC output 8 kWh ESS capacity



Germany

8 kW AC output 16 kWh ESS capacity



United Kingdom

40 kW AC output 32 kWh ESS capacity



United States

11.4 kW AC output 13 kWh ESS capacity



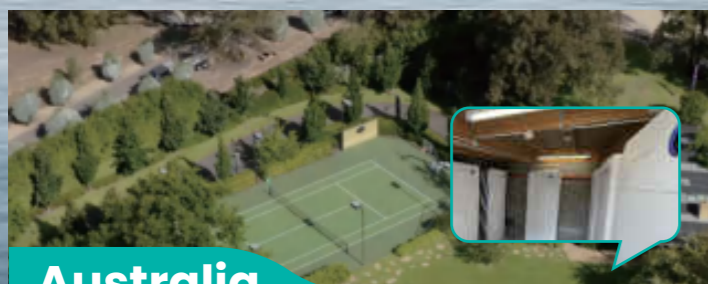
France

12 kW AC output 24 kWh ESS capacity



South Africa

25 kW AC output 24 kWh ESS capacity



Australia

70 kW AC output 336 kWh ESS capacity



Netherlands

75 kW AC output 120 kWh ESS capacity



Namibia

300 kW AC output 960 kWh ESS capacity