



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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www.sigenergy.com

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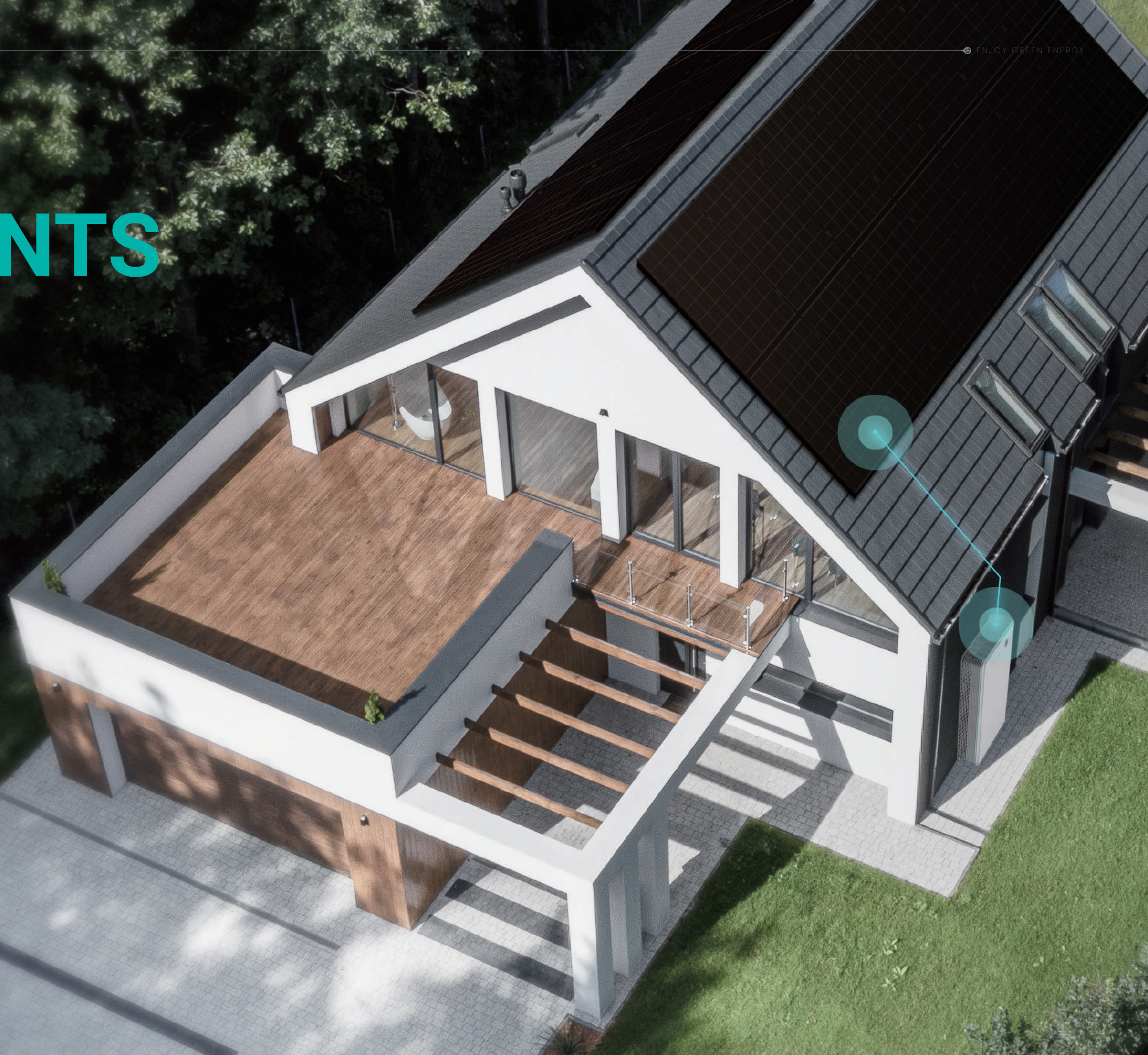


Home Energy Solution

Let the world enjoy green energy

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ABOUT SIGENERGY

Sigenergy focuses on developing cutting-edge all-scenario 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

Leading AI-powered PV and energy storage innovation.
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



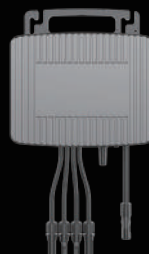
SigenStor BAT
Modular BESS

Energy Gateway



Sigen Gateway HomePro
Powerful home energy hub

Micro Inverter

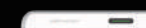


SigenMicro Inverter
Ideal for rooftop and balcony solar

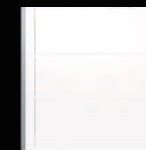
Hybrid Inverter



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

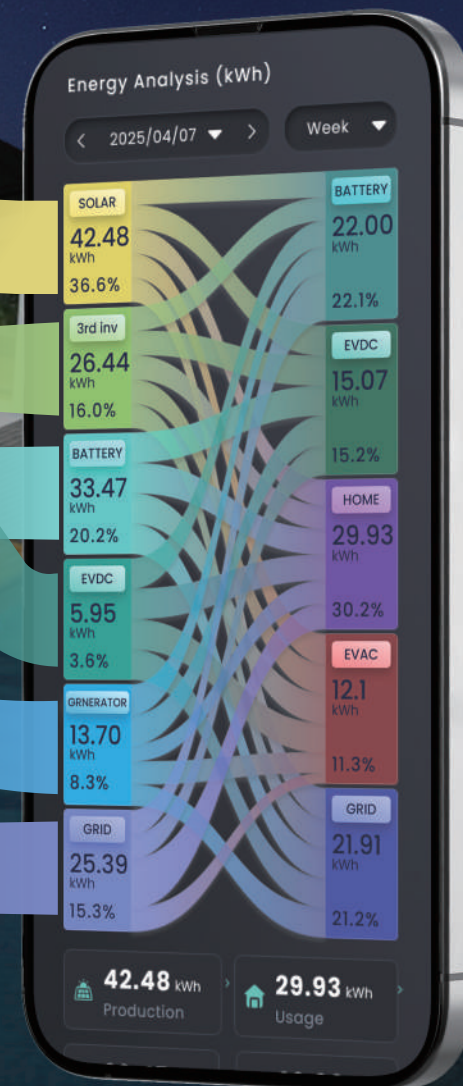
Track energy flow with precision—from power generation to consumption. Gain clear insights into your battery's green energy composition, ensuring transparency and efficiency in every charge.

System-level

Know every watt's source and destination

Load-level

See the power source behind every watt

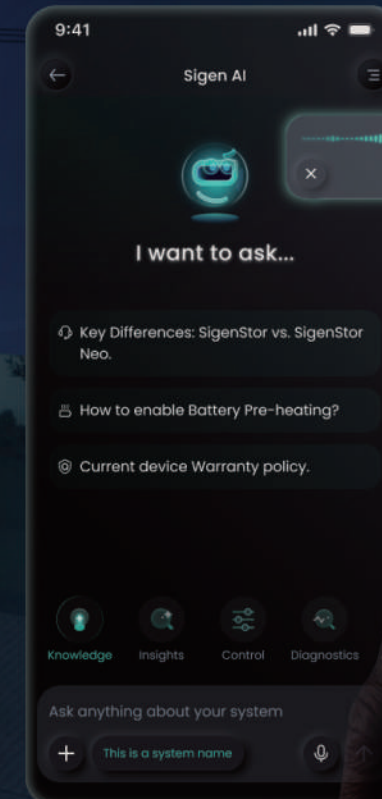


Why Sigenenergy?

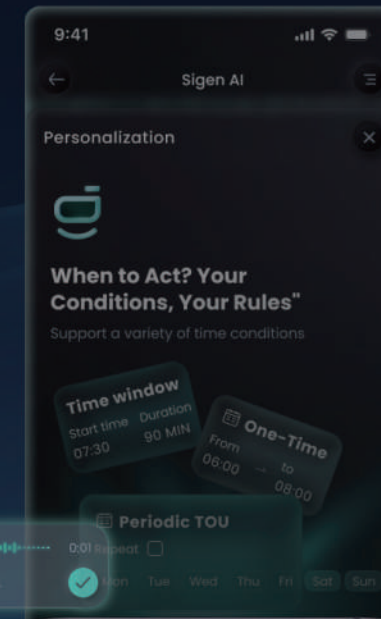
02 Let AI Power Your Energy Freedom

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

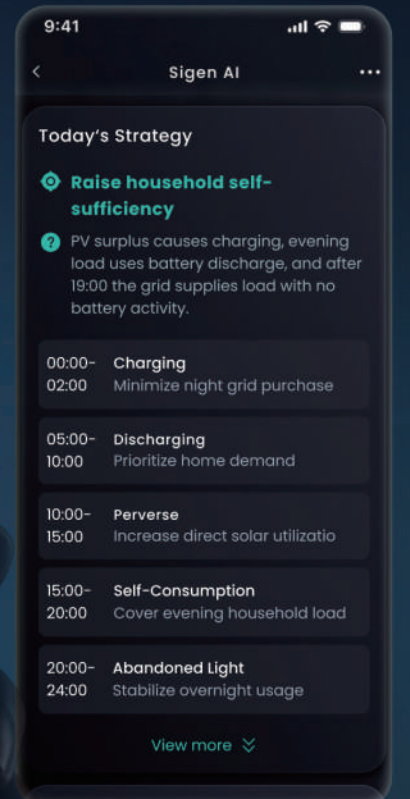
AI Strategy Planner



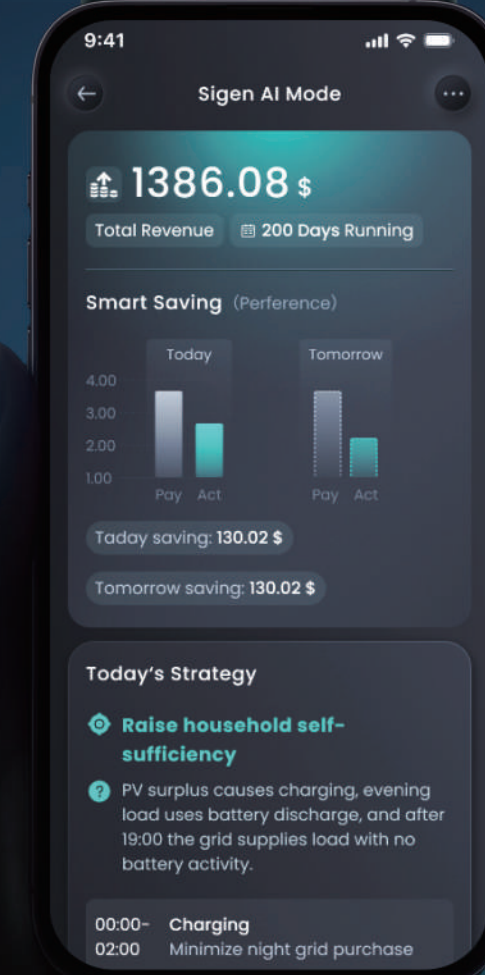
Sigen AI Assistant



AI Strategy Insight



Sigen AI Mode



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.

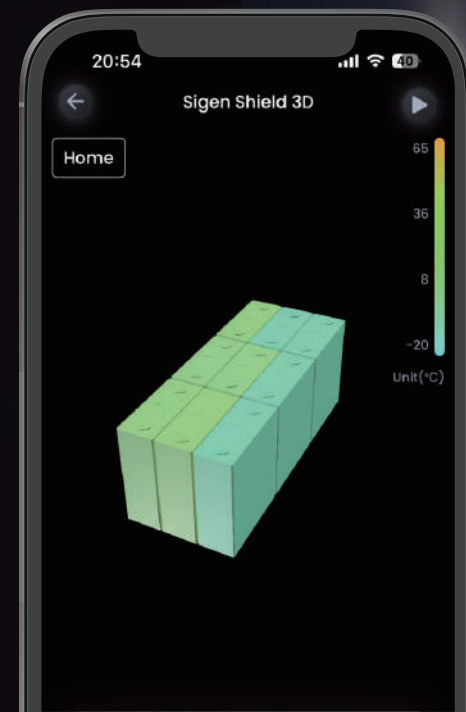
5 Layers Battery Safety Protection



- 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



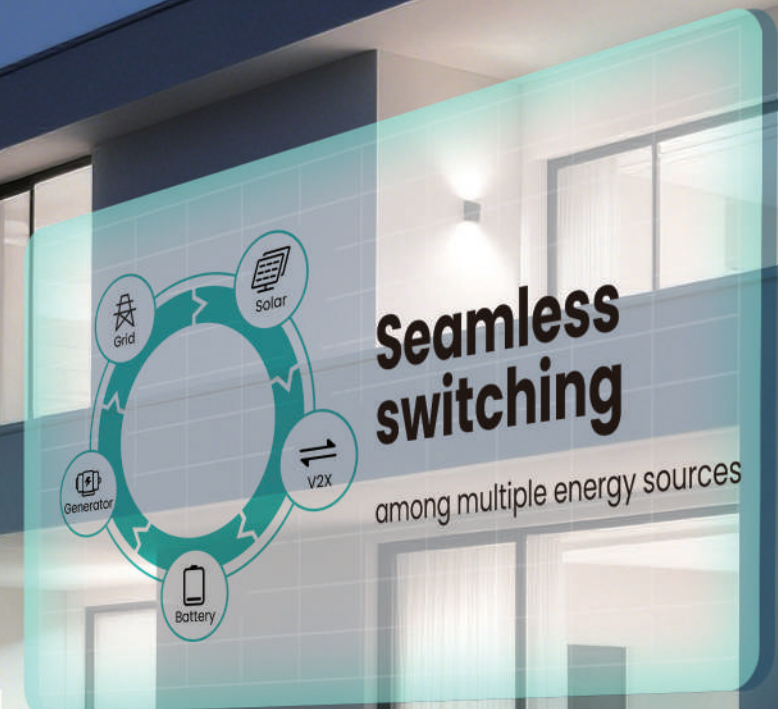
*This is provided by the battery cell manufacturer. Based on cell test condition of 25±2°C, 0.5C charge and discharge rate and SOH=60%.

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.

0 ms Load-side disruption



Why Sigenenergy?

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 Sigenenergy?

06 V2X Pioneering the Future

The world's first V2X-powered home energy revolution. SigenStor EVDC pioneers up to 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

- 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
- 200% 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

SigenStor EC	3.0 SP	4.0 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	8000	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	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	3000	4000	5000	6000	8000	10000	12000	W
Max. output apparent power	3300	4400	5500	6600	8800	11000	12000	VA
Nominal output current	13.6	18.2	22.7	27.3	36.4	45.5	54.6	A
Max. output current	15.0	20.0	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%	97.6%	97.6%	97.6%	
European efficiency	97.0%	97.2%	97.4%	97.4%	97.0%	97.0%	97.0%	
AC Output (backup)								
Peak output power (10 seconds) ²				2 times of nominal output power				
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				
Standard Compliance ⁵								
EMC				IEC/EN 62311, IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/11, EN 61000-3-3/12, ETSI EN 301 489-1/3/17				
Safety				IEC/EN 62109-1, IEC 62109-2, EN 62477				
Grid compliance				IEC 62116, IEC 61727, EN 50549-1, UNE 217001/UNE 217002/NTS 631, CEI 0-21, XP C15-712-3, C10/11, G98/G99/G100, VDE 4105, NRS 097				

1.

The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.

2.

Actual load starting performance depends on the load type and its characteristics; practical results may vary.

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 Sigenergy for more information.

5.

For all standards refer to the certificates catogary on the Sigenergy website.

Sigen Energy Controller 5.0–30.0 kW Three Phase

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 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	2	2	3	3	3	4	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	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) ²					2 times of nominal output power						
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	36	36	36	36	36	36	36	36	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						
Standard Compliance ⁵											
EMC					IEC/EN 62311, IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/11, EN 61000-3-3/12, ETSI EN 301 489-1/3/17						
Safety					IEC/EN 62109-1, IEC 62109-2, EN 62477						
Grid compliance					IEC 62116, IEC 61727, EN 50549-1, UNE 217001/UNE 217002/NTS 631, CEI 0-21, UTE C15-712-1, C10/11, G98/G99/G100, VDE 4105, NRS 097						

1.

The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.

2.

Actual load starting performance depends on the load type and its characteristics; practical results may vary.

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 Sigenergy for more information.

5.

For all standards refer to the certificates catogary on the Sigenergy website.

Sigen EV DC Charging Module

- Upgradeable from 12.5 kW to 25 kW for higher demand*
- World's first V2X-integrated all-in-one home energy system
- Max. 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 ²		Units
Operational mode	Standard mode	License boost mode	
DC Charging			
Max. charging power of charging port	12.5 ²	25	kW
Max. discharging power of charging port	12.5 ²	25	kW
Operation voltage range	150 ~ 1000		V
Max. operation current	40 ²	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 ³	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 ⁴	7.5 / 10		m
Function			
Authentication	RFID card / App / No authentication		
Smart Charging	Scheduled Charging	The system supports setting the charging start times	
	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 ⁵ , Smart load management		
User interfaces	LED indicator, App, RFID		
Remote function	OTA, Remote diagnostics		
OCPP protocol	OCPP 1.6J ED 2		
Standard Compliance			
Standard ⁶	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 SigenStor EVDC 12 model can be upgraded to 25 kW. End users can purchase a license via Sigen Mall or local distributors to increase the charging port's maximum charging/discharging power from 12.5 kW to 25 kW, and the maximum operating current from 40 A to 80 A. This upgrade is only available for specific models. For more information, please contact official Sigenergy support or your local distributor.

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

4. 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.

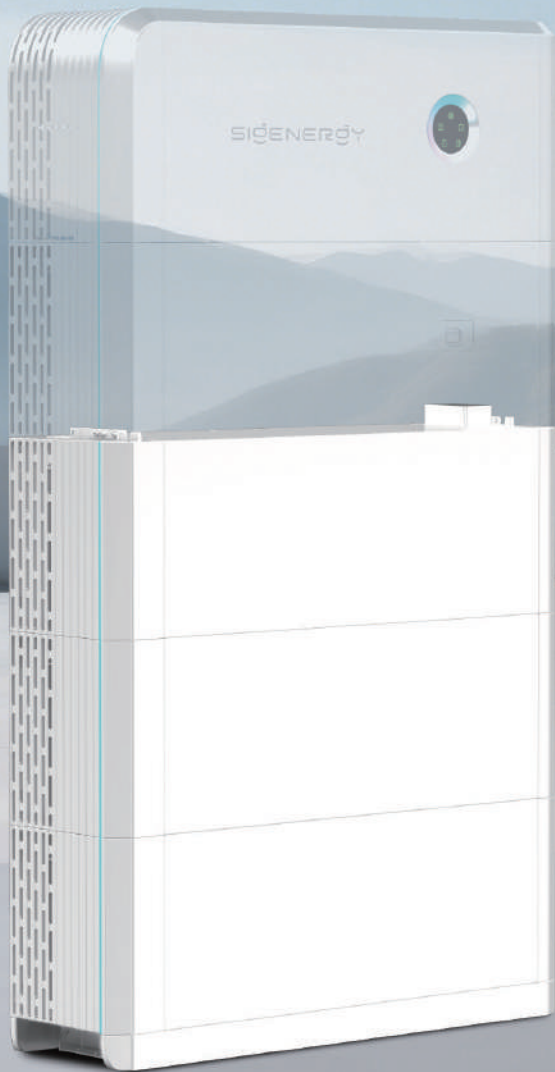
5. V2X functionality is limited by the EV's capabilities. Once the relevant standards are published and tested, V2X feature can be upgraded through the OTA. For the official support of vehicle models and support timelines, please refer to future announcement made on the official website.

6. For all standards refer to the certificates category on the Sigenergy website.

*This upgrade is only available for specific models. For more details, please contact Sigenergy official support or local distributors.

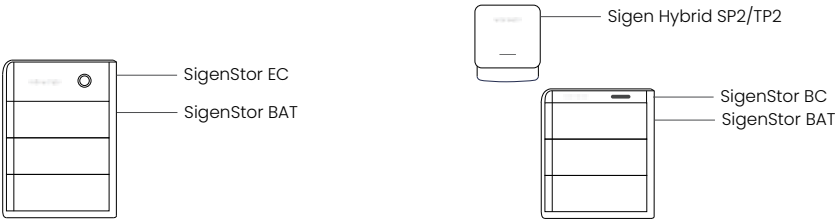
Sigen Battery

- 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		



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.

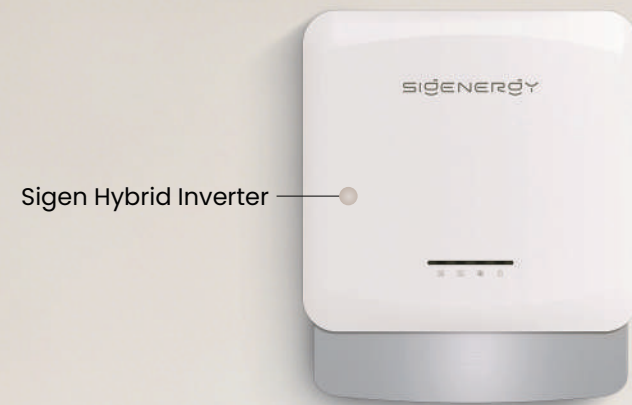
3. Refers to the usable energy capacity. Battery must be recharged within 7 days after being fully discharged to keep battery healthy.

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.

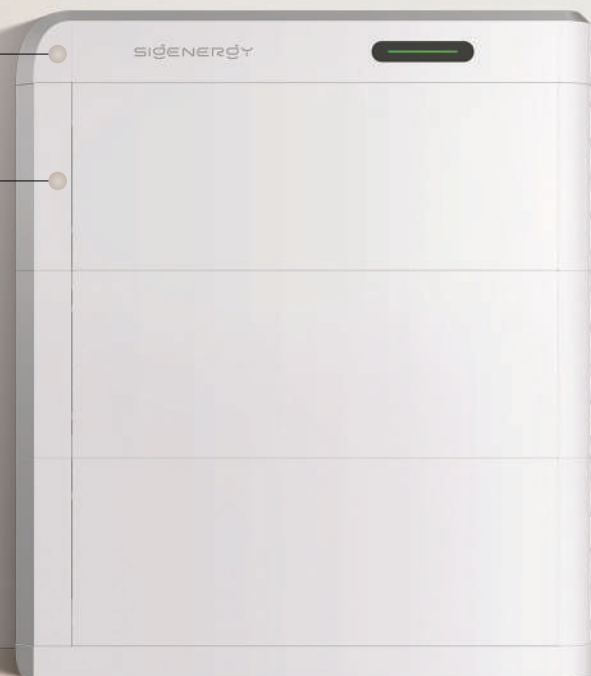
Sigen Hybrid Inverter

Harmoniously Complementing Your Home



Sigen Battery Controller
(SigenStor BC)

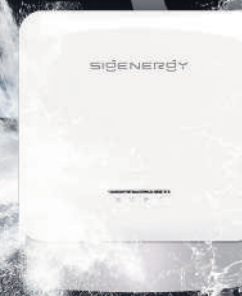
Sigen Battery
(SigenStor BAT)



99mm
ultra slim design

As Low As
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

200%

DC/AC ratio for higher yield

Sigen Hybrid Inverter 3.0–6.0 kW Single Phase

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	5000	6000	W
Max. output apparent power	3300	5500	6600	VA
Nominal output current	13.6	22.7	27.3	A
Max. output current	15.0	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) ²		2 times of nominal output power		
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 ³		0		ms
Efficiency				
Max. efficiency		98.6%		
European efficiency	98.0%	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	
Installation method	Wall-mounted	
Night consumption	2.5	W
Noise	25	dB

Standard Compliance ⁴

EMC	IEC/EN 62311, IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/11, EN 61000-3-3/12, ETSI EN 301 489-1/3/17
Safety	IEC/EN 62109-1, IEC 62109-2
Grid compliance	IEC 62116, IEC 61727, EN 50549-1, UNE 217001/UNE 217002/NTS 631, CEI 0-21, C10/11, G98/G99/G100, VDE 4105, NRS 097

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.

2. Actual load starting performance depends on the load type and its characteristics; practical results may vary.

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. For all standards refer to the certificates catogary on the Sigenenergy website.

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(MPPT1) / 2(MPPT2) 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)					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) ³			2 times of nominal output power						
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 ⁴				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	
Installation method	Wall-mounted	
Night consumption	3	W
Noise	28	dB

Standard Compliance ⁵

EMC	IEC/EN 62311, IEC/EN 61000-6-1/2/3/4, IEC/EN 61000-3-2/11, EN 61000-3-3/12, ETSI EN 301 489-1/3/17
Safety	IEC/EN 62109-1, IEC 62109-2
Grid compliance	IEC 62116, IEC 61727, EN 50549-1, UNE 217001/UNE 217002/NTS 631, CEI 0-21, C10/11, G98/G99/G100, VDE 4105, NRS 097

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.

2. PV1 independently connects to MPPT1, while PV2 and PV3 share MPPT2. The maximum power rating is 6.66 kW (10.0 TP2) or 8 kW (12.0 TP2) for MPPT1, and 13.3 kW (10.0 TP2) or 16 kW (12.0 TP2) for MPPT2. Any MPPT input power exceeding these limits will be clipped.

3. Actual load starting performance depends on the load type and its characteristics; practical results may vary.

4. 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.

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

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



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	V
Nominal AC current	54.6	100	45.6	A
Nominal AC power	12	22	30	kW
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	V
Nominal AC current	54.6	100	45.6	A
Nominal AC power	12	22	30	kW
Nominal AC frequency	50 / 60		Hz	
Overvoltage category	III			
Inverter Connection				
Nominal AC voltage	220 / 230 / 240		380 / 400	V
Nominal AC current	54.6 / 32 ²	55	45.6	A
Nominal AC power	12 / 6 ²	12	30	kW
Smart Port Connection				
Generator output voltage	220 / 230 / 240		380 / 400	V
Nominal current	54.6	55	45.6	A
Nominal AC power	12	12	30	kW
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 (without decorative cover)	mm
Weight	25 (without decorative cover)	25 (without decorative cover)	25 (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	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 Sigenenergy 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.

Sigen Energy Gateway Home

- Seamless switch to backup mode, worry-free energy usage
- Real-time current monitoring with 100ms zero export
- Uninterrupted power supply through PV+ESS/grid
- Support both whole home backup & partial home backup



Sigen Energy Gateway Home¹

Sigen Gateway ¹	Home SP 12K		Home TP 30K	Units
Grid Connection				
Grid connection type	Single phase		Three phase	
Nominal AC voltage	220 / 230 / 240		380 / 400	V
Nominal AC current	52.2		45.6	A
Nominal AC power	12		30	kW
Nominal AC frequency	50 / 60			Hz
Disruption time of backup switch ²	0			ms
AC Output to Backup Port				
Nominal AC voltage	220 / 230 / 240		380 / 400	V
Nominal AC current	52.2		45.6	A
Nominal AC power	12		30	kW
Nominal AC frequency	50 / 60			Hz
Overvoltage category	III			
AC Output to Non-Backup Port				
Nominal AC voltage	220 / 230 / 240		380 / 400	V
Nominal AC current	52.2		45.6	A
Nominal AC power	12		30	kW
Nominal AC frequency	50 / 60			Hz
Inverter Connection				
Nominal AC voltage	220 / 230 / 240		380 / 400	V
Nominal AC current	52.2 (INV1), 32 (INV2) ³		45.6	A
Nominal AC power	12 / 6 ³		30	kW
General Data				
Dimensions (W / H / D)	400 / 590 / 156			mm
Weight	17.5		19	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 , dry contact			
Installation method	Wall mounted			

1.

Please contact Sigenergy or local distributors for specific countries where sales are available.

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.

The sum of the parallel power of the Sigenergy inverters cannot exceed 12 kW.

SigenMicro Inverter

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

- Innovative DAB Topology, industry-leading efficiency
- 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

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	20 x 1				20 x 1				20 x 2				20 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	97.0%								97.5%									
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																	
Ingress protection rating	IP67																	
Display	LED																	
AC connection type	Plug and play connector																	
Installation method	Bracket mounted																	
Standard Compliance ⁴																		
RED	EN 300328 V 2.2.2:2019, EN IEC 62311:2020, EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN 301489-1 V 2.2.3:2019, EN 301489-17 V 3.3.1:2024, EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019, EN 62920:2017+A11+A1, EN 55011:2016+A1+A11+A2, EN 62109-1:2010, EN 62109-2:2011																	
Grid compliance	IEC 62116, IEC 61727, EN 50549-1, UNE 217001/UNE 217002/NTS 631, CEI 0-21, C10/11, VDE 4105, NRS 097																	

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.

4.

For all standards refer to the certificates catogary on the Sigenergy website.

Sigen Power Sensor

For SigenMicro only

- Perfectly matched for SigenMicro series
- Direct cloud connection, zero data loss
- 24/7 monitoring, real-time App access
- Standalone OTA, exportable logs for O&M
- Plug-and-play antenna for easy setup
- Built for extremes from -40 to +70°C



Sigen Power Sensor

Sigen Sensor ¹	SP-CT100 ²		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) 304 ~ 477(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				
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				
Operating temperature range	-25 ~ 65				
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	
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	

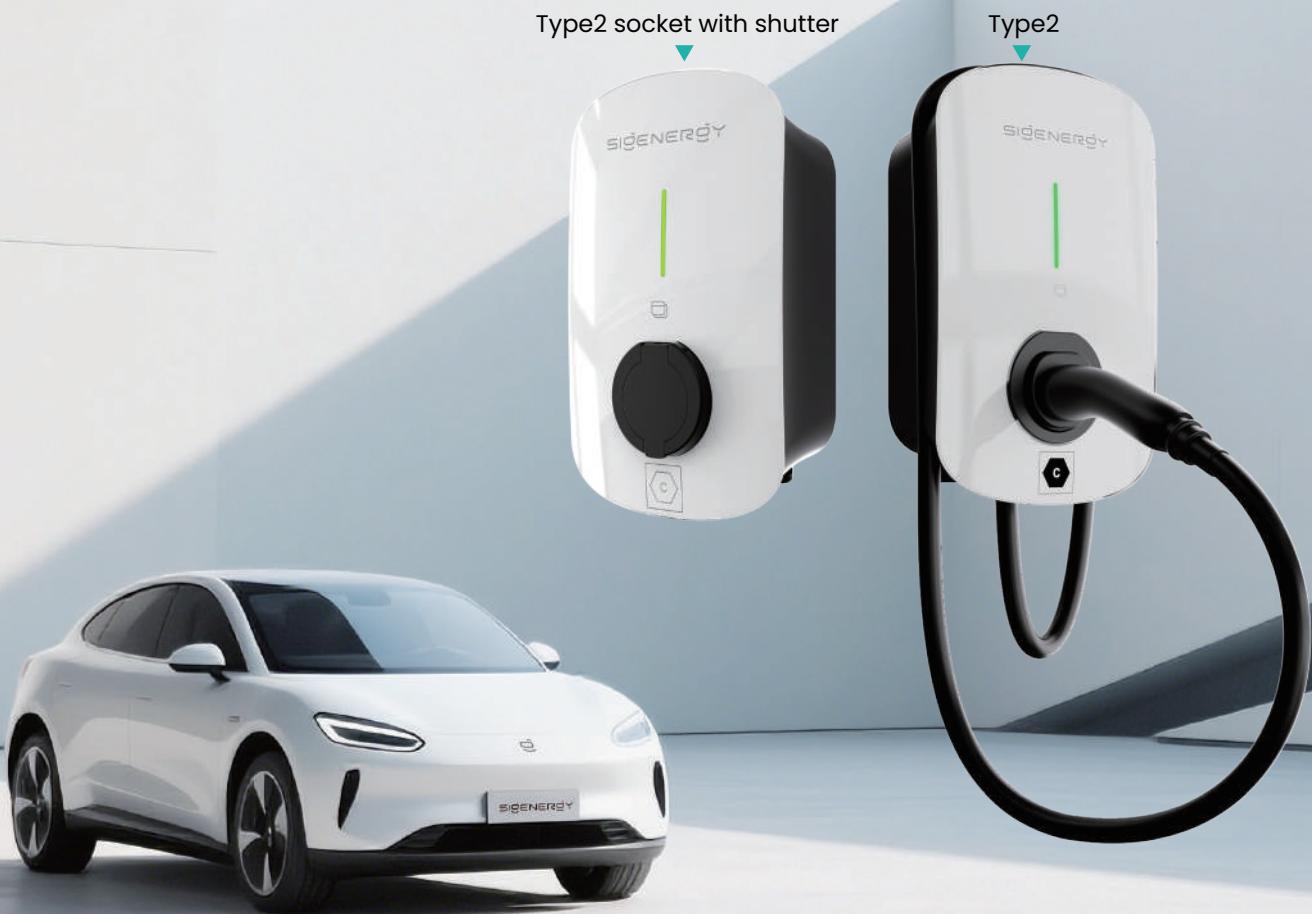
1. For more models refer to the Sigenergy website.

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 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



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	Modbus RTU ² , RS485			
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 Sigenergy 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	1P2W		3P3W/3P4W		
AC input voltage range	176 ~276	100 ~ 276	173 ~ 480	176 ~ 276 (L~N) 304 ~ 477(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 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 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% ~ 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.

mySigen App

03 Battery Energy Source

Real-time battery power source composition refreshing every 10 seconds



04 Energy Sankey Diagram

Know where every watt comes from and where it goes



01 Real-time Monitoring

Immersive 3D visualization of real-time energy flow with live weather conditions



02 Sigen AI Mode

Smart scheduling for maximum savings



05 AI Strategy Insight

Instant insight into current and future operation strategy



06 Sigen AI Assistant

LLM-powered AI assistant



07 AI Strategy Planner

AI smartly adjust operation strategy by your word



08 AI OneSearch

Smart in-app search for settings, posts, tutorials, guide videos and so on.....



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
- Work Order Management



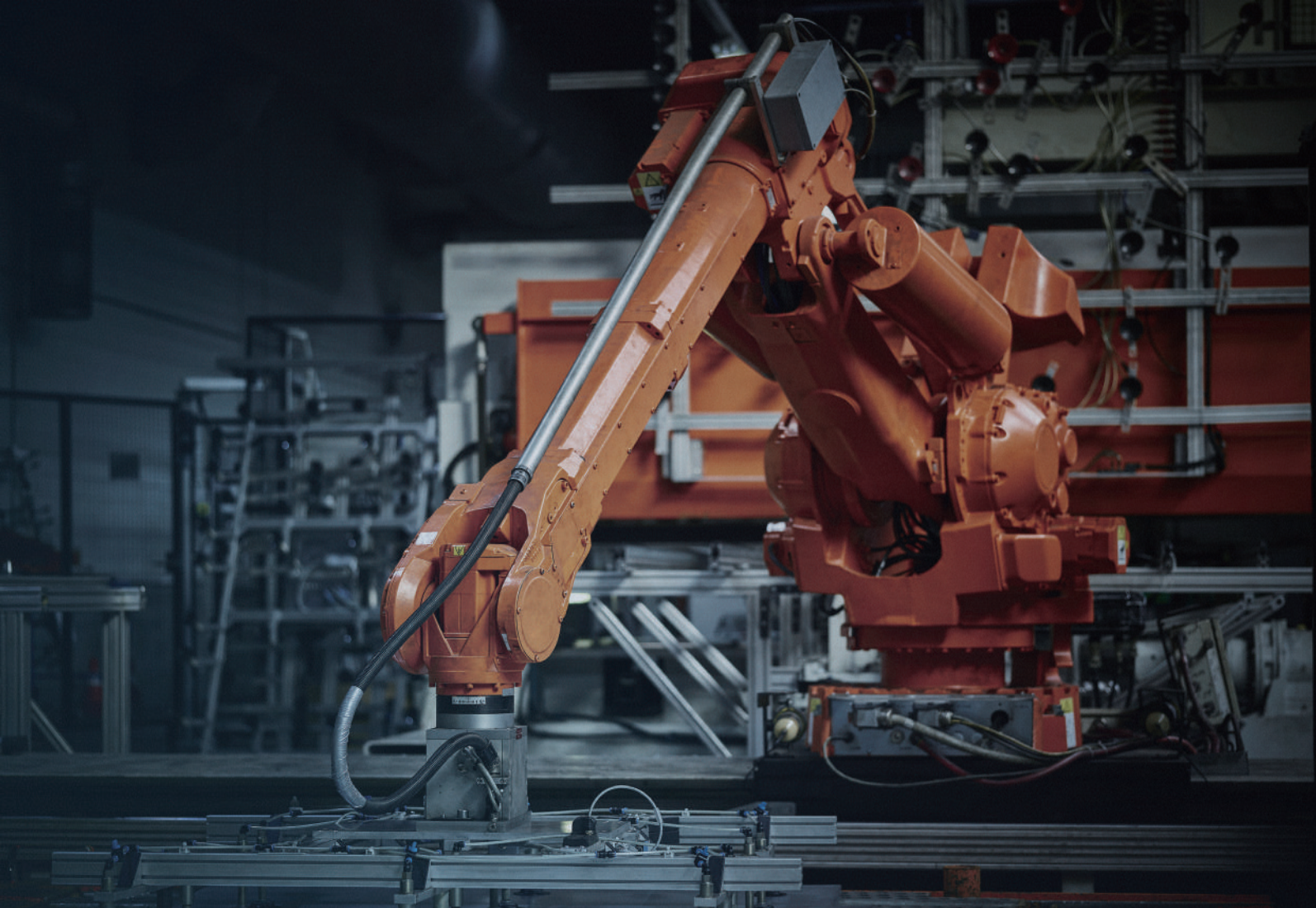
Organization Management

- In-organization Member Management
- Company Information
- Installer Company Hierarchical Management



Value-Added Services

- AI Smart Assistant
- Third-party VPP Integration
- Open Northbound Integration



WORLD-LEADING Intelligent Manufacturing

99.9%

Industry-Leading
First Pass Yield



100%

Full-Lifecycle
Material Tracking



100%

Fully Automated
Transport



Nantong Smart Energy Center



Shanghai Lingang Manufacturing Center



Shanghai Pudong Manufacturing Center

Driven by the "AI in All" strategy, Sigenergy has established a world-class intelligent manufacturing ecosystem anchored by three advanced hubs in Shanghai and Nantong. At the heart of this network is the Nantong Smart Energy Center, a 136,000-square-meter facility and capable of producing over 300,000 inverters and battery packs annually. This scale is powered by a fully synchronized digital architecture integrating MES, WMS, and EMS to ensure real-time visibility and adaptive, automated workflows.

By embedding AI into every stage of the manufacturing chain, Sigenergy optimizes precision, speed, and reliability at scale. More than just a factory, this integrated hub unites R&D, smart manufacturing, and global logistics to deliver unparalleled product quality and meet the surging demands of the global market.

Powering Homes Worldwide

