SIGENERGY

Business Energy Solution

Powering the future of business

Website | LinkedIn | YouTube

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

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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.

SIGEN

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

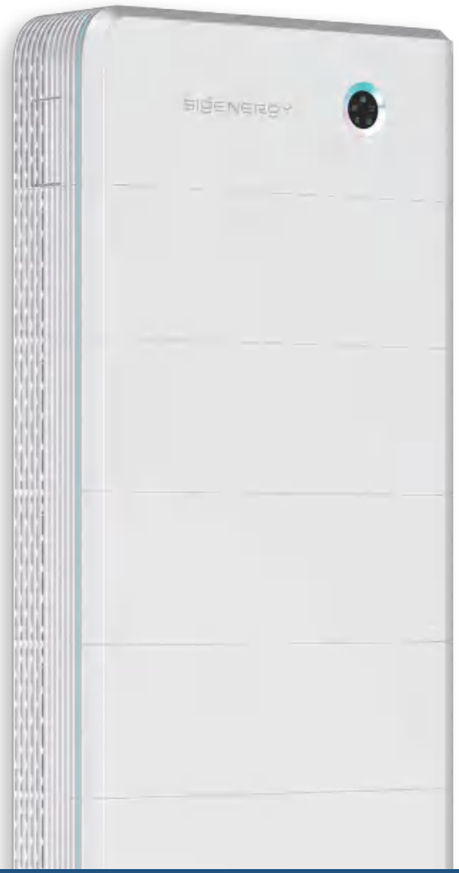
Flexible adaption to different scenarios by modular design
Stackable easy installation with instant commissioning
Free from complex cabling, reducing costs and labor

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

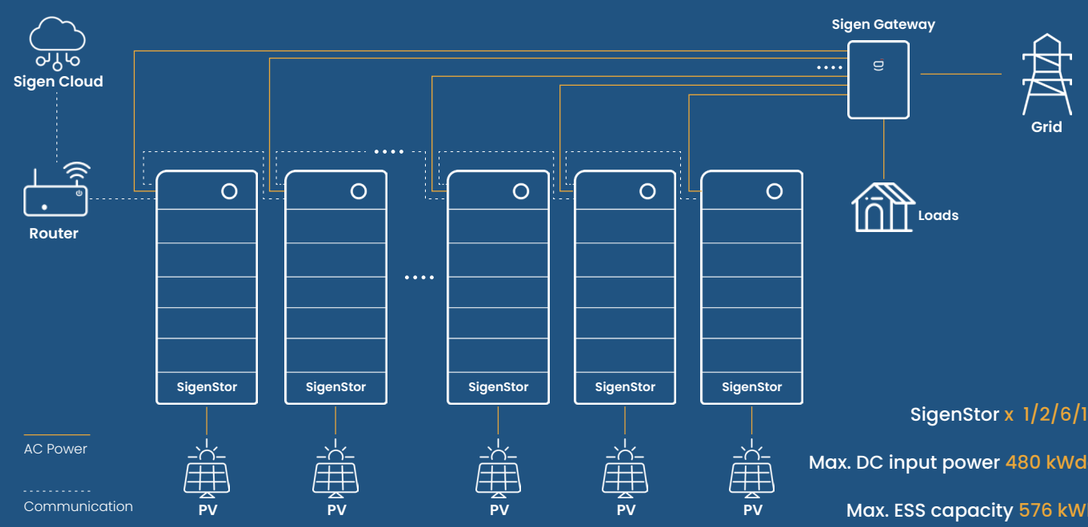
Energy capacity(kWh)

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

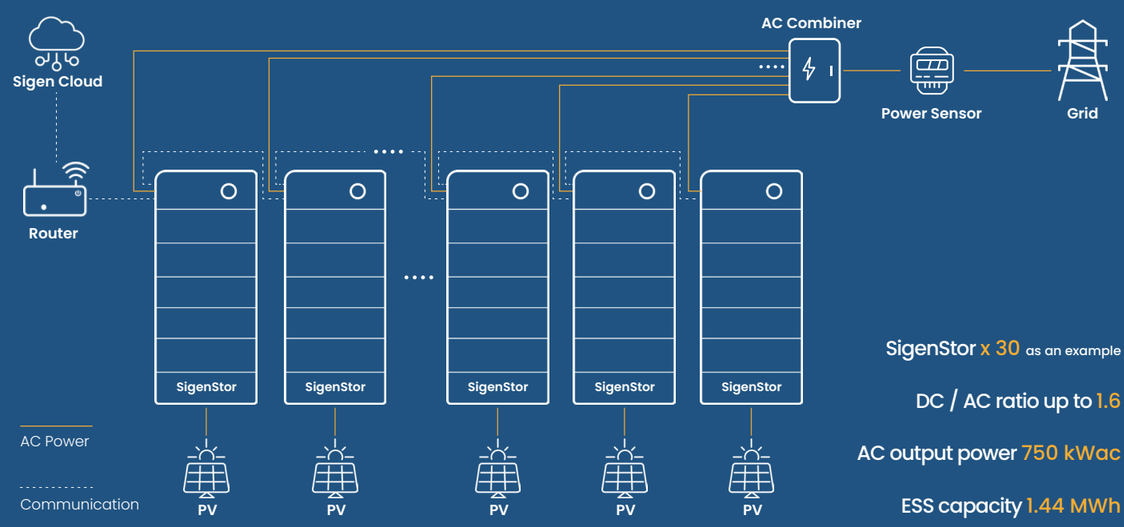


SigenStor x 1/2/6/12

Max. DC input power 480 kWdc

Max. ESS capacity 576 kWh

On-grid system



SigenStor x 30 as an example

DC / AC ratio up to 1.6

AC output power 750 kWac

ESS capacity 1.44 MWh

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

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	Units
DC Input (from PV)										
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
AC Output (on-grid)										
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%									
Efficiency										
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%	
AC Output (backup)										
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	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 [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									

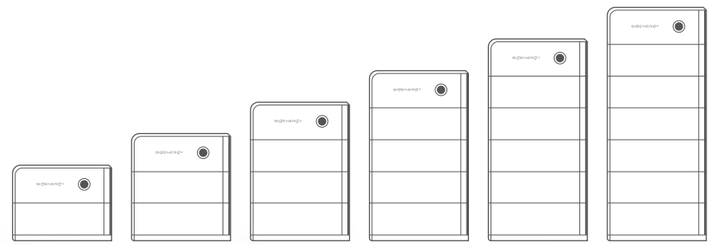
1. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Controller needs to be used together with Sigen Battery and Sigen Energy Gateway. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the backup loads.
2. For all standards refer to the certificates category in the Sigenergy 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 (three phase system)	600 ~ 900		V
Max. charge / discharge power	2500	4000	W
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		



Number of battery modules [2]	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 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

Sigen Energy Gateway HomeMax Three Phase

Preliminary

Sigen Gateway	HomeMax TP	Units
Grid Connection		
Grid connection type	Three phase	
Nominal AC input / output voltage	380 / 400	V
Nominal AC input / output current	76	A
Nominal AC input / output power	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	76	A
Nominal AC output power	50 / 52.6	kW
Nominal AC frequency	50 / 60	Hz
Overvoltage category	III	
Inverter Connection		
Max. number of connections	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	
Nominal AC input / output power	50 / 52.6	kW
Generator 2-wire start	Supported	
General Data		
Dimensions (W / H / D)	510 / 750 / 179	mm
Weight	23	kg
Storage temperature range	-40 ~ 70	℃
Operating temperature range	-30 ~ 55	℃
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

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	Units
DC Input										
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
AC Output (on-grid)										
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%									
Efficiency										
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%	
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
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	W
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 Sigenergy website.

Sigen PV Inverter

5.0 - 25.0 kW Three Phase

- Easy installation with side cabling
- Visible energy tracking on mySigen App
- WLAN, Ethernet & 4G communication
- IP66 protection rating
- DC/AC ratio up to 1.6
- Up to 4 MPP. trackers

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
DC Input										
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
AC Output										
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%									
Efficiency										
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%	
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 Sigenergy website.

Sigen EV DC Charging Module

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

Sigen EV DC Charging Module 12 / 25 kW

Preliminary

SigenStor EVDC [1]	12	25	Units
DC Charging			
Max. charging power of charging port	12.5	25	kW
Max. discharging power of charging port	12.5	25	kW
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 diagnosis		

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	℃
Operating temperature range	-30 ~ 60	℃
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	

Sigen Power Sensor

- 1% high-accuracy power detection for precise control
- LCD real-time info display, easy to operate and check
- Integrates smoothly with Sigenergy 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 Sigenergy 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 m^2 | 362 kW_p | 240 kW_{ac} | 432 kWh

Estimated Annual Generation

398,200 kWh

Community Contribution per Year

309t CO_2 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 m^2 | 191.4 kW_p | 250 kW_{ac} | 448 kWh

Estimated Annual Generation

210,540 kWh

Community Contribution per Year

210t CO_2 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.

Max.
Self-consumption

Lower
Electricity Bills

24/7 Hours
Uninterrupted Power

Virtual Grid
Expansion

Flexible to accommodate various scenarios

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.