

SIGENERGY

Business Energy Solution

Powering the future of business



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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Service Partner



ABOUT SIGENERGY

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VISION Enjoy Green Energy

MISSION

Be a distributed energy pioneer.
Build intelligent energy solutions with superior safety,
ultra simplicity, and outstanding performance.

SIGENERGY

Safe **I**ntelligent **G**reen **E**fficient **N**ew



SIGENERGY BUSINESS ENERGY SOLUTION

By integrating solar power with energy storage, businesses can effectively reduce ongoing utility cost and reliance on the grid. Not only providing a safety net in the event of power emergencies, but also fulfilling corporate social responsibilities. A competitive edge can be obtained by adopting more sustainable practices that align with company values as well as consumer and market trends.

Optimal Investment

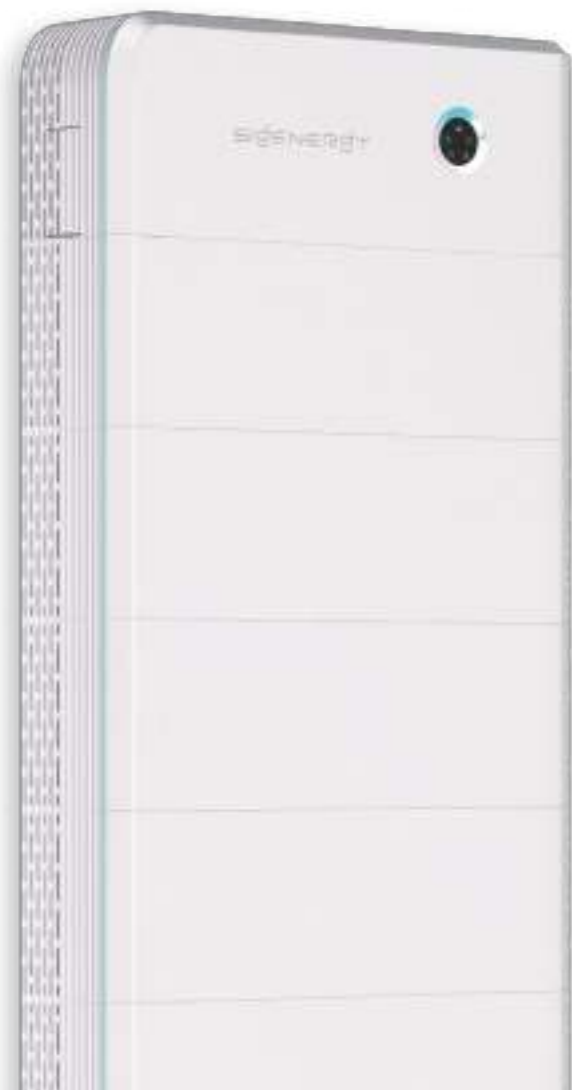
Flexible adaption to different scenarios by modular design
Stackable easy installation with instant commissioning
Free from complex cabling, reducing costs and labor

Minimal O&M

IP66 protection, worry-free O&M and outdoor application
Comprehensive protection at both system and battery levels
Remote one-click full system diagnosis for easy troubleshooting

Higher Yields

Enhanced power generation achieved through more MPPTs
Pack-level battery optimizer for more usable energy
DC coupling system mitigates energy loss from cables



► **Sigen Energy Controller**

► **Sigen Battery**

8.0 **5.0**

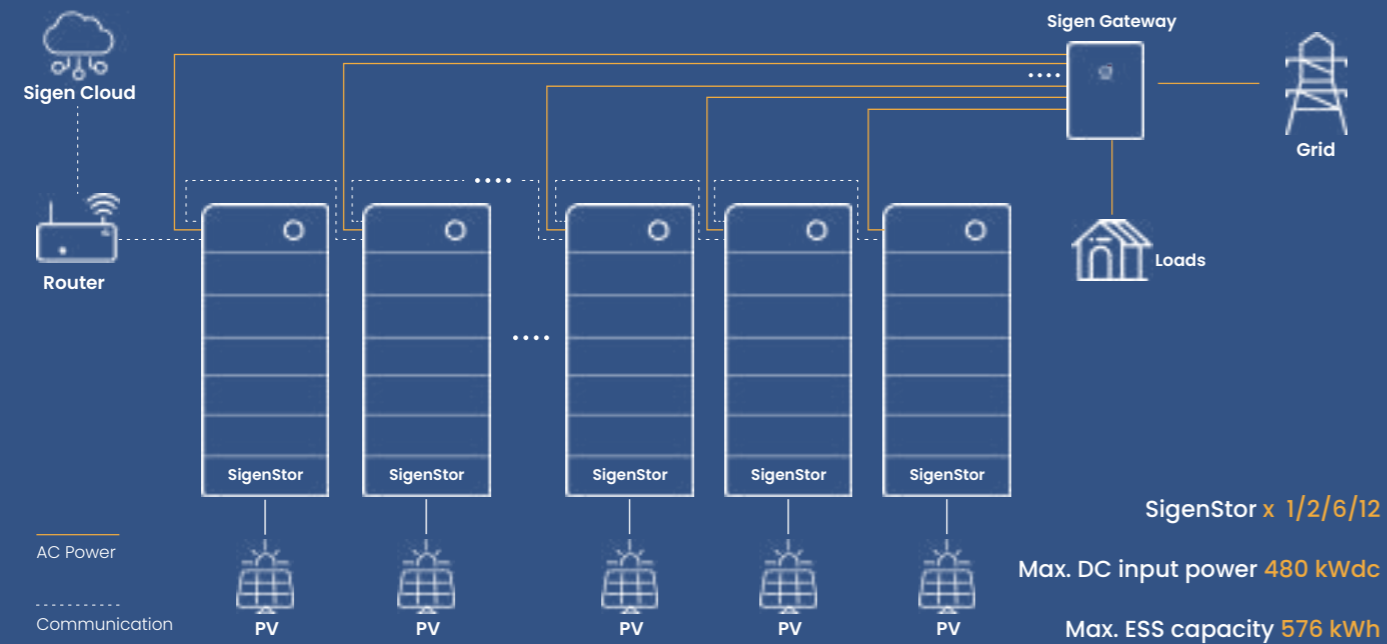
Energy capacity(kWh)

1 – 6
batteries stackable for per stack

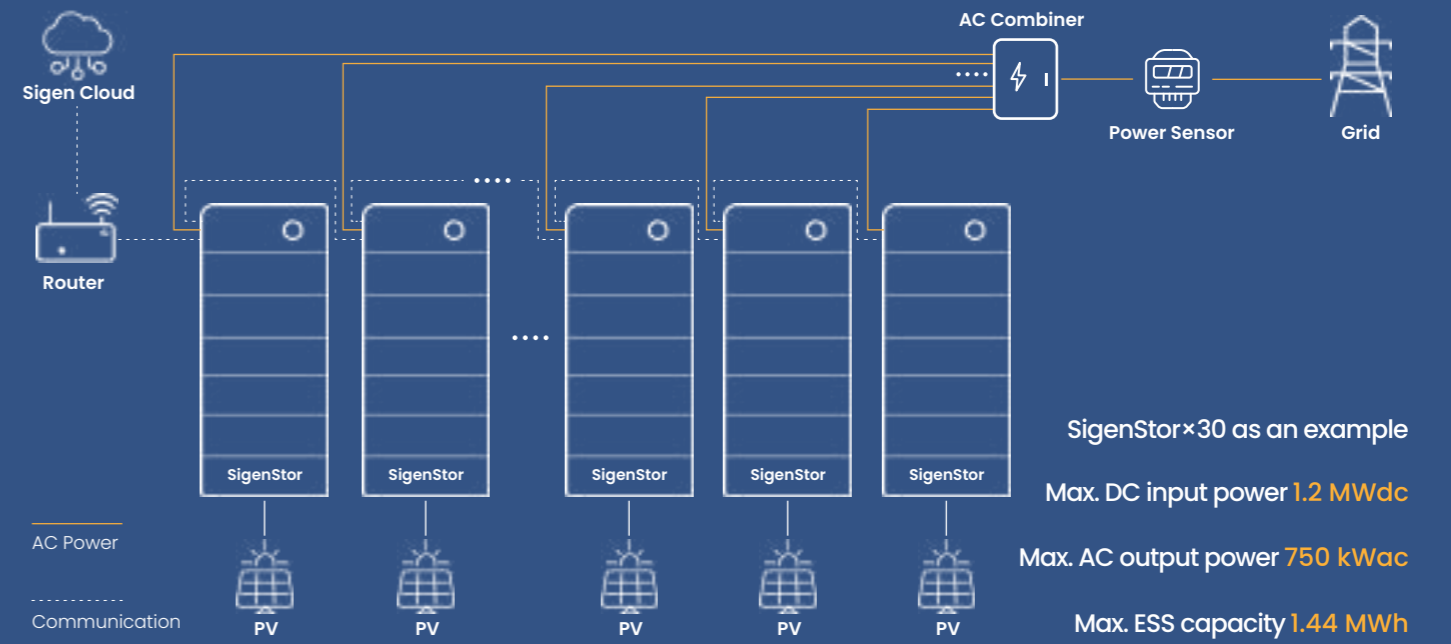
5 kWh – 48 kWh
energy capacity range for per stack

Multiple
systems supported in parallel connection

Hybrid system



On-grid system



Sigen Energy Controller

5.0 – 25.0 kW Three Phase

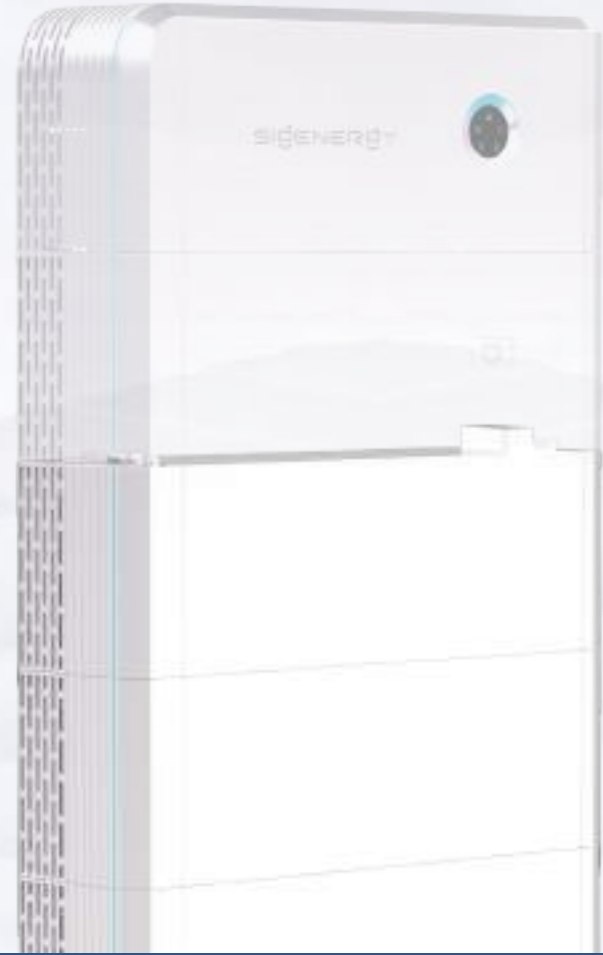
- EMS inside for precise control
- DC ground-fault protection
- Multi-source black start
- On & off-grid compatibility
- DC/AC ratio up to 1.6
- IP66 system protection rating

Sigen Energy Controller 5.0-25.0 kW Three Phase Australia

SigenStor EC	5.0 TP	10.0 TP	15.0 TP	25.0 TP	Units
DC Input (from PV)					
Max. PV power	8000	16000	24000	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
AC Output (on-grid)					
Nominal output power	5000	9999	15000	25000	W
Max. output apparent power	5500	9999	15000	27500	VA
Nominal output current	7.6	14.4	21.7	38.0	A
Max. output current	8.4	14.4	21.7	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%			
Efficiency					
Max. efficiency	98.1%	98.3%	98.3%	98.3%	
European efficiency	96.1%	97.5%	97.9%	98.0%	
AC Output (backup)					
Nominal output power	5000	10000	15000	25000	W
Max. output apparent power	5500	11000	16500	27500	W
Peak output power (10 seconds)	7500	15000	22500	30000	W
Nominal output current	7.6	15.2	22.8	38.0	A
Max. output current	8.4	16.7	25.1	41.8	A
Peak output current (10 seconds)	11.4	22.8	34.2	45.5	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 ¹		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 ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Type II DC/AC surge protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection			
General Data					
Dimensions (W / H / D)		700 / 300 / 260			mm
Weight		36			kg
Storage temperature range		-40 ~ 70			°C
Operating temperature range		-30 ~ 60			°C
Relative humidity range		0% ~ 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 ²		IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2			

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 home loads.

2. For all standards refer to the certificates category in 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, optimized battery cycle life
- Parallel connections for flexible battery mix

Sigen Battery 5.0 / 8.0 kWh

SigenStor BAT	5.0	8.0	Units
Performance Specification			
Battery type	LiFePO4		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity ¹	5.2	7.8	kWh
Battery modules voltage range	300 ~ 900		V
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		
Standard Compliance			
Standard	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040		

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

Sigen Energy Gateway



- 0 ms load side disruption, worry-free energy usage
- Ready for generator*, heat pump and other controllable loads
- 350 ms reserve power flow protection of grid & generator
- Uninterrupted power supply through PV+ESS/grid/generator*

* Generator support is exclusive to the Sigen Energy Gateway HomeMax

Sigen Energy Gateway Home Series Three Phase

Preliminary

Sigen Gateway	Home TP	HomeMax TP	Units
Grid Connection			
Grid connection type	Three phase		
Nominal AC input / output voltage	380 / 400		V
Nominal AC input / output current	38	76	A
Nominal AC input / output power	25 / 26.3	50 / 52.6	kW
Nominal AC frequency	50 / 60		Hz
Disruption time of backup switch ¹	0		ms
AC Output to Backup Port			
Nominal AC output voltage	380 / 400		V
Nominal AC output current	38	76	A
Nominal AC output power	25 / 26.3	50 / 52.6	kW
Nominal AC frequency	50 / 60		Hz
Overvoltage category	III		
Inverter Connection			
Max. number of connections	1	2	
Nominal AC voltage	380 / 400		V
Nominal AC input current	38		A
Smart Port Connection			
Generator output voltage	-	380 / 400	V
Nominal input / output current	-	76	A
Nominal AC input / output power	-	50 / 52.6	kW
Generator 2-wire start	-	Supported	
General Data			
Dimensions (W / H / D)	450 / 300 / 160	510 / 750 / 179	mm
Weight	< 15	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.

Sigen Hybrid Inverter

5.0 – 25.0 kW Three Phase



- Battery ready, future proof
- DC ground-fault protection
- DC/AC ratio up to 1.6
- Up to 4 MPP. trackers
- IP66 protection rating

Sigen Hybrid Inverter 5.0–25.0 kW Three Phase Australia

Sigen Hybrid	5.0 TP	10.0 TP	15.0 TP	25.0 TP	Units
DC Input					
Max. PV power	8000	16000	24000	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
AC Output (on-grid)					
Nominal output power	5000	9999	15000	25000	W
Max. output apparent power	5500	9999	15000	27500	VA
Nominal output current	7.6	14.4	21.7	38.0	A
Max. output current	8.4	14.4	21.7	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%			
Efficiency					
Max. efficiency	98.1%	98.3%	98.3%	98.3%	
European efficiency	96.1%	97.5%	97.9%	98.0%	
Additional Features					
Compatible battery module		SigenStor BAT 5.0 / 8.0			
Number of modules per controller		1 ~ 6			pcs
Battery module voltage range		600 ~ 900			V
Off-grid peak output power (10 seconds)	7500	15000	22500	30000	W
Off-grid peak output current (10 seconds)	11.4	22.8	34.2	45.5	A
Nominal output voltage		380 / 400			V
Protection					
Safety protection feature	DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Type II DC/AC surge protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection				
General Data					
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)				
Standard Compliance					
Standard ¹	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2				

1. For all standards refer to the certificates category in the Sigenenergy website.

Sigen EV DC Charging Module



Sigen EV DC Charging Module 12 / 25 kW

Preliminary

SigenStor EVDC ¹	12	25	Units
DC Output			
Max. charging power of charging port	12.5	25	kW
Max. discharging power of charging port	12.5	25	kW
Output voltage range	150 ~ 1000		V
Max. output current	40	80	A
Charging interfaces	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	40		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 ²	5 / 7.5		m
Function			
Authentication	RFID card / App / No authentication		
Application	Bi-directional V2X operation ³ , Smart load management		
User interfaces	LED indicator, App, RFID		
Remote function	OTA, Remote diagnostics		

Experience Fast DC charging

- Max. 25 kW stable bi-directional charging
- 150 V ~ 1000 V charging, wide EV compatibility
- Track & schedule charging on mySigen App
- IP66 system protection, maintenance free
- Charge EV with 100% solar power*

* Works with Sigen Energy Controller in business solar system

1. Sigen EV DC Charging Module needs to be used together with Sigen Energy Controller.
2. 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.
3. 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.

Sigen Communication Module



- IP66 protection rate, 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 standards	4G: FDD-LTE / TDD-LTE 3G: WCDMA / HSDPA / HSUPA / HSPA+ 2G: GSM / GPRS / EDGE3	
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 Power Sensor



- 1% high-accuracy power detection for precise control
- LCD real-time info display, easy to operate and check
- Integrates smoothly with Sigenenergy devices, no need for setup
- Support export/import limitations and ready for AI evolving
- 100 ms data refresh rate, instantaneous data feed

Sigen Power Sensor

Sigen Sensor ¹	TP-CT120-DH	TP-CT300-DH	TP-CT600-DH	Units
Power Supply				
Grid connection type	3P3W/3P4W			
AC input voltage range	173 - 480			Vac
Nominal AC frequency	50 / 60			Hz
Measurement Accuracy				
Voltage accuracy	0.5%			
Current accuracy	0.5%			
Power accuracy	1%			
Frequency accuracy	0.2%			
Communication				
Interface	RS485			
Baud rate	9600			bps
Protocol	Modbus RTU			
General Data				
Dimensions (W / H / D)	72 / 94.5 / 65			mm
Weight	0.20	0.20	0.23	kg
Storage temperature range	-40 - 85			°C
Operating temperature range	-30 - 60			°C
Relative humidity range	0% - 90%			
Ingress protection rating	IP51			
Installation method	DIN Rail 35 mm			
CT Accessory				
Number of CT	3	3	3	pcs
Cable length of CT	1	1	1	m
Inner diameter of CT	16	24	36	mm
Weight of CT	0.09	0.2	0.4	kg
Max. operating current of CT	120	300	600	A
Standard Compliance				
Standard	EN 61010-1:2010, EN 61010-2-030:2010			

¹ For more models refer to the Sigenenergy website.

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 software (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 achieved 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 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

Turning the Office into a Green Space with Renewable Energy

We have implemented a sustainable office by installing a 1,050 sqm PV plant and a 448 kWh energy storage system on the rooftop. This strategic investment not only ensures an abundant supply of clean energy but also leads to substantial reductions in carbon emissions. This system features a robust 0 ms load side disruption function, ensuring uninterrupted power supply for the entire office, which provides each employee with a worry-free and green energy usage experience.

Plant Size

1,050 m² 191.4 kW_p 250 kW_{ac} 448 kWh

Estimated Annual Generation

210,540 kWh

Community Contribution per Year

210t CO₂ emission reduced

241 equivalent of trees planted





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.



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.





Flexible to accommodate various scenarios



Max. Self-consumption



Lower Electricity Bills



24/7 Hours Uninterrupted Power



Virtual Grid Expansion

Our systems are modular and easily stackable, starting from 5 kWh for the energy storage battery. It can finely match different capacity requirements, flexibly adapting to various small commercial and industrial business requirements. The modular design with quick connectors enables easy installation just like building LEGO blocks. With a complete system commissioning time of less than 10 minutes, rapid & low cost deployment is easily achievable.

