



# SIGENERGY

## Home Energy Solution

Let the world enjoy green energy



**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.

[www.sigenergy.com](http://www.sigenergy.com)

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Intelligent Manufacturing

Solar-powered Manufacturing

Quality Assurance

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

**S**afe **I**ntelligent **G**reen **E**fficient **N**ew

# SIGENERGY HOME ENERGY SOLUTION

Combining solar, storage and EV charging, Sigenergy offers an all-in-one Home Energy Solution that helps you lower utility bill and reliance on the grid. Simple to install, easy to use, smart & safe all around, our system is versatile and scalable to meet every need.

Let numbers talk  
Sigenergy is raising industry standards

**15 mins**

stackable installation

**5 layers**

battery protection

**280 Ah**

long cycle-life battery cell

**0 ms**

load-side disruption

**5 mins**

fast commissioning

**IP66**

SigenStor protection rating

**25 kW**

fast EV charging at home

**1-click**

full system diagnosis



Simple



Versatile



Robust



Intelligent





▶ **Sigen Energy Controller**  
for solar + energy storage system

▶ **Sigen EV DC Charging Module**  
Ready for V2X

▶ **Sigen Battery**

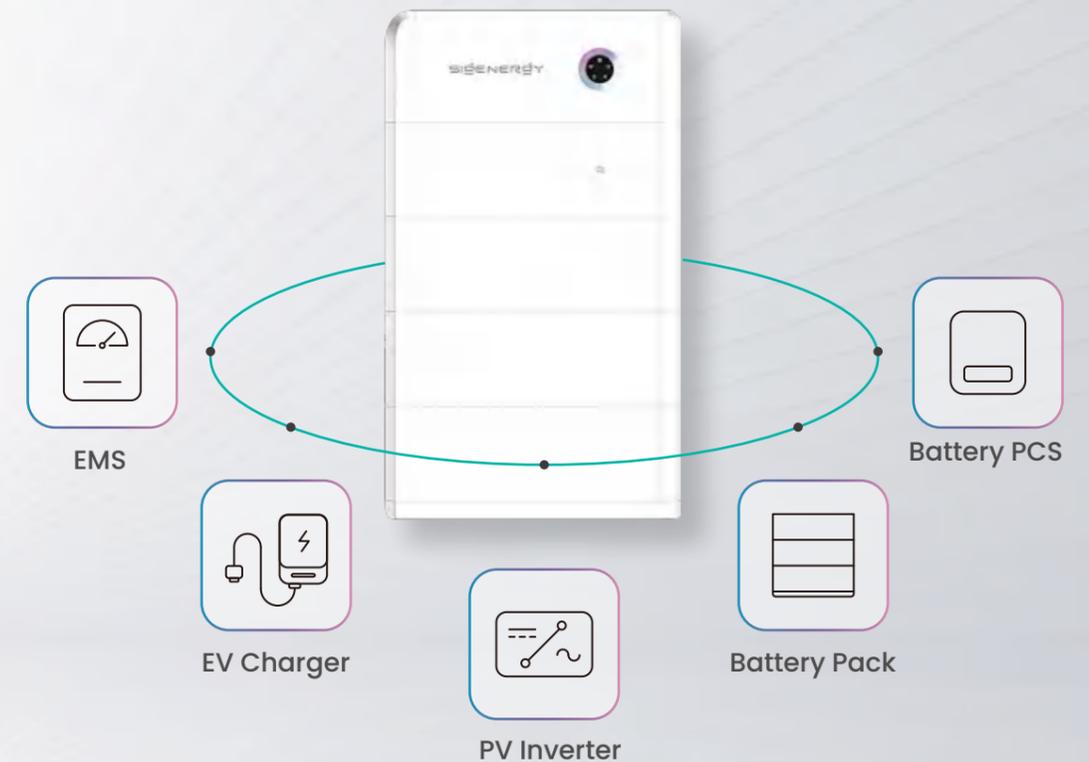
**8.0** **5.0**  
Energy capacity(kWh)

**1 – 6**  
batteries stackable for each stack

**5 kWh – 48 kWh**  
energy capacity range for each stack

**Multiple**  
systems supported in parallel connection

## 5-in-One, highly integrated design



Sigenergy is leading a new way of storing, transferring, and consuming home energy. We provide a genuine all-in-one solar energy storage system, SigenStor. Its unique 5-in-One modular design integrates Solar Inverter, EV DC Charger, Battery PCS, Battery Pack, and EMS into one intelligent home energy system. Simple, robust and versatile, it will be a great addition to your home.

## Start small, grow on demand

Controller	x 1	x 1	x 1	x 1	x 1	x 1
Battery	x 1	x 2	x 3	x 4	x 5	x 6
Max. Total Energy Capacity	8 kWh	16 kWh	24 kWh	32 kWh	40 kWh	48 kWh



# Sigen Energy Controller

**3.0 – 12.0 kW** Single Phase  
**5.0 – 30.0 kW** Three Phase

- EMS inside for precise control
- Up to 4 MPP. trackers
- Multi-source black start
- On & off-grid compatibility
- DC/AC ratio up to 2 (single phase)
- IP66 system protection rating

## Sigen Energy Controller 3.0–12.0 kW Single Phase <sup>1</sup>

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	
<b>DC Input (from PV)</b>											
Max. PV power	6000	7360	8000	9200	10000	12000	16000	20000	24000	W	
Max. DC input voltage										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		
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	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 <sup>2</sup>										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 <sup>3</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection									
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### 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% ~ 95%	
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 <sup>4</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2									
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- Sigen Energy Controller 8.0–12.0 kW Single Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
- 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.
- This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- For all standards refer to the certificates category on the Sigenenergy website.

## Sigen Energy Controller 5.0–30.0 kW Three Phase <sup>1</sup>

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
<b>DC Input (from PV)</b>											
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	48000	W
Max. DC input voltage										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	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	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 <sup>2</sup>										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 <sup>3</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection									
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### 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% ~ 95%	
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 <sup>4</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2									
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- Sigen Energy Controller 30.0 kW Three Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
- 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.
- This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- For all standards refer to the certificates category on the Sigenenergy website.



# Sigen Energy Controller

5.0 – 12.0 kW Three Phase Low Voltage

- Compatible with delta grid
- IP66 system protection rating
- EMS inside for precise control
- Up to 4 MPP. trackers

## Sigen Energy Controller 5.0-12.0 kW Three Phase Low Voltage <sup>1</sup>

SigenStor EC	5.0 TPLV	6.0 TPLV	8.0 TPLV	10.0 TPLV	12.0 TPLV	Units
<b>DC Input (from PV)</b>						
Max. PV power	8000	9600	12800	16000	19200	W
Max. DC input voltage	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
<b>AC Output (on-grid)</b>						
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%					
<b>Efficiency</b>						
Max. efficiency	98%					
European efficiency	97.3%	97.5%	97.7%	97.8%	97.8%	
<b>Battery Connection</b>						
Battery module models	SigenStor BAT 5.0 / 8.0					
Number of modules per controller	1 ~ 6					pcs
Battery module voltage range	300 ~ 600					V
<b>Protection</b>						
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>2</sup> , AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection					
<b>General Data</b>						
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% ~ 95%					
Max. operating altitude	4000					m
Cooling	Smart air cooling					
System ingress protection rating	IP66					
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)					
<b>Standard Compliance</b>						
Standard <sup>3</sup>	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. This is an optional feature only supported in certain models, please contact Sigenenergy for more information.  
 3. For all standards refer to the certificates category on the Sigenenergy website.

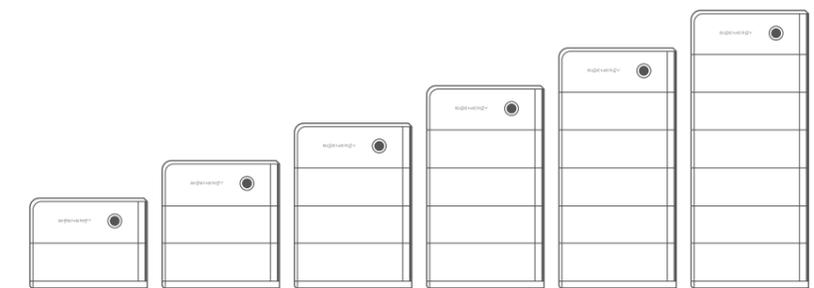


# Sigen Battery

- Large cell capacity, low voltage & durable
- Multi-layer full battery safety protection
- Visible battery status on mySigen App
- Quick connectors for fast installation
- AI enablement, optimised battery cycle life
- Parallel connections for flexible battery mix

## Sigen Battery 5.0 / 8.0 kWh

SigenStor BAT	5.0	8.0	Units
<b>Performance Specification</b>			
Battery type	LiFePO4		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity <sup>1</sup>	5.2	7.8	kWh
Battery modules voltage range (single phase system)	300 ~ 600		V
Battery modules voltage range (three phase system)	600 ~ 900		V
Max. charge / discharge power	2500	4000	W
Peak charge / discharge power (10 seconds)	3750	6000	W
<b>General Data</b>			
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		
<b>Standard Compliance</b>			
Standard	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040		



Number of battery modules <sup>2</sup>	1	2	3	4	5	6	pcs
Total energy capacity	8.06	16.12	24.18	32.24	40.3	48.36	kWh
Max. charge / discharge power	4	8	12	16	20	24	kW
Total weight	112	183	254	325	396	467	kg
Total height (with base)	640	910	1180	1450	1720	1990	mm
Total width (with decorative covers)				850			mm
Total depth (with decorative covers)				260			mm

1. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.

2. The data in the table is based on the combination of SigenStor BAT 8.0 and SigenStor EC three-phase as an example, with a ground-mounted installation.



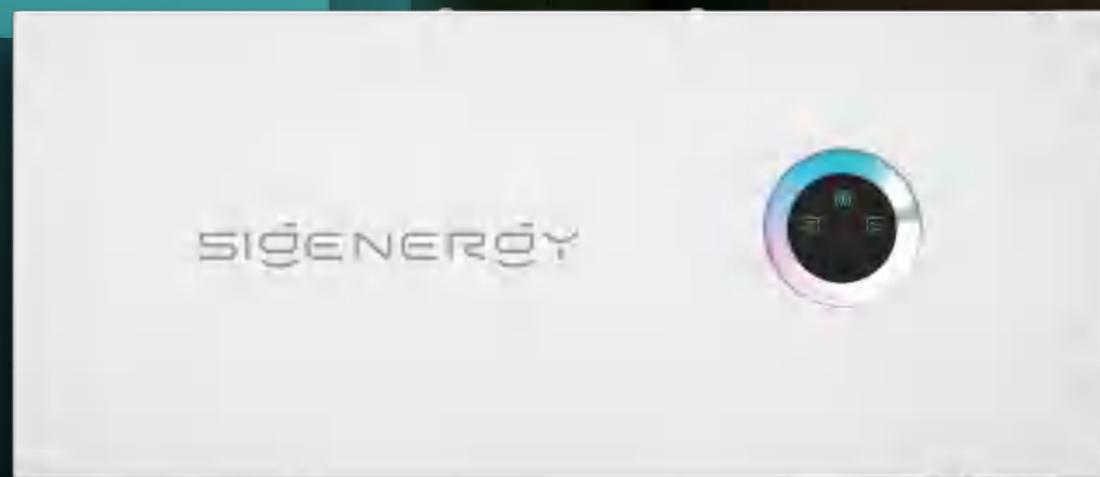
# Sigen EV DC Charging Module

- V2X ready technology, future proof
- Max. 25 kW bi-directional charging
- 150V ~ 1000V charging, wide EV compatibility
- Charge EV with green solar power
- Remote control on mySigen App
- IP66 system protection, maintenance free

## Sigen EV DC Charging Module 12 / 25 kW

SigenStor EVDC <sup>1</sup>	12	25	Units
<b>DC Charging</b>			
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		
<b>Protection</b>			
Short-circuit protection	Supported		
Over / Under voltage protection	Supported		
Overload protection	Supported		
Over temperature protection	Supported		
Reverse polarity protection	Supported		
Welded contactor check	Supported		
<b>General Data</b>			
Dimensions (W / H / D)	700 / 270 / 260		mm
Weight <sup>2</sup>	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 <sup>3</sup>	5 / 7.5 / 10		m
<b>Function</b>			
Authentication	RFID card / App / No authentication		
Application	Bi-directional V2X operation <sup>4</sup> , Smart load management		
User interfaces	LED indicator, App, RFID		
Remote function	OTA, Remote diagnostics		
<b>Standard Compliance</b>			
Standard <sup>5</sup>	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 Hybrid Inverter

**3.0 – 12.0 kW** Single Phase

**5.0 – 30.0 kW** Three Phase

- Battery ready, future proof
- DC/AC ratio up to 2 (single phase)
- Up to 4 MPP. trackers
- IP66 protection rating

## Sigen Hybrid Inverter 3.0–12.0 kW Single Phase <sup>1</sup>

Sigen Hybrid	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	
<b>DC Input</b>											
Max. PV power	6000	7360	8000	9200	10000	12000	16000	20000	24000	W	
Max. DC input voltage										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	A
Max. short-circuit current per MPPT										20	A
<b>AC Output (on-grid)</b>											
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%	
<b>Efficiency</b>											
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%		
<b>Additional Features</b>											
Compatible battery module										SigenStor BAT 5.0 / 8.0	
Number of modules per controller										1 ~ 6	pcs
Battery module voltage range										300 ~ 600	V
Peak output power (10 seconds)	4500	5520	6000	6900	7500	9000	12000	15000	15000	W	
Nominal output voltage	220 / 230 / 240						220 / 230			V	
<b>Protection</b>											
Safety protection feature										DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>2</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection	
<b>General Data</b>											
Dimensions (W / H / D)	700 / 300 / 268						700 / 300 / 283			mm	
Weight	18						36			kg	
Storage temperature range										-40 ~ 70	°C
Operating temperature range										-30 ~ 60	°C
Relative humidity range										0% ~ 95%	
Max. operating altitude										4000	m
Cooling	Natural convection						Smart air cooling				
Ingress protection rating										IP66	
Installation method										Wall-mounted	
Communication										WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)	
<b>Standard Compliance</b>											
Standard <sup>3</sup>										IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2	

- Sigen Hybrid Inverter 8.0–12.0 kW Single Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
- This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- For all standards refer to the certificates category on the Sigenenergy website.

## Sigen Hybrid Inverter 5.0–30.0 kW Three Phase <sup>1</sup>

Sigen Hybrid	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
<b>DC Input</b>											
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	48000	W
Max. DC input voltage										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
<b>AC Output (on-grid)</b>											
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	V
Nominal grid frequency										50 / 60	Hz
Power factor										0.8 leading ~ 0.8 lagging	
Total current harmonic distortion										THDi < 2%	
<b>Efficiency</b>											
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%	
<b>Additional Features</b>											
Compatible battery module										SigenStor BAT 5.0 / 8.0	
Number of modules per controller										1 ~ 6	pcs
Battery module voltage range										600 ~ 900	V
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	36000	W
Nominal output voltage										380 / 400	V
<b>Protection</b>											
Safety protection feature										DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>2</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection	
<b>General Data</b>											
Dimensions (W / H / D)										700 / 300 / 283	mm
Weight										36	kg
Storage temperature range										-40 ~ 70	°C
Operating temperature range										-30 ~ 60	°C
Relative humidity range										0% ~ 95%	
Max. operating altitude										4000	m
Cooling										Smart air cooling	
Ingress protection rating										IP66	
Installation method										Wall-mounted	
Communication										WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)	
<b>Standard Compliance</b>											
Standard <sup>3</sup>										IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2	

- Sigen Hybrid Inverter 30.0 kW Three Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
- This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- For all standards refer to the certificates category on the Sigenenergy website.



# Sigen PV Inverter

**3.0 – 6.0kW** Single Phase

**5.0 – 25.0kW** Three Phase



- Easy installation with side cabling
- Visible energy tracking on mySigen App
- WLAN, Ethernet & 4G communication
- DC/AC ratio up to 2 (single phase)
- Up to 4 MPP. trackers (three phase)
- IP66 protection rating

## Sigen PV Inverter 3.0–6.0 kW Single Phase

Sigen PV Max	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	Units
<b>DC Input</b>							
Max. PV power	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage			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			20				A
<b>AC Output</b>							
Nominal output power	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	3300	3680	4400	5000	5500	6600	VA
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	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 < 2%				
<b>Efficiency</b>							
Max. efficiency			98.0%				
European efficiency	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	
<b>Protection</b>							
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>1</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection						
<b>General Data</b>							
Dimensions (W / H / D)	700 / 300 / 268						mm
Weight	18						kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 95%						
Max. operating altitude	4000						m
Cooling	Natural convection						
Ingress protection rating	IP66						
Installation method	Wall-mounted						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						
<b>Standard Compliance</b>							
Standard <sup>2</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2						

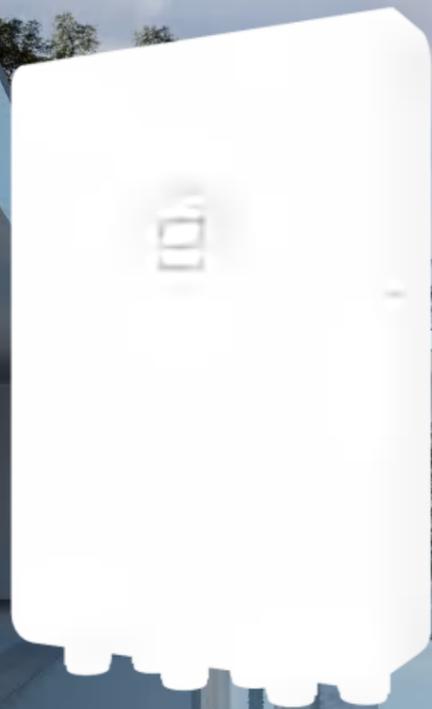
- This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
- For all standards refer to the certificates category on the Sigenenergy website.

## Sigen PV Inverter 5.0–25.0 kW Three Phase

Sigen PV Max	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	Units	
<b>DC Input</b>											
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	W	
Max. DC input voltage					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
<b>AC Output</b>											
Nominal output power	5000	6000	8000	10000	12000	15000	17000	20000	25000	W	
Max. output apparent power	5500	6600	8800	11000	13200	16500	18700	22000	27500	VA	
Nominal output current	7.6	9.1	12.2	15.2	18.2	22.8	25.8	30.4	38.0	A	
Max. output current	8.4	10.0	13.4	16.7	20.1	25.1	28.4	33.4	41.8	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%						
<b>Efficiency</b>											
Max. efficiency	98.1%	98.2%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%		
European efficiency	96.1%	96.6%	97.1%	97.5%	97.7%	97.9%	97.9%	97.9%	98.0%		
<b>Protection</b>											
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>1</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection										
<b>General Data</b>											
Dimensions (W / H / D)	700 / 300 / 283									mm	
Weight	36									kg	
Storage temperature range	-40 ~ 70									°C	
Operating temperature range	-30 ~ 60									°C	
Relative humidity range	0% ~ 95%										
Max. operating altitude	4000									m	
Cooling	Smart air cooling										
Ingress protection rating	IP66										
Installation method	Wall-mounted										
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)										
<b>Standard Compliance</b>											
Standard <sup>2</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2										

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

# Sigen Energy Gateway HomeMax



- Multiple breaker positions reserved for SigenStor or other loads
- Seamless switch to backup mode, worry-free energy usage
- Ready for generator, heat pump or other controllable loads
- Support both whole home backup & partial home backup
- 350 ms reverse power flow protection of grid & generator
- Uninterrupted power supply through PV+ESS/grid/generator



## Sigen Energy Gateway HomeMax

Sigen Gateway	HomeMax SP 12K	HomeMax TP	Units
<b>Grid Connection</b>			
Grid connection type	Single phase	Three phase	
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Nominal AC current	100	76	A
Nominal AC power	22 / 23 / 24	50 / 52.6	kW
Nominal AC frequency		50 / 60	Hz
Disruption time of backup switch <sup>1</sup>		0	ms
<b>AC Output to Backup Port</b>			
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Nominal AC current	100	76	A
Nominal AC power	22 / 23 / 24	50 / 52.6	kW
Nominal AC frequency		50 / 60	Hz
Overvoltage category		III	
<b>Inverter Connection / EV Charger Port (optional)</b>			
Max. number of connection	3	2	
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Nominal AC current	55 (INV1), 32 (INV2), 32 (INV3) <sup>2</sup>	38	A
Compatible EV charger power	7	11 / 22	kW
<b>Smart Port Connection</b>			
Generator output voltage	220 / 230 / 240	380 / 400	V
Nominal current	63	76	A
Nominal AC power	13.8 / 14.5 / 15.1	50 / 52.6	kW
Generator 2-wire start		Supported	
<b>General Data</b>			
Dimensions (W / H / D)	455 / 660 / 179	510 / 750 / 179	mm
Weight	19	23	kg
Storage temperature range		-40 ~ 70	°C
Operating temperature range		-30 ~ 55	°C
Relative humidity range		0% ~ 95%	
Max. operation altitude		4000	m
Cooling		Natural convection	
Ingress protection rating		IP54	
Communication		Fast Ethernet, RS485, dry contact	
Installation method		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 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/INV3 port.

# Sigen Communication Module

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



## Sigen Communication Module

	Sigen CommMod <sup>1</sup>	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 Sigen PV Inverter series	

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





# Sigen Power Sensor

- 1% high-accuracy power detection for precise control
- LCD real-time info display, easy to operate and check
- Integrate smoothly with Sigenergy devices, no need for setup
- Top class 100 A direct connection in power sensor with built-in CT
- Support export/import limitations and ready for AI evolving
- 100 ms data refresh rate, instantaneous data feed

## Sigen Power Sensor

Sigen Sensor <sup>1</sup>	SP-DH	SP-CT120-DH	TP-DH	TP-CT120-DH	Units
<b>Power Supply</b>					
Grid connection type	1P2W		3P3W/3P4W		
AC input voltage range	176 ~ 276		173 ~ 480 Vac		
Nominal AC frequency	50 / 60				Hz
Max. operating current	100	-	100	-	A
<b>Measurement Accuracy</b>					
Voltage accuracy	0.5%				
Current accuracy	0.5%				
Power accuracy	1%				
Frequency accuracy	0.2%				
<b>Communication</b>					
Interface	RS485				
Baud rate	9600 bps				
Protocol	Modbus RTU				
<b>General Data</b>					
Dimensions (W / H / D)	36 / 100 / 63	18 / 118 / 64	72 / 100 / 66	72 / 94.5 / 65	mm
Weight	0.20	0.07	0.32	0.20	kg
Storage temperature range	-40 ~ 70 °C				
Operating temperature range	-25 ~ 60 °C				
Relative humidity range	0% ~ 90%				
Ingress protection rating	IP20				
Installation method	DIN Rail 35 mm				
<b>CT Accessory</b>					
Number of CT	-	1	-	3	pcs
Cable length of CT	-	1	-	1	m
Inner diameter of CT	-	16	-	16	mm
Weight of CT	-	0.09	-	0.09	kg
Max. operating current of CT	-	120	-	120	A
<b>Standard Compliance</b>					
Standard	EN 61010-1:2010, EN 61010-2-030:2010				

1. For more models refer to the Sigenergy website.

# Sigen EV AC Charger



- Green power charging with Sigenenergy home energy solution
- Data tracking & scheduled charging on mySigen App
- Dynamic load management to prevent overload, user-friendly charging\*
- Easy installation with less steps and top/bottom entry option
- Integrated residual current failure protection reduces installation costs
- IP65 protection rating, worry-free outdoor usage with easy O&M

\* Only works with Sigenenergy home energy solution or additional Sigen Power Sensor

## Sigen EV AC Charger 7 / 11 / 22 kW

Sigen EVAC	7	11	22	Units
<b>AC Input &amp; Output</b>				
Nominal charging power	7	11	22	kW
Nominal output voltage	1P/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 <sup>2</sup>
<b>Protection</b>				
Integrated DC fault detection <sup>1</sup>	6			mA
Integrated AC fault detection <sup>1</sup>	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			
<b>User Interface &amp; Communication</b>				
Protocol	RS485, Modbus RTU			
Communication	4G / WLAN / Fast Ethernet			
Authentication	RFID card / App / Auto-charge (no authentication)			
Display	LED indicator / App			
Charging mode <sup>2</sup>	100% PV charging / Solar boost charging / Fast charging			
Metering	External meter with RS485 / Integrated metering IC			
Dynamic load management <sup>3</sup>	Supported			
Phase switching	Supported			
OCPP protocol	OCPP 1.6J ED 2			
<b>General Data</b>				
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
<b>Standard Compliance</b>				
Standard <sup>4</sup>	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			

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.

# mySigen App

Intelligent energy management within touches  
For homeowners

Smarter energy life empowered by mySigen App



## Real-time monitoring

Energy data refresh every 10 seconds  
Visible energy flow & related devices  
Auto. system network display on App



## AI Mode

Provide intelligent optimization suggestions on system mode, battery capacity and energy usage



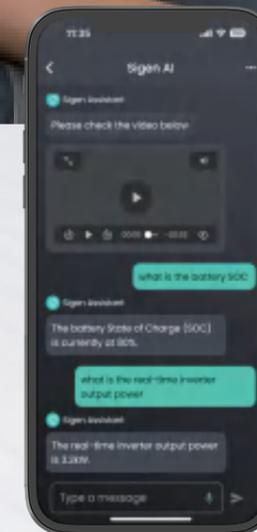
## Sigen Shield

Discover industry-leading battery safety features



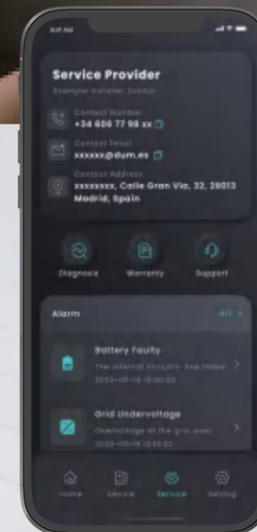
## Fun ambient lighting

Customizable lighting language  
Add personality to your system



## Sigen AI

After-sales engineer  
Home energy analyst  
Device mgmt. assistant



## Interactive services

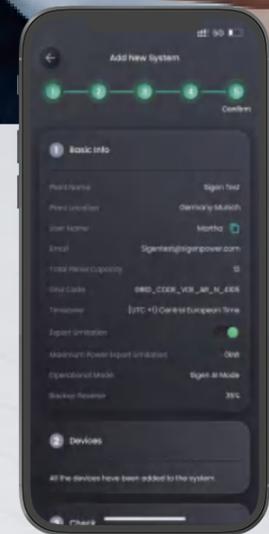
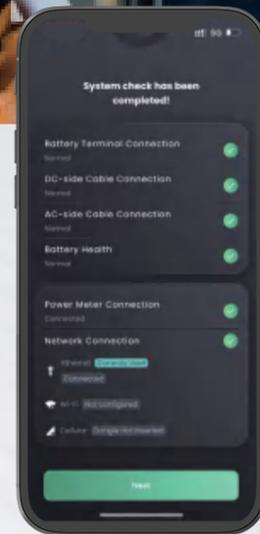
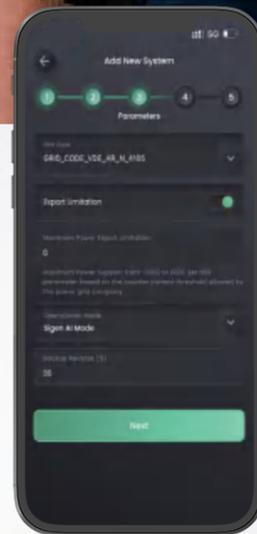
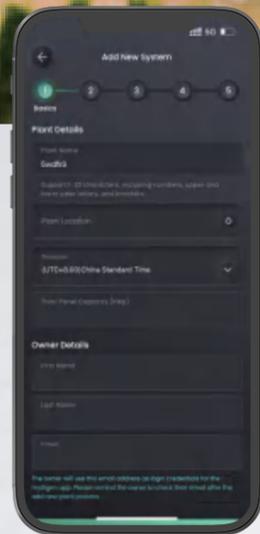
AI-integrated service interface  
Self-diagnosis to identify problems  
Submit service requests via the App

\*The interface may change after the mySigen App version is updated, please refer to the actual interface.

# mySigen App

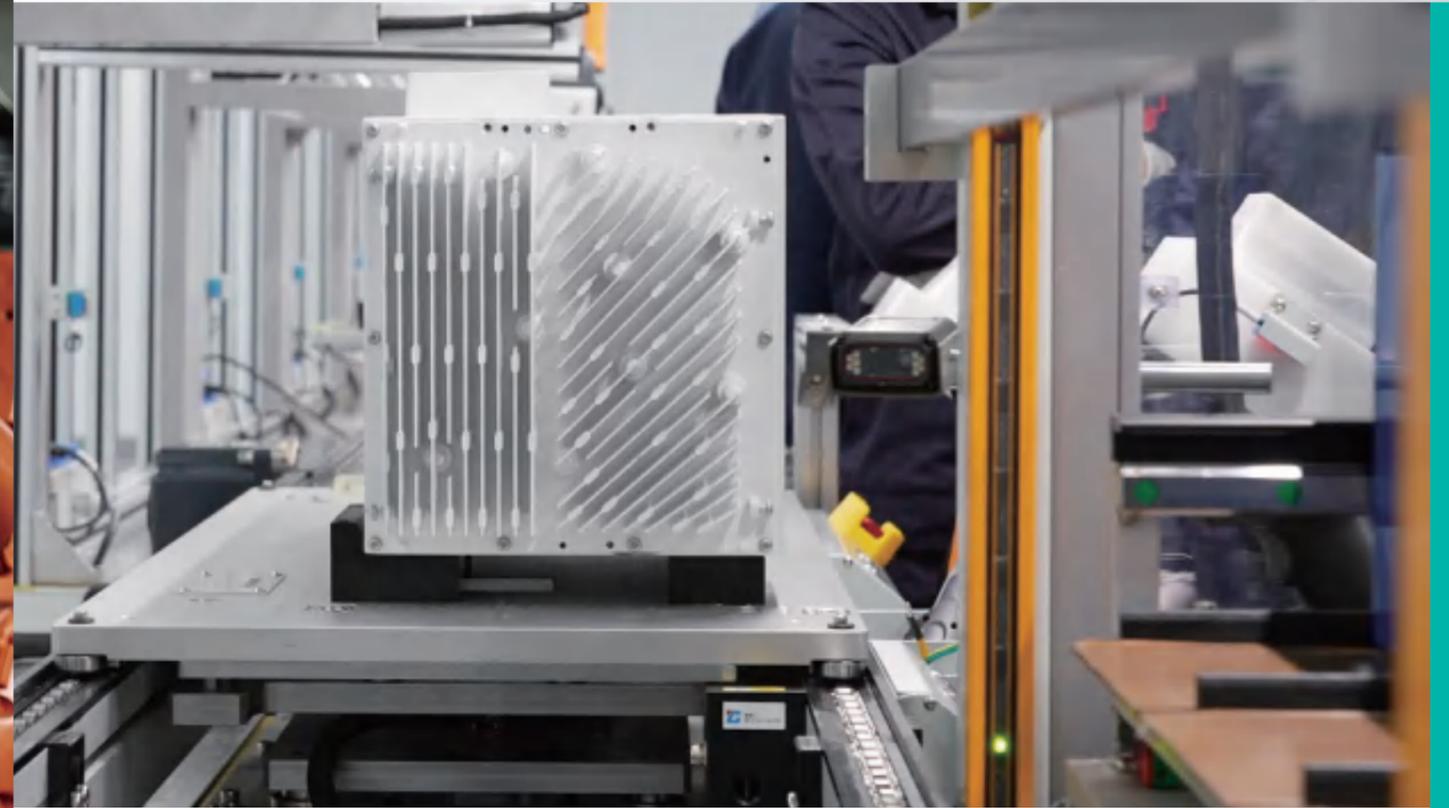
Intelligent energy management within touches  
For installers

Simplify your installation process, one App does it all



\*The interface may change after the mySigen App version is updated, please refer to the actual interface.

# Leading the Way in Intelligent Manufacturing



**6 GWh**

Battery production capacity

**12 GW**

Inverter production capacity

Located in the Lin-gang New Area, Shanghai, a hub of world-class enterprises with strong innovative strengths, the 20,000 sqm manufacturing center is equipped with state-of-the-art technology and innovative manufacturing processes that allow us to produce high-quality products with exceptional efficiency. It also features the latest manufacturing execution system (MES) which streamlines our operations and enables real-time monitoring of the production process.



## 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.

### Plant Size

 3,000 m<sup>2</sup>  362 kW<sub>p</sub>  240 kW<sub>ac</sub>  432 kWh

### Estimated Annual Generation

 398,200 kWh

### Community Contribution per Year

 309t CO<sub>2</sub> emission reduced

 269 equivalent of trees planted



## Manufacturing Execution System (MES)

Quality and efficiency is consistently guaranteed by our MES system, which monitors, tracks, documents, and controls the entire manufacturing process from raw materials to finished products, as well as full product lifecycle management.

# Where Quality Meets Perfection

At Sigenergy, our unwavering commitment to putting the customer first is at the core of everything we do. We firmly believe that delivering top-quality products is paramount to ensuring customer satisfaction and building long-term relationships. With a relentless pursuit of excellence, we constantly strive to develop innovative products that meet and exceed customer expectations. Our strict implementation of rigorous quality control guarantees that every product leaving our factories is of the highest standard. Moreover, we never settle for complacency; Instead, we embrace a culture of continuous improvement to constantly enhance our products and surpass industry standards.



# Powering Homes Worldwide

From Sweden's Frost to South Africa's Sun



From the coldest **-20°C** to the hottest **48°C**,  
from the **coastline** to the **snowfield**,  
from the **century-old** castle to the **modern** villa

SigenStor operates perfectly in a wide range of scenarios, from the frigid temperatures of northern regions like Sweden, where it can drop to -20°C, to the warmer climates of southern regions like Myanmar. Whether installed indoors or outdoors, SigenStor performs reliably in any environment. Whether you want to cut electricity bills, reduce reliance on diesel generators, or whole-home backup during power outages, 5-in-One SigenStor is here to meet your needs.

