



Home Energy Solution

Let the world enjoy green energy



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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.

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Version: 20250908

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CONTENTS

01 Brand Story

About SIGENERGY

02 Product

Residential Solution

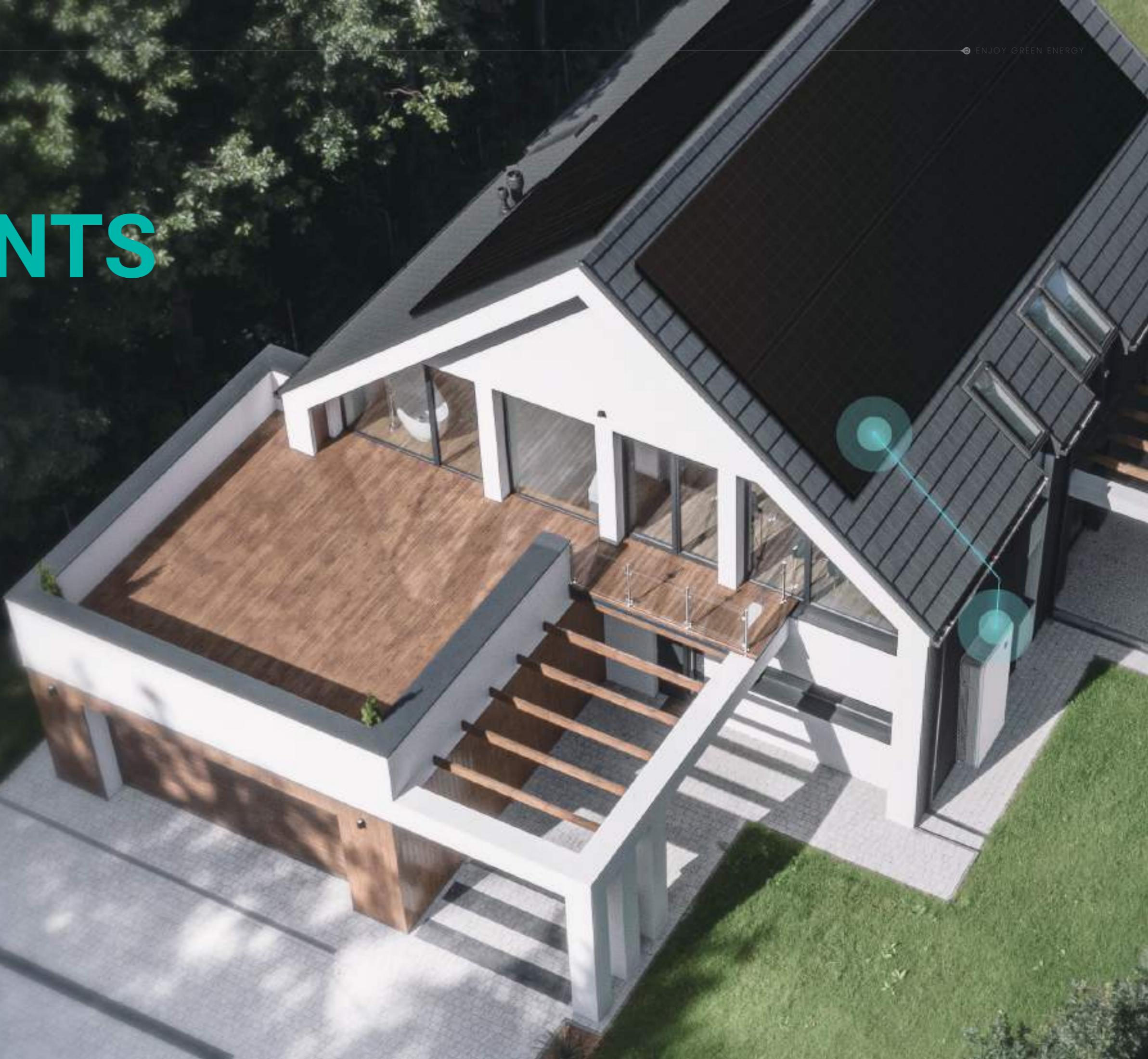
Why Sigenergy?

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



Sigenergy 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
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

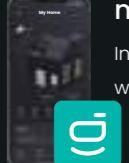
EV AC Charger



Sigen EVAC Charger
Power drives with smart energy



App & Cloud

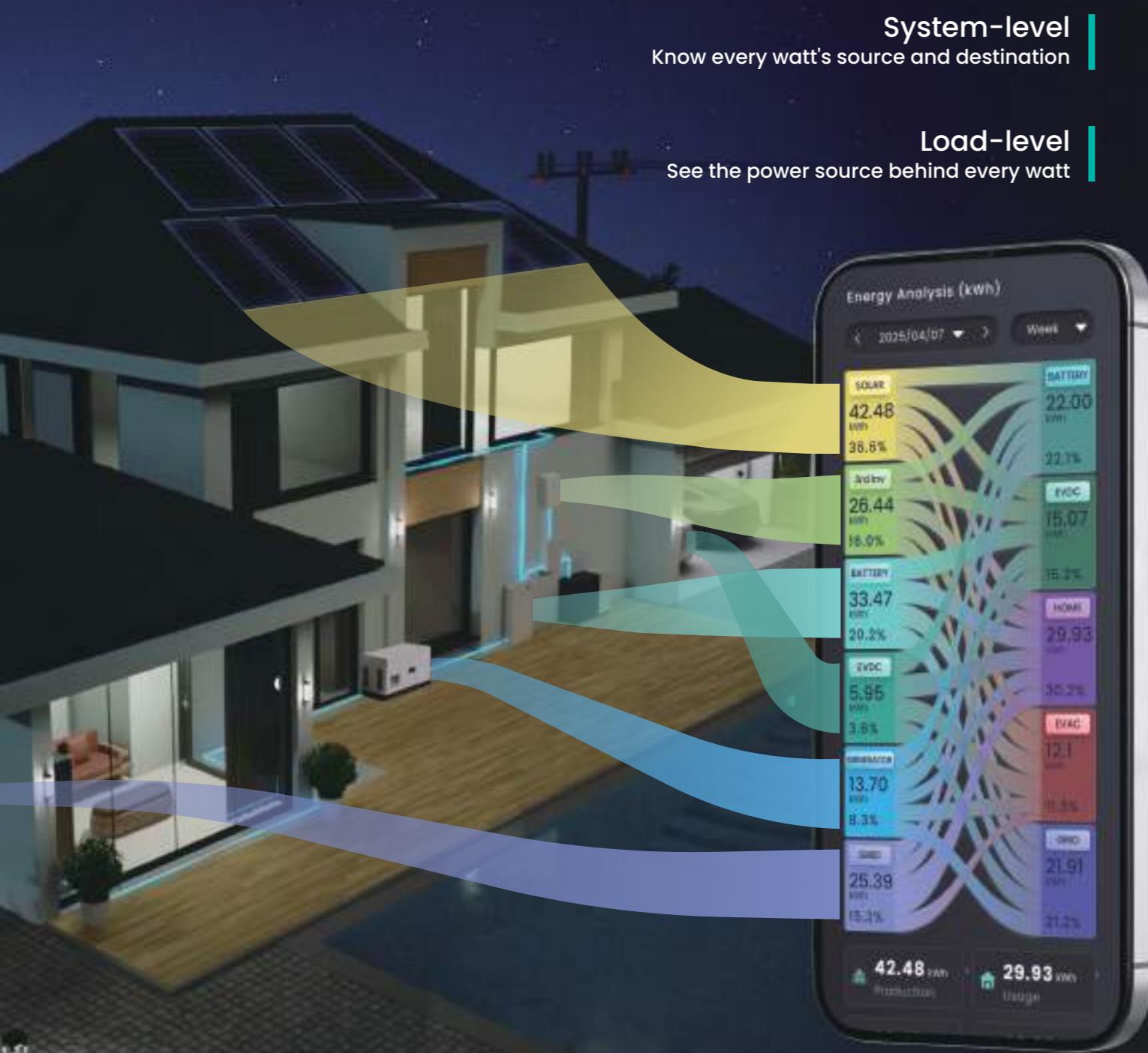


mySigen App
Intelligent energy mgmt.
within touches

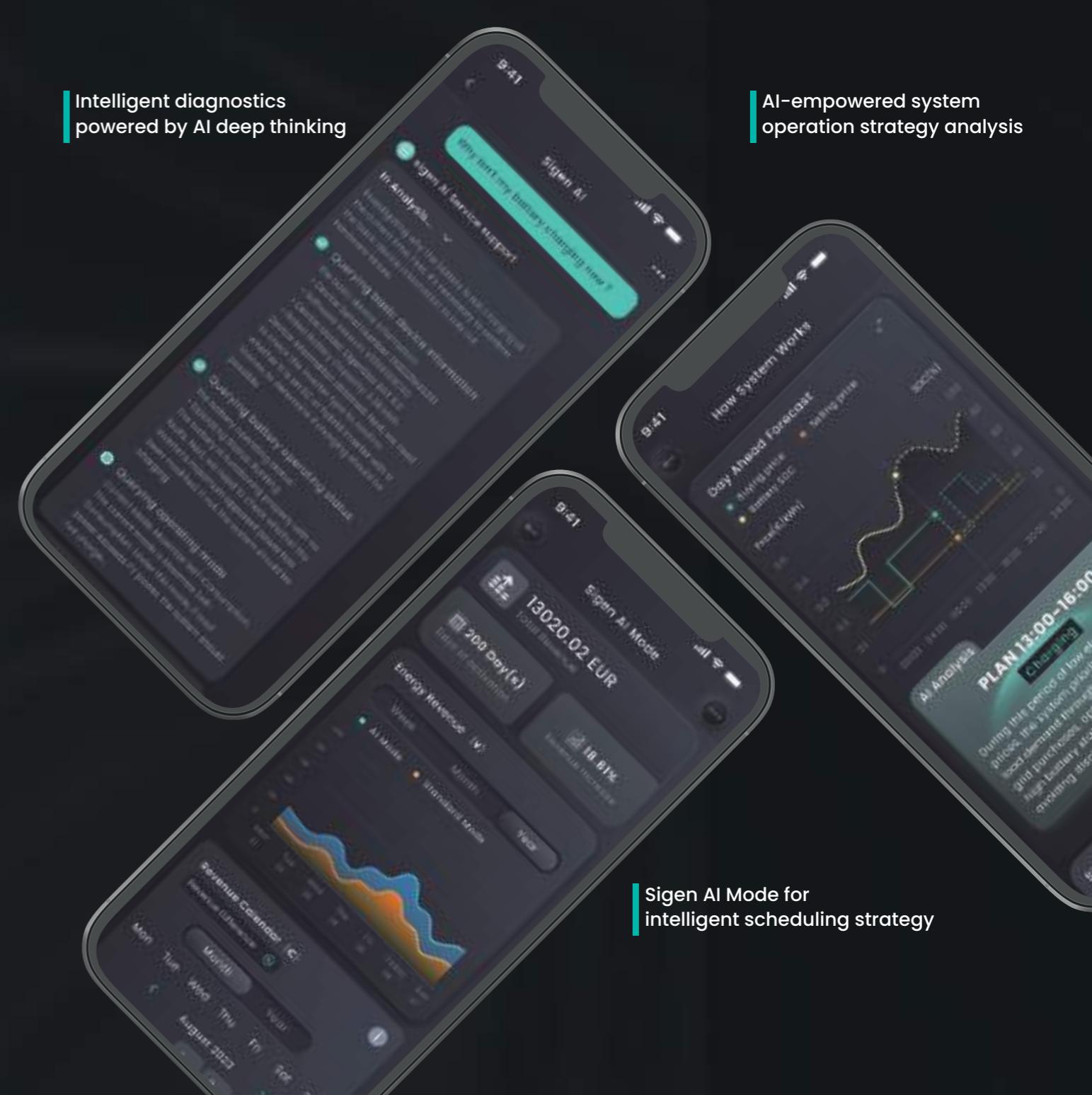
mySigen App

Why Sigenergy?**01 Visualise 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.

**Why Sigenergy?****02 Let AI Power Your Energy Freedom**

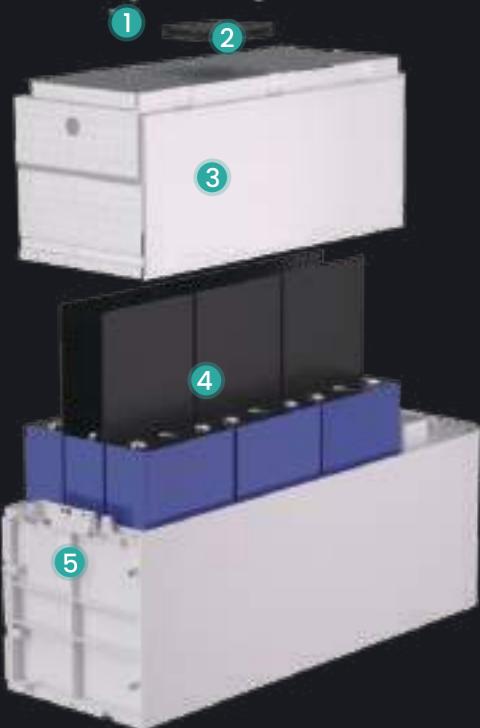
mySigen App integrates AI deeply with Sigen AI Mode, AI-driven insights, and a GPT-4o – powered smart assistant, using advanced AI to boost system efficiency, convenience, and performance.



Why Sigenergy?**03 Superior Battery Safety**

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

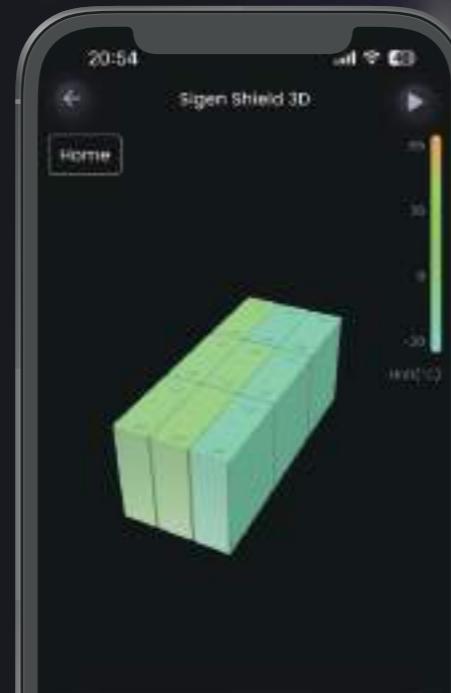
5 Layers Battery Safety Protection



- 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 battery monitoring

mySigen APP

**Why Sigenergy?****04 Goodbye to Power Outage**

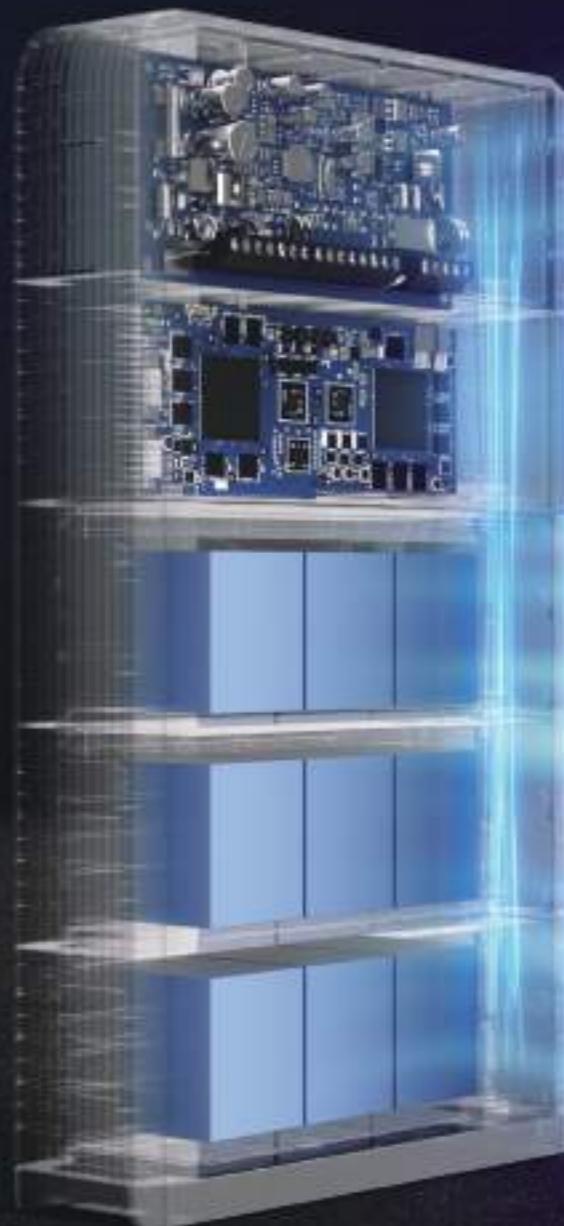
Sigenergy provides the ultimate backup solution. Our patented power control algorithm enables seamless energy switching and robust off-grid performance.

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/aged batteries and active balancing.

**DC BUS**

Patented architecture

Optimiser

for each battery

Mixed use

Of new/aged batteries

Why Sigenergy?**06 Pioneering Future-proof V2X**

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



*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

5.0-12.0 kW

Single Phase

5.0-30.0 kW

Three Phase

- 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 5.0-12.0 kW Single Phase Australia

SigenStor EC	5.0 SP	6.0 SP	8.0 SP	10.0 SP	12.0 SP	Units
DC Input (from PV)						
Max. PV power	10000	12000	16000	20000	24000	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	2	3	4	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	4999	6000	8000	9999	12000	W
Max. output apparent power	4999	6600	8800	9999	12000	VA
Nominal output current	21.7	27.3	36.4	43.4	54.6	A
Max. output current	21.7	30.0	40.0	43.4	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%	97.6%	97.6%	97.6%	
European efficiency	97.4%	97.4%	97.0%	97.0%	97.0%	
AC Output (backup)						
Nominal output power	5000	6000	8000	10000	12000	W
Max. output apparent power	5500	6600	8800	11000	13200	VA
Peak output power (10 seconds)	7500	9000	12000	15000	18000	W
Nominal output current	22.7	27.3	36.4	45.5	54.6	A
Max. output current	25.0	30.0	40.0	50.0	60.0	A
Peak output current (10 seconds)	34.1	40.9	54.6	68.2	81.8	A
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 ²	0				ms	
Battery Connection						
Battery module models	SigenStor BAT 5.0 / 8.0					
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 / 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 ⁴	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2, AS 4777					

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.
3. This is an optional feature only supported in certain models, please contact Sigenergy for more information.
4. For all standards refer to the certificates category on the Sigenergy website.

Sigen Energy Controller 5.0-30.0 kW Three Phase Australia

SigenStor EC	5.0 TP	10.0 TP	15.0 TP	20.0 TP	25.0 TP	30.0 TP	Units
DC Input (from PV)							
Max. PV power	8000	16000	24000	32000	40000	48000	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	3	3	4	4	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	9999	15000	20000	25000	29999	W
Max. output apparent power	5000	9999	15000	22000	27500	29999	VA
Nominal output current	7.2	14.4	21.7	30.4	38.0	43.4	A
Max. output current	7.2	14.4	21.7	33.4	41.8	43.4	A
Nominal output voltage			380 / 400				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%	98.3%	98.3%	98.3%	98.3%	98.4%	
European efficiency	96.1%	97.5%	97.9%	97.9%	98.0%	98.0%	
AC Output (backup)							
Nominal output power	5000	10000	15000	20000	25000	30000	W
Max. output apparent power	5500	11000	16500	22000	27500	33000	VA
Peak output power (10 seconds)	7500	15000	22500	30000	30000	36000	W
Nominal output current	7.6	15.2	22.8	30.4	38.0	45.6	A
Max. output current	8.4	16.7	25.1	33.4	41.8	50.1	A
Peak output current (10 seconds)	11.4	22.8	34.2	45.6	45.6	54.7	A
Nominal output voltage			380 / 400				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 ²	0				ms		
Battery Connection							
Battery module models	SigenStor BAT 5.0 / 8.0						
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 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	36	36	36	38	38	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, AS 4777						
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 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	37 (5m cable) / 39 (7.5m cable) / 41 (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	5 / 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 Sigenergy website.

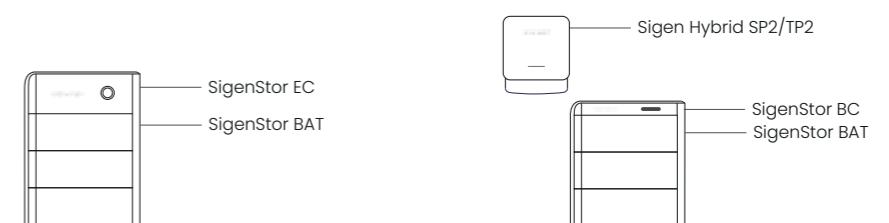
Sigen Battery

- Premium 280Ah cells with 10,000 cycles, long-lasting & reliable
- 5-layer battery safety protection redefines safety standards
- Pack-level battery optimisation, mix and match, upgrade with ease
- Higher energy density, efficient storage & compact design
- 100% depth of discharge, maximum energy utilisation



Sigen Battery

SigenStor BAT	5.0	8.0	Units
Performance Specification			
Battery type	LiFePO4		
Cell capacity	280		Ah
Cycle life ¹	10000		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity ²	5.2	7.8	kWh
Depth of discharge ³	100%		
Max. charge / discharge power	2500	4000	W
Max. charge / discharge current	7.5	12.0	A
Peak charge / discharge power (10 seconds)	3750	6000	W
General Data			
Weight	55	70	kg
Dimensions (W / H / D)	767 / 270 / 260		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	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040		
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 system	SigenStor BAT series		
Compatible inverter	Sigen Hybrid SP2/TP2 series		
Communication	CAN		



- 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%.
- Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.
- Refers to the usable energy capacity.
- SigenStor BC must be used if Sigen Hybrid SP2/TP2 is to be connected to the Sigen Battery.
- For all standards refer to the certificates category on the Sigenergy website.

Sigen Hybrid Inverter

Harmoniously Complementing Your Home



Sigen Hybrid Inverter



99mm
ultra slim design



25 dB
Super silent



IP66



Wide operating temperature

From -30 °C to 60 °C



Sigen Battery Controller
(SigenStor BC)

Sigen Battery
(SigenStor BAT)



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 3.0-6.0 kW Single Phase Australia

Sigen Hybrid	3.0 SP2	5.0 SP2	6.0 SP2	Units
DC Input (from PV)				
Max. PV power	6000	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	3000	4999	6000	W
Max. output apparent power	3300	4999	6600	VA
Nominal output current	13.6	21.7	27.3	A
Max. output current	15.0	21.7	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)				
Nominal output power	3000	5000	6000	W
Max. output apparent power	3300	5500	6600	VA
Peak output power (10 seconds)	4500	7500	9000	W
Nominal output current	13.6	22.7	27.3	A
Max. output current	15.0	25.0	30.0	A
Peak output current (10 seconds)	20.5	34.1	40.9	A
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%	98.3%	98.3%	
Protection				
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overtoltage/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 Battery and Sigen Hybrid Inverter. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Hybrid Inverter is higher than the total power of the home loads.

Sigen Hybrid Inverter 5.0-12.0 kW Three Phase Australia

Sigen Hybrid	5.0 TP2	6.0 TP2	8.0 TP2	10.0 TP2	12.0 TP2	Units
DC Input (from PV)						
Max. PV power	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	5000	6000	8000	9999	12000	W
Max. output apparent power	5000	6600	8800	9999	13200	VA
Nominal output current	7.2	9.1	12.2	14.4	18.2	A
Max. output current	7.2	10.0	13.4	14.4	20.1	A
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)					V
Nominal grid frequency	50 / 60		Hz			
Power factor	0.8 leading ~ 0.8 lagging					
Total current harmonic distortion	THDi < 3%					
AC Output (backup)						
Nominal output power	5000	6000	8000	10000	12000	W
Max. output apparent power	5500	6600	8800	11000	13200	VA
Peak output power (10 seconds)	10000	12000	16000	20000	24000	W
Nominal output current	7.6	9.1	12.2	15.2	18.2	A
Max. output current	8.4	10.0	13.4	16.7	20.1	A
Peak output current (10 seconds)	15.2	18.2	24.3	30.4	36.5	A
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)					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	98.9%	99.0%	99.0%	99.0%	99.0%	
European efficiency	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/overtoltage/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 Battery and Sigen Hybrid Inverter. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Hybrid Inverter is higher than the total power of the home loads.

Sigen Energy Gateway

- 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



Sigen Energy Gateway for Australia

Sigen Gateway	Home SP AU	Home TP AU	Units
Grid Connection			
Grid connection type	Single phase	Three phase	
Nominal AC input / output voltage	220 / 230 / 240	380 / 400	V
Nominal AC input / output current	54.6	45.6	A
Nominal current of circuit breaker ¹	63	63	A
Nominal AC input / output power	12	30	kW
Nominal AC frequency	50 / 60	50 / 60	Hz
Disruption time of backup switch ²	0	0	ms
AC Output to Backup Port			
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Nominal AC output current	54.6	45.6	A
Nominal current of circuit breaker ¹	63	63	A
Nominal AC output power	12	30	kW
Nominal AC frequency	50 / 60	50 / 60	Hz
Overvoltage category	III		
AC Output to Non-Backup Port			
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Nominal AC output current	54.6	45.6	A
Nominal AC output power	12	30	kW
Nominal AC frequency	50 / 60	50 / 60	Hz
Inverter Connection			
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Nominal AC input current	54.6 (INV1), 32 (INV2) ³	45.6 (INV1), 32 (INV2) ⁴	A
Nominal current of circuit breaker ¹	63 (INV1), 40 (INV2)	63 (INV1), 40 (INV2)	A
Smart Port Connection			
Generator output voltage	220 / 230 / 240	380 / 400	V
Nominal input / output current	54.6	45.6	A
Nominal current of circuit breaker ¹	63	63	A
Nominal AC input / output power	12	30	kW
Generator 2-wire start	Supported		
General Data			
Dimensions (W / H / D)	450 / 570 / 197 (without decorative cover)		mm
Weight	22.5 (without decorative cover)	25.5 (without decorative cover)	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	IP54		
Communication	Fast Ethernet, RS485, dry contact		
Installation method	Wall mounted, rear wiring supported		

1. The circuit breaker can be adjusted according to actual requirements and cable specifications.
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 backup loads.
3. For Sigenergy 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 sum of the parallel power of the Sigenergy inverters cannot exceed 12 kW.
4. For Sigenergy three phase inverter products, 15.0-30.0 kW inverters should be connected to the INV1 port, 5.0-15.0 kW inverters should be connected to the INV2 port. The sum of the parallel power of the Sigenergy inverters cannot exceed 30 kW.

SigenMicro Inverter

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	A
Nominal output voltage	220	230	240	220	V
Nominal output voltage range ¹	184 ~ 275				
Nominal grid frequency	50 / 60				
Grid frequency range ¹	45 ~ 55 / 57 ~ 63				
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	
Max. units per branch ² (4.0 mm ² , 30A)	13	13	14	10	
	7	7	7	4	
	11	11	6	6	
	4	4	4	3	
	3	3	3	3	
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)				
Weight	2.8				
Storage temperature range	-40 ~ 85				
Operating temperature range	-40 ~ 65				
Relative humidity range	0% ~ 100%				
Max. operation altitude	4000				
Cooling	Natural convection				
Topology	High Frequency Transformers, Galvanically Isolated				
Night power consumption	< 50				
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 Sigenergy 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



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 Sigenergy website.

Sigen EVAC Charger

- 100% Green power charging with Sigenergy 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



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

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	IP/N/PE, 220 ~ 240	3P/N/PE, 220 ~ 240 / 380 ~ 415	3P/N/PE, 220 ~ 240 / 380 ~ 415	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 DC fault detection ¹		6		mA
Integrated AC fault detection ¹		30		mA
Flame retardant rating	UL94-5VB			
Over / Under voltage protection	Supported			
Overload protection	Supported			
Over temperature protection	Supported			
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 Schedule	The system supports setting the charging start and stop times, charging frequency, and charging mode. Each scheduled time slot allows the charging mode to be set separately between PV Surplus charging and Fast Charging.			
Smart Charging	PV Surplus Charging 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.			
Metering	External meter with RS485 / Integrated metering IC			
Dynamic load management ³	Supported			
Phase switching	Supported			
OCPP protocol	OCPP 1.6J ED 2			
General Data				
Dimensions (W / H / D)	234 / 384 / 126			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 62995, 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			

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

Sigen Power Sensor

- WiFi halow remote communication functionality (with Sigen Sensor Sub1G Kit)
- Efficient and stable data transmission up to 200m (with Sigen Sensor Sub1G Kit)
- 1% high-accuracy power detection for precise control
- Compact IP size, plug-in design for easy installation
- Integrate smoothly with Sigenergy devices, no need for setup



Sigen Power Sensor

sigen Sensor ¹	SP-DH	SP-CT100 ²	TP-DH	TP-CT100 ²	Units
Power Supply					
Grid connection type	1P2W		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%	0.5%	0.5%	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 Sub1G Kit	Units
Working mode	AP(master device), STA(slave device)	
Communication method	RS485 / wireless communication	
Network protocol	IEEE 802.11ah	
Operating voltage	85 ~ 277	Vac
Maximum power	2	W
Operating temperature	-25 ~ 55	°C
Dimensions (W/H/D)	18 / 118 / 66	mm
Wireless frequency	915	MHz
Wireless transmission distance ²	≤ 200	m
Way to install	DIN35mm Rail mounting	

1. For more models refer to the Sigenergy 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	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 * 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% ~ 95%	
Max. operating altitude	4000	m
Controller / Inverter compatibility	Sigen Energy Controller series Sigen Hybrid Inverter series	

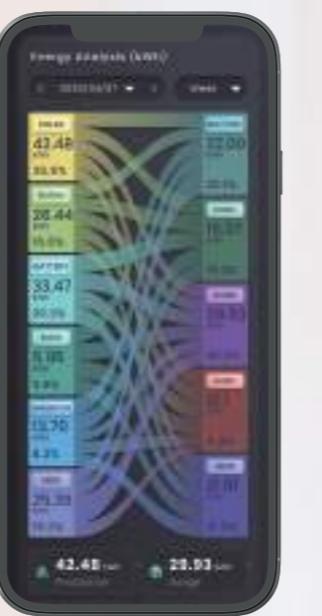
1. To ensure stable data transmission, the mobile signal for 2G signal ≥ 4 bars, 3G/4G signal ≥ 3 bars.

**Real-time Monitoring**

Monitor real-time energy flow
on home screen

**Sigen AI Mode**

Max savings via smart scheduling that
adapts to weather, tariffs and your
energy usage pattern

**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 visibility on battery
power source composition

mySigen App

Intelligent energy management within touches

Smarter energy life empowered by mySigen App



Sigen Cloud

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



- Instantly grasp business trends with data visualisation and interaction
- Batch remote system parameter configuration and auto command retry
- Enhanced system monitoring with real-time multi-layer information
- System data updates every 10 seconds, offering quick energy insights
- Sigen AI smart energy assistant, real-time help, always online



Business Operation

Interactive BI Dashboard



Efficient Maintenance

Installer Points Dashboard

Points Redemption Mall



System Monitoring

Alert Management

Ownership Management

Fleet Management

Status Management

Real-time Energy Flow

System Energy Graphs

Reporting and Download

Device Management



Device Monitoring

Real-time Device information

Parameter Check and Remote Configuration

Device Historical Curves



After-sales Service

Warranty Lookup

Member Management



Organisation Management

Company Information

Hierarchy 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



Australia

70 kW AC output 336 kWh ESS capacity



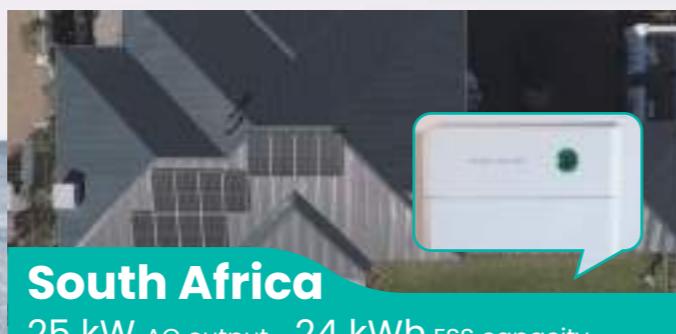
France

12 kW AC output 24 kWh ESS capacity



Spain

16 kW AC output 24 kWh ESS capacity



South Africa

25 kW AC output 24 kWh ESS capacity



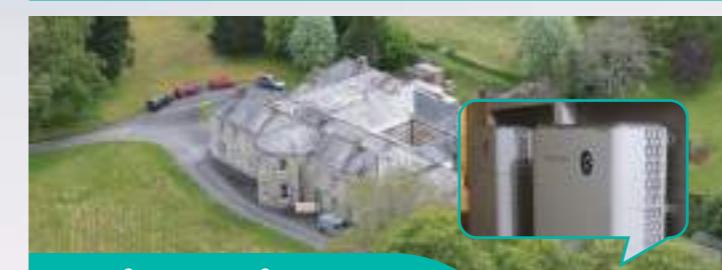
Netherlands

75 kW AC output 120 kWh ESS capacity



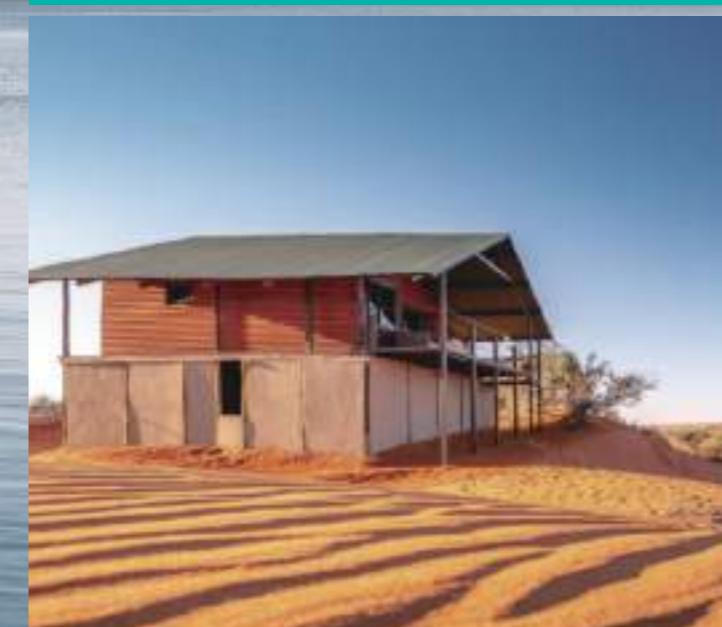
Sweden

6 kW AC output 8 kWh ESS capacity



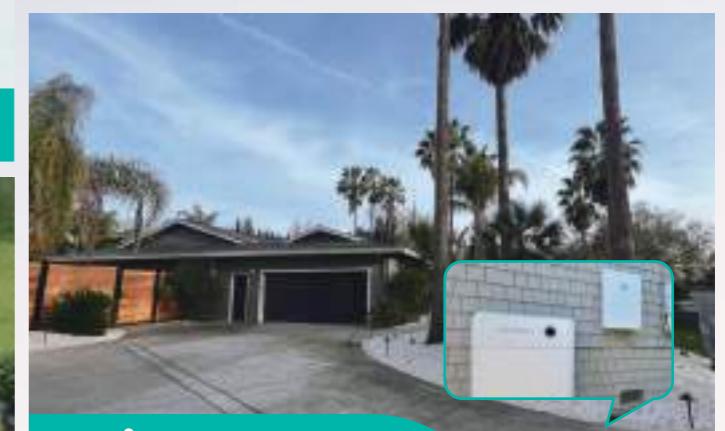
United Kingdom

40 kW AC output 32 kWh ESS capacity



Germany

8 kW AC output 16 kWh ESS capacity



United States

11.4 kW AC output 13 kWh ESS capacity



Namibia

300 kW AC output 960 kWh ESS capacity