



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.

www.sigenergy.com

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Enjoy Green Energy

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.

SIGENERGY BUSINESS ENERGY SOLUTION

Optimal CAPEX | Reduced OPEX | Higher Revenue



SigenStack



Sigen Hybrid Inverter



SigenStor



Sigen Energy Gateway

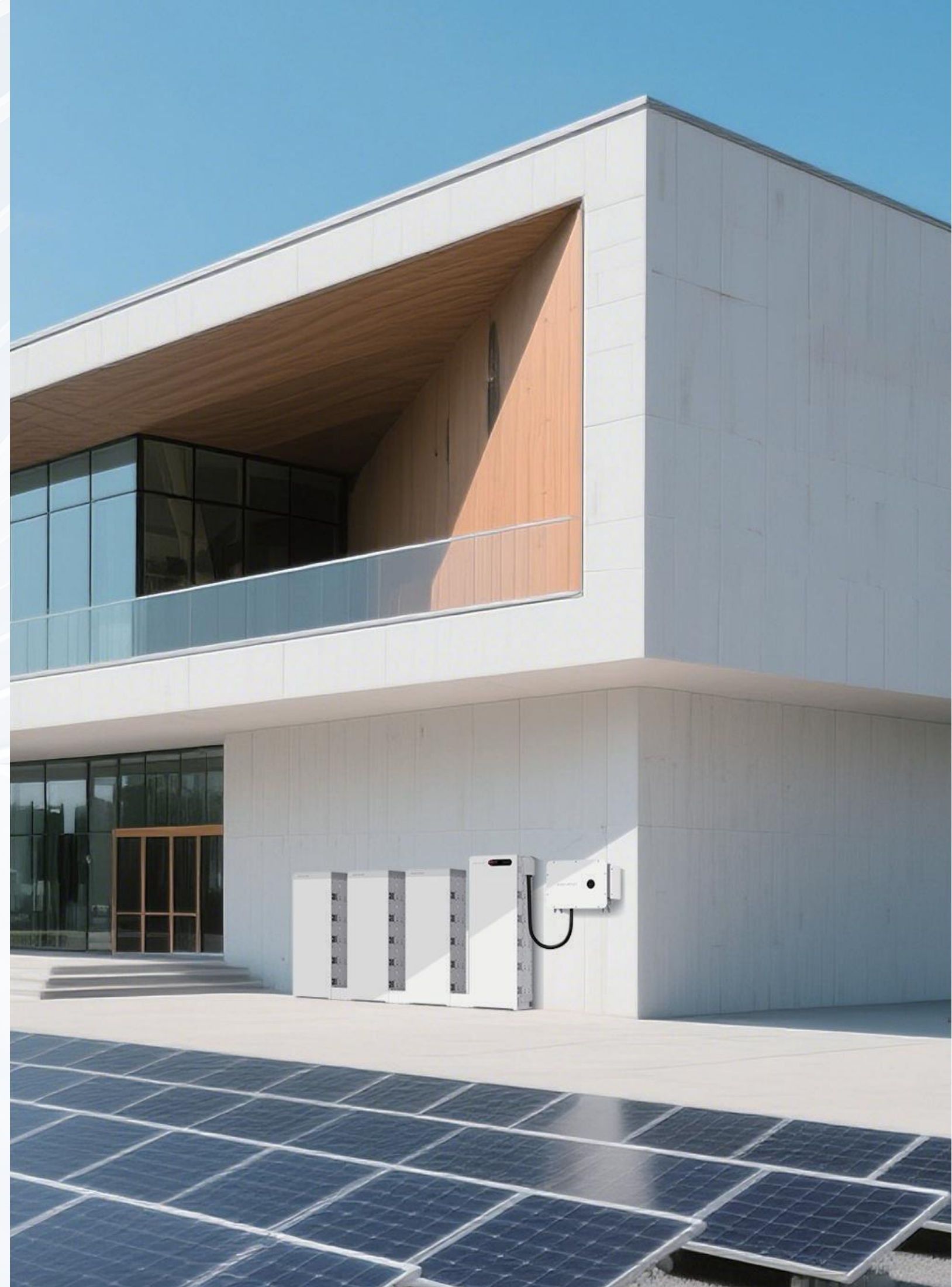
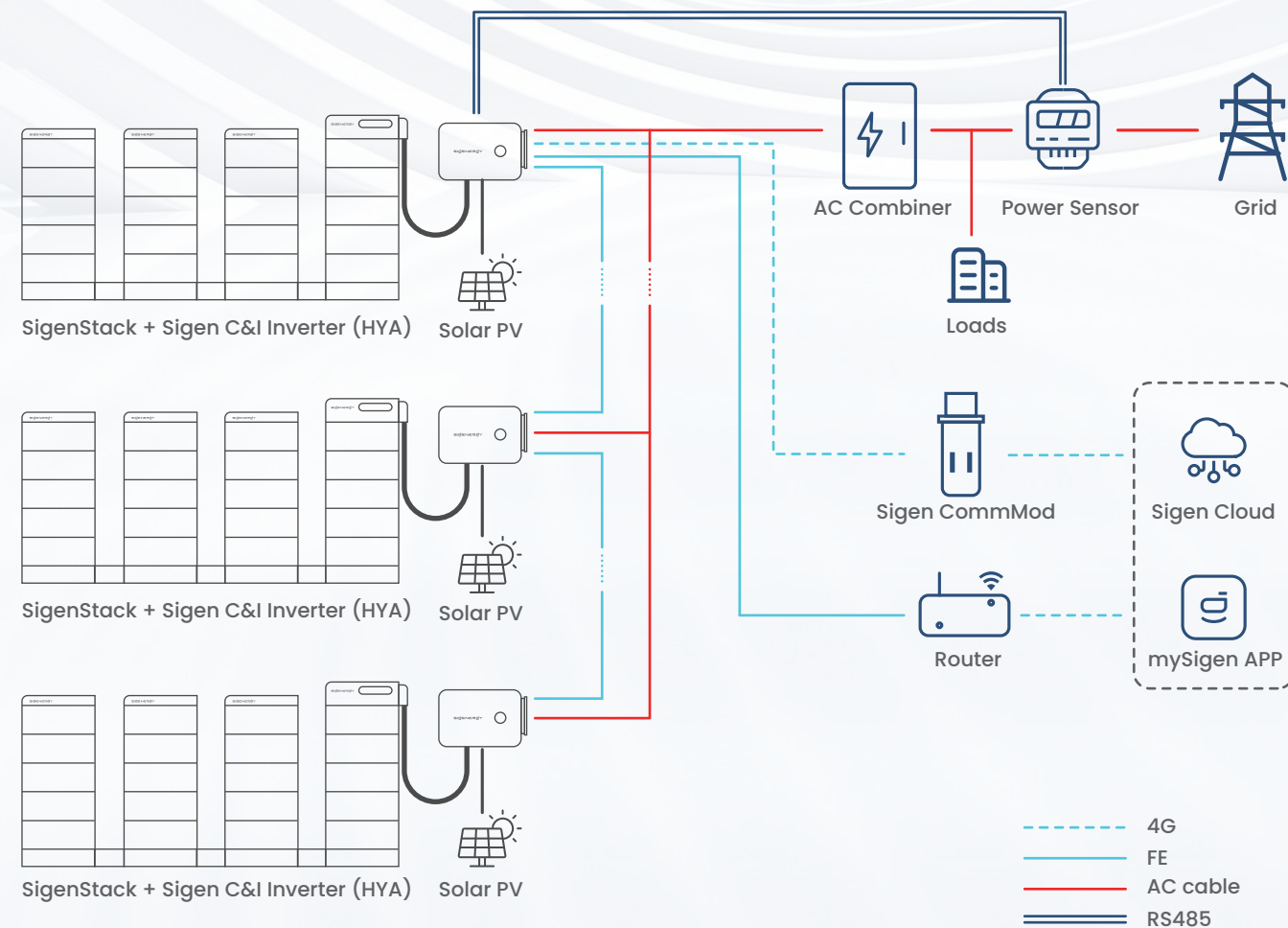


Sigen Cloud & mySigen App

On-grid PV+ESS System

In scenarios with a stable grid power supply, the system intelligently optimizes energy utilization to maximize solar self-consumption and user benefits. When solar generation is abundant, excess energy is stored in the battery. When solar power becomes insufficient, the system seamlessly discharges the battery to power the loads, ensuring efficient energy management and enhanced economic returns.

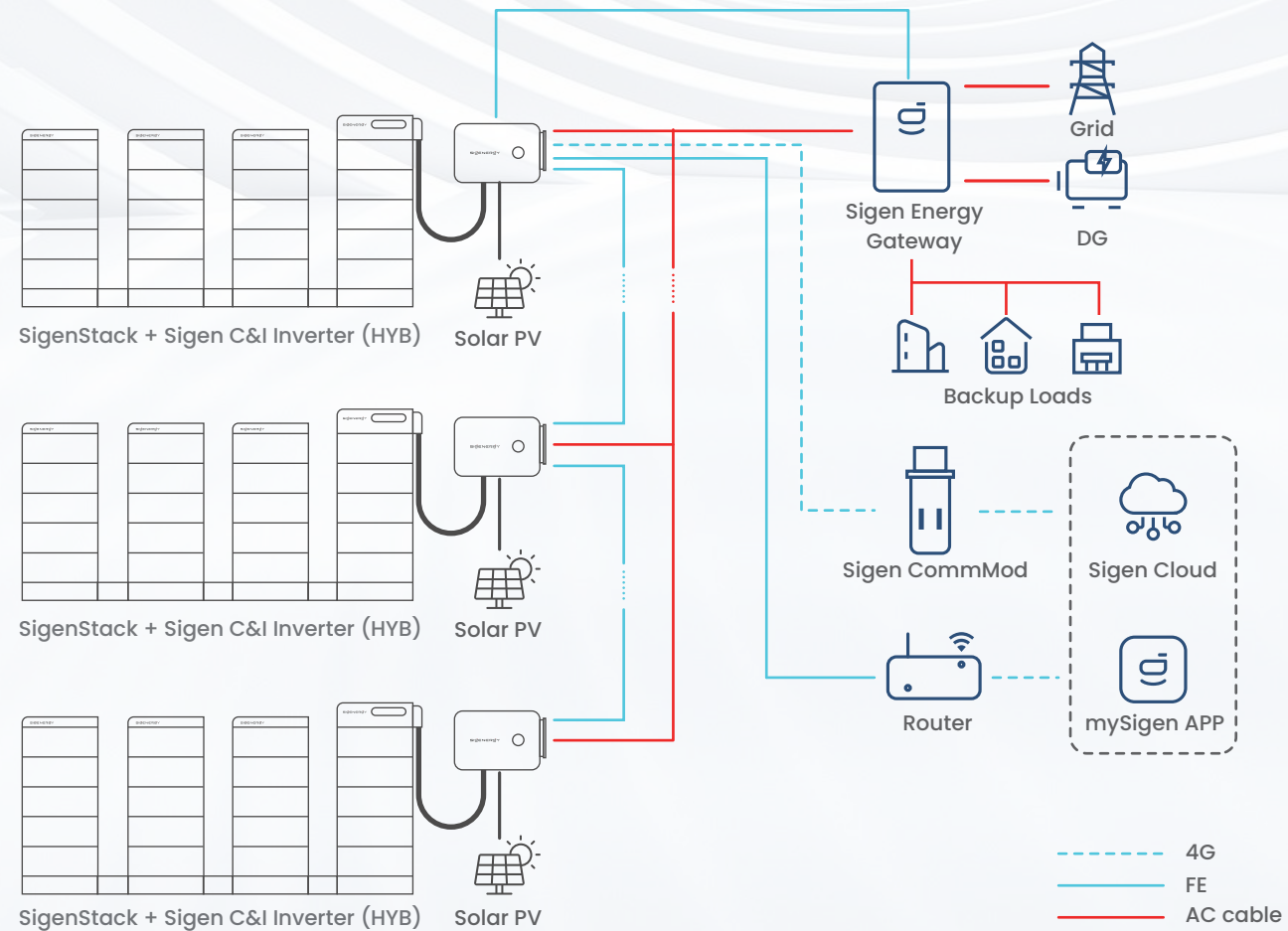
Equipped with an integrated Energy Management System (EMS), Sigenergy solution supports multiple inverters operating in parallel without the need for an external data logger, enabling a simplified system architecture. Featuring a “Battery Ready” inverter, Sigenergy solution adopts a true DC-coupled architecture, maximizing energy conversion efficiency while significantly optimizing CAPEX (capital expenditures), slashing O&M cost, and enhancing system efficiency.



Micro-grid PV+ESS System

In microgrid scenarios, the system operates independently to ensure a continuous and reliable power supply. When solar energy is abundant, it powers the loads and charges the battery. When there is a power outages on the grid at night, the battery discharges to supply the loads. If both solar and battery energy are unavailable, a diesel generator automatically starts to maintain uninterrupted power. This seamless coordination among solar, battery, grid, and diesel generator guarantees stable and resilient energy for microgrid applications.

Multi-unit parallel connection through a gateway enables flexible system scaling from kilowatts to megawatts, supporting a wider range of microgrid sizes. Sigenergy DC-coupled microgrid solution streamlines system design, improves energy conversion efficiency, and delivers a robust, cost-effective, and reliable power solution for your business.



Sigen PV Inverter

50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW



- Fully networked communication, enabling rapid commissioning
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 500m AFCI, top-tier safety across applications
- IP66 protection rating, ensuring worry-free outdoor deployment

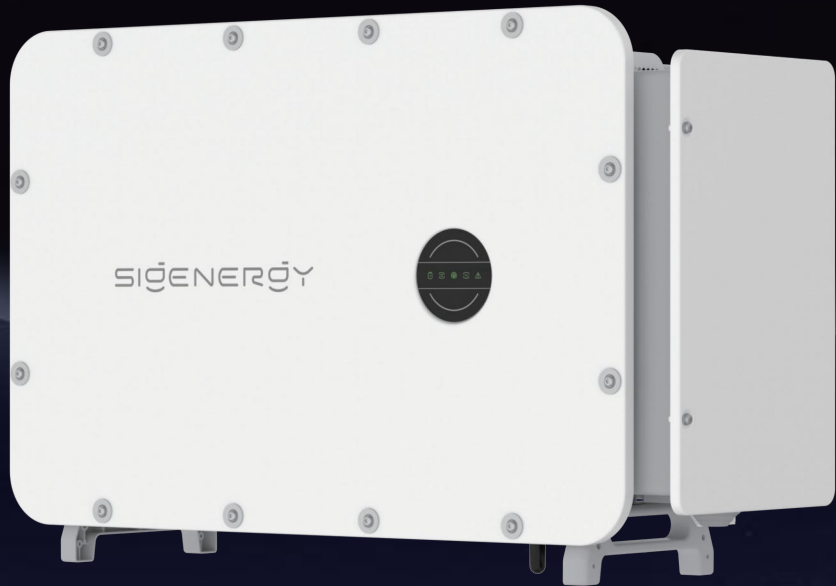
Sigen PV Inverter 50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW

Sigen PV	50M1	60M1	80M1	100M1	110M1	125M1	Units
DC Input							
Max. PV input power	100,000	120,000	160,000	200,000	220,000	220,000	Wp
Max. DC input voltage ¹	1,100						V
Nominal DC input voltage	600						V
Start-up voltage	180						V
MPPT voltage range	160 ~ 1,000						V
Number of MPP. trackers	4	5	6	8	8	8	
Number of PV strings per MPPT	2						
Max. input current per MPPT	40						A
Max. short-circuit current per MPPT	60						A
AC Output							
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	137,500	VA
Max. output active power (cosΦ=1)	55,000	66,000	88,000	110,000	121,000	137,500	W
Nominal output current @380 Vac	76.0	91.2	121.5	151.9	167.1	189.9	A
Nominal output current @400 Vac	72.5	87.0	115.9	144.9	159.4	181.2	A
Max. output current @380/400 Vac	83.6	100.3	133.7	167.1	183.8	208.9	A
Nominal output voltage	380 / 400, 3W+(N)+PE						Vac
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 3%	THDi < 3%	THDi < 2%	THDi < 2%	THDi < 2%	THDi < 2%	
Efficiency							
Max. efficiency	98.6%						
European efficiency	98.3%	98.3%	98.3%	98.4%	98.4%	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 surge protection (Type I + II optional), Type II AC surge protection, Anti-islanding protection						
General Data							
Dimensions (W / H / D)	918 / 640 / 340						mm
Weight	69	72	72	72	72	83	kg
Nighttime power consumption	< 3.5						W
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 100%						
Max. operating altitude	5,000 (Derating at 4,000 m)						m
PV connection type	MC4 / H4 Pro (Max. 6 mm²)						
AC connection type	OT / DT terminal (Max. 240 mm²)						
Cooling	Smart air cooling						
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. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2. For all standards refer to the certificates category on the Sigenenergy website.
3. The information in this document reflects the current state of technology and is subject to change without notice. For the latest updates, please refer to the Sigenenergy website.

Sigen PV Inverter

150.0 / 166.6 kW



- 166.6kW industry new power benchmark, engineered for max. project value
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 500m AFCI, top-tier safety across applications
- IP66 protection rating, ensuring worry-free outdoor deployment



Sigen PV Inverter 150.0 / 166.6 kW

Preliminary

Sigen PV	150M1	166M1	Units
DC Input			
Max. PV input power	270,000	270,000	Wp
Max. DC input voltage ¹	1,100		V
Nominal DC input voltage	600 @380/400 Vac, 720 @480 Vac		V
Start-up voltage	180		V
MPPT voltage range	160 ~ 1,000		V
Number of MPP. trackers	9		
Number of PV strings per MPPT	2		
Max. input current per MPPT	40		A
Max. short-circuit current per MPPT	60		A
AC Output			
Nominal output active power	150,000	166,600	W
Max. output apparent power	165,000	183,260	VA
Max. output active power (cosΦ=1)	165,000	183,260	W
Nominal output current @380 Vac	227.9	253.1	A
Nominal output current @400Vac	217.4	241.4	A
Nominal output current @480 Vac	180.5	200.5	A
Max. output current @380/400 Vac	250.7	278.4	A
Max. output current @480 Vac	198.6	220.5	A
Nominal output voltage	380 / 400 / 480, 3W+(N)+PE		Vac
Nominal grid frequency	50 / 60		Hz
Power factor	0.8 leading ~ 0.8 lagging		
Total current harmonic distortion	THDi < 1% ²		
Efficiency			
Max. efficiency @380/400 Vac	98.6%		
European efficiency @380/400 Vac	98.2%		
Max. efficiency @480 Vac	98.8%		
European efficiency @480 Vac	98.4%		
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)	1019 / 668 / 340		mm
Weight	100		kg
Nighttime power consumption	< 4.0		W
Storage temperature range	-40 ~ 70		°C
Operating temperature range	-30 ~ 60		°C
Relative humidity range	0% ~ 100%		
Max. operating altitude	5,000 (Derating at 4,000m)		m
PV connection type	H4 Pro (Max. 6 mm²)		
AC connection type	OT / DT terminal (Max. 400 mm²)		
Cooling	Smart air cooling		
Ingress protection rating	IP66		
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)		
Standard Compliance			
Standard ³	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2		

1.

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

2.

This is tested under rated operating conditions.

3.

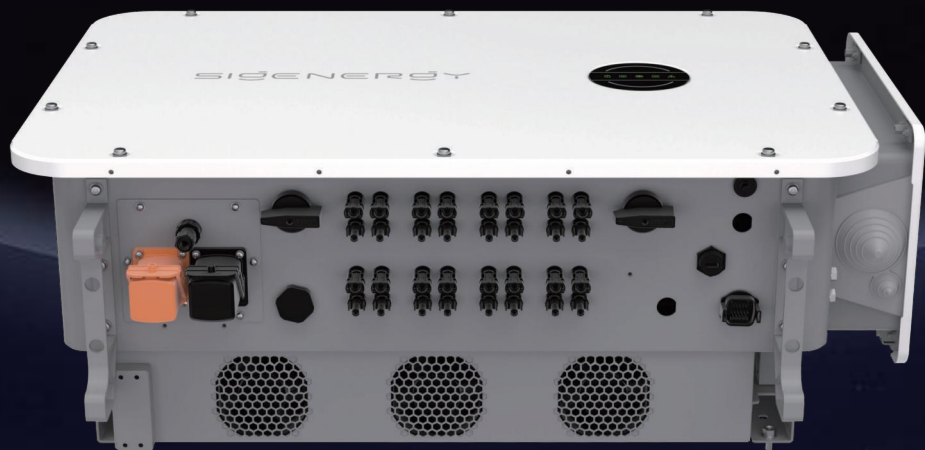
For all standards refer to the certificates category on the Sigenenergy website.

4.

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Sigen Hybrid Inverter

50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW



- Battery ready, easy upgrades to a PV + BESS at any time
- Smaller and lighter, easier installation and transportation
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 500m AFCI, top-tier safety across applications
- Fully networked communication, enabling rapid commissioning
- IP66 protection rating, ensuring worry-free outdoor deployment



Sigen Hybrid Inverter 50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW

Sigen PV	50M1-HYA	60M1-HYA	80M1-HYA	100M1-HYA	110M1-HYA	125M1-HYA	Units
DC Input (PV)							
Max. PV input power	100,000	120,000	160,000	200,000	220,000	220,000	Wp
Max. DC input voltage ¹	1,100						V
Nominal DC input voltage	600 @380/400 Vac, 720 @480 Vac						V
Start-up voltage	180						V
MPPT voltage range	160 ~ 1,000						V
Number of MPP. trackers	4	5	6	8	8	8	
Number of PV strings per MPPT	2						
Max. input current per MPPT	40						A
Max. short-circuit current per MPPT	60						A
DC Input (Battery)							
Battery module models	SigenStack BAT 12.0						
System configuration quantity range ²	4 ~ 21						pcs
Max. charge power ³	55,000	66,000	88,000	110,000	121,000	137,500	W
Max. discharge power	55,000	66,000	88,000	110,000	121,000	137,500	W
Max. operating current	180						A
AC Output							
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	137,500	VA
Max. output active power (cosΦ=1)	55,000	66,000	88,000	110,000	121,000	137,500	W
Nominal output current @380 Vac	76.0	91.2	121.5	151.9	167.1	189.9	A
Nominal output current @400 Vac	72.5	87.0	115.9	144.9	159.4	181.2	A
Nominal output current @480 Vac	60.2	72.2	96.3	120.3	132.4	150.4	A
Max. output current @380/400 Vac	83.6	100.3	133.7	167.1	183.8	208.9	A
Max. output current @480 Vac	66.2	79.4	105.9	132.4	145.6	165.5	A
Nominal output voltage	380 / 400 / 480, 3W+(N)+PE						Vac
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 3%	THDi < 3%	THDi < 2%	THDi < 2%	THDi < 2%	THDi < 2%	
Efficiency							
Max. efficiency @380/400 Vac	98.6%						
European efficiency @380/400 Vac	98.3%	98.3%	98.3%	98.4%	98.4%	98.3%	
Max. efficiency @480 Vac	98.8%						
European efficiency @480 Vac	98.4%	98.4%	98.4%	98.6%	98.6%	98.4%	
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 surge protection (Type I + II optional), Type II AC surge protection, Anti-islanding protection						
General Data							
Dimensions (W / H / D)	918 / 640 / 340					999 / 668 / 340	mm
Weight	72	75	75	78	78	95	kg
Nighttime power consumption	< 3.5					< 4	W
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 100%						
Max. operating altitude	5,000 (Derating at 4,000m)						m
PV connection type	MC4 / H4 Pro (Max. 6 mm²)						
AC connection type	OT / DT terminal (Max. 240 mm²)						
Cooling	Smart air cooling						
Ingress protection rating	IP66						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						
Standard Compliance							
Standard ⁴	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2						

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

2. The requirements for the PV string open-circuit voltage in a PV+ESS DC coupling system are as follows: 1.) When the system is configured with ≥19 battery modules, the string open-circuit voltage should meet the following minimum requirements: 1.1) If configured with 21 battery modules, the string open-circuit voltage should be > 935 V; 1.2) If configured with 20 battery modules, the string open-circuit voltage should be > 870 V; 1.3) If configured with 19 battery modules, the string open-circuit voltage should be > 805 V. 2) When the system is configured with 4 to 18 battery modules, the string open-circuit voltage has no special requirements.

3. This represents the combined input from PV DC and rectified AC sources, while actual power depends on site configuration and operating condition.

4. For all standards refer to the certificates category on the Sigenenergy website.

5. The information in this document reflects the current state of technology and is subject to change without notice. For the latest updates, please refer to the Sigenenergy

Sigen Hybrid Inverter

50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW



- Seamless switchover, ensuring 0ms load-side disruption operation
- 150% overload for 10s, handling impact loads for smooth device startup
- Minimal size & weight in the same power range, ensures simple installation
- Multi-unit connection via Energy Gateway, flexible expansion from kW to MW
- DC coupling micro-grid solution, simplifies configuration & boosts efficiency



Sigen Hybrid Inverter 50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW Preliminary

Sigen PV	50MI-HYB	60MI-HYB	80MI-HYB	100MI-HYB	110MI-HYB	125MI-HYB	Units
DC Input (PV)							
Max. PV input power	100,000	120,000	160,000	200,000	220,000	220,000	Wp
Max. DC input voltage ¹	1,100						V
Nominal DC input voltage	600 @380/400 Vac, 720 @480 Vac						V
Start-up voltage	180						V
MPPT voltage range	160 ~ 1,000						V
Number of MPP trackers	4	5	6	8	8	8	
Number of PV strings per MPPT	2						
Max. input current per MPPT	40						A
Max. short-circuit current per MPPT	60						A
DC Input (Battery)							
Battery module models	SigenStack BAT 12.0						
Battery controller models	SigenStack BC M2-0.5C-BST / SigenStack BC M2-1C-BST						
System configuration quantity range ²	4 ~ 21						pcs
Max. charge power ³	55,000	66,000	88,000	110,000	121,000	137,500	W
Max. discharge power	55,000	66,000	88,000	110,000	121,000	137,500	W
Max. operating current	180						A
AC Output (On-grid)							
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	137,500	VA
Max. output active power (cosφ=1)	55,000	66,000	88,000	110,000	121,000	137,500	W
Nominal output current @380 Vac	76.0	91.2	121.5	151.9	167.1	189.9	A
Nominal output current @400 Vac	72.5	87.0	115.9	144.9	159.4	181.2	A
Nominal output current @480 Vac	60.2	72.2	96.3	120.3	132.4	150.4	A
Max. output current @380/400 Vac	83.6	100.3	133.7	167.1	183.8	208.9	A
Max. output current @480 Vac	66.2	79.4	105.9	132.4	145.6	165.5	A
Nominal output voltage	380 / 400 / 480, 3W+N+PE						Vac
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 3%						
AC Input (On-grid)							
Max. input apparent power	100,000	120,000	160,000	160,000	160,000	160,000	VA
Max. input current @380/400 Vac	151.9	182.3	243.1	243.1	243.1	243.1	A
Max. input current @480 Vac	120.3	144.4	192.5	192.5	192.5	192.5	A
Max. continuous AC passthrough (grid to load)	83.6	100.3	133.7	167.1	183.8	189.9	A
AC Output (Backup)							
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	125,000	VA
Peak output power (10 seconds)	75,000	90,000	120,000	150,000	150,000	150,000	W
Nominal output voltage	380 / 400 / 480, 3W+N+PE						V
Nominal grid 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 @380/400 Vac	98.6%						
European efficiency @380/400 Vac	98.3%	98.3%	98.3%	98.4%	98.4%	98.3%	
Max. efficiency @480 Vac	98.8%						
European efficiency @480 Vac	98.4%	98.4%	98.4%	98.6%	98.6%	98.4%	
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)	1097 / 668 / 340						mm
Weight	102	105	105	108	108	108	kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 100%						
Max. operating altitude	5,000 (Derating at 4,000m)						m
Cooling	Smart air cooling						
Ingress protection rating	IP66						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						
Standard Compliance							
Standard ⁵	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2						

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

2. The requirements for the PV string open-circuit voltage in a PV+ESS DC coupling system are as follows: 1) When the system is configured with ≥19 battery modules, the string open-circuit voltage should meet the following minimum requirements: 1.1) If configured with 21 battery modules, the string open-circuit voltage should be > 935 V; 1.2) If configured with 20 battery modules, the string open-circuit voltage should be > 870 V; 1.3) If configured with 19 battery modules, the string open-circuit voltage should be > 805 V. 2) When the system is configured with 4 to 18 battery modules, the string open-circuit voltage has no special requirements.

3. This represents the combined input from PV DC and rectified AC sources, while actual power depends on site configuration and operating condition.

4. This refers to the load-side disruption time. Test conditions: In the open-circuit state of the power grid, the total power of the Sigen Hybrid Inverter is higher than the total power of the loads.

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

6. For Sigen energy gateway connections, the inverter should be connected to the gateway via its AC output port (Grid).

7. The information in this document reflects the current state of technology and is subject to change without notice. For the latest updates, please refer to the Sigenenergy website.

SigenStack

Innovative modular energy storage system

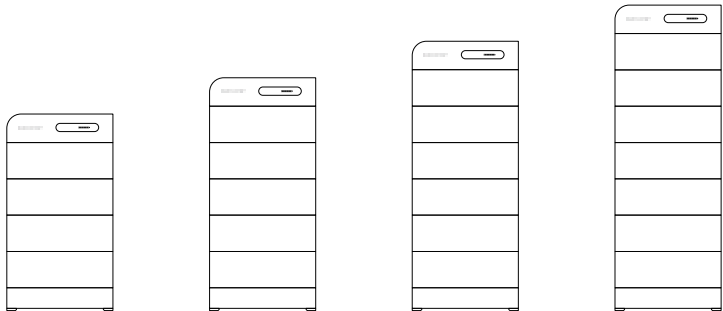


- Pack-level safety protection, precise thermal runaway control
- Higher energy density saves space and eases site selection
- IP66-rated design eliminates regular and complex O&M
- Pack-level active balancing, no need for on-site SOC calibration
- Modular design, stackable installation & ultra-fast commissioning



C&I Energy Storage System

SigenStack BC	M2-0.5C ¹	M2-0.5C-BST	M2-1C-BST	Units
Max. output current (to inverter)	180			A
Max. input current (from inverter)	180			A
Operating voltage range	550 ~ 1,100			V
Nonimal charge/discharge current of battery	157	157	314	A
Weight	50	60	60	kg
Dimensions (W / H / D)	770 / 248 / 363			mm
Communication	CAN			
Compatible inverter	Sigen C&I Hybrid Inverter Series			
	SigenStack BAT 12.0			Units
Performance Specification				
Battery type	LiFePO ₄			
Cell capacity	314			Ah
Cycle life ²	10,000			
Total energy capacity per module	12.06			kWh
Weight	105			kg
Dimensions (W / H / D)	770 / 300 / 363			mm
Nominal charge / discharge rate	0.5C			
Max. charge / discharge rate	1C			
System configuration quantity range	4 ~ 21			pcs
Max. system energy capacity	253			kWh
System General Data				
Max. number of modules per stack	7			pcs
Max. number of modules per system	21			pcs
Fire suppression system	Aerosol, smoke sensor and exhausting system			
Dimensions of base (W / H / D)	770 / 195 / 363			mm
Storage temperature range	-25 ~ 60			°C
Operating temperature range	-20 ~ 55			°C
Relative humidity range	0% ~ 100%			
Max. operating altitude	4,000 (Derating at 2,000m)			m
Cooling	Smart air cooling			
System ingress protection rating	IP66			
Installation method	Floor standing			
Noise ³	< 65			dB
Standard Compliance				
Standard ⁴	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040, UL9540A			



Number of battery modules	4	5	6	7	pcs
Total energy capacity	48.24	60.3	72.36	84.42	kWh
Total weight	500	605	710	815	kg
Total height (with base and SigenStack BC)	1,643	1,943	2,243	2,543	mm
Total width	770				mm
Total depth	363				mm

1. SigenStack BC M2-0.5C can only be used in applications where an on-grid energy storage system with ≥ 20 battery modules operates under 380/400V grid voltage and no PV connected to the inverters. For other scenarios, please utilize the battery controller with 'BST' model.
2. 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%.
3. Noise level is tested based on the rated operating conditions (25 °C ambient temperature, 0.5CP charge/discharge rate, 400Vac output voltage).
4. For all standards refer to the certificates category on the Sigenenergy website.
5. This document reflects current technology and is subject to change without notice. Refer to the Sigenenergy website for the latest information.

Sigen DC Combiner Box

for SigenStack



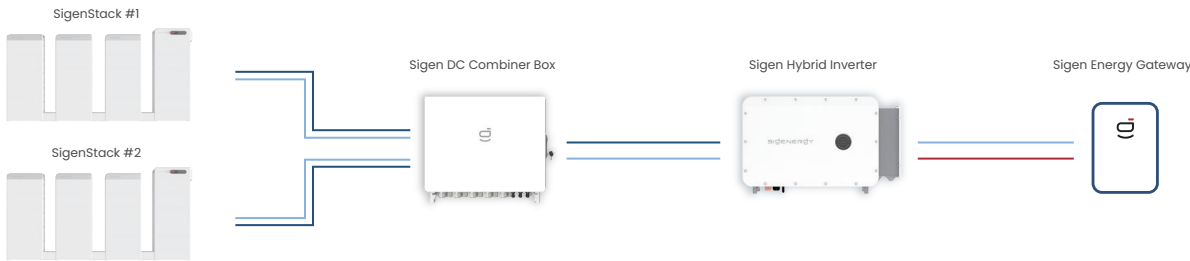
- Connect up to 4 SigenStack systems to meet diverse backup duration
- Simplified wiring for quick installation and hassle-free maintenance
- IP55-rated protection, waterproof and dustproof

Sigen DC Combiner Box for SigenStack

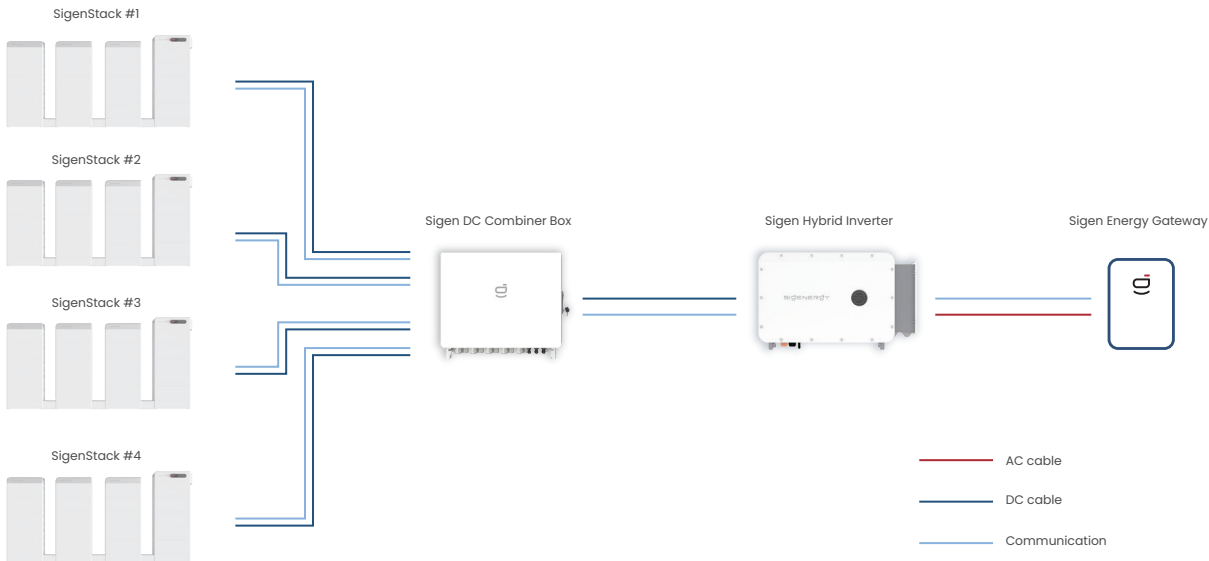
Preliminary

SigenStack BC	CMB-4	Units
Performance Specification		
Max. operating voltage	1,100	V
Max. operating current (battery controller)	180	A
Max. number of battery controller connections	4	
Max. operating current (inverter)	180	A
Max. number of inverter connections	1	
Compatible battery controller	SigenStack BC M2-0.5C-BST / SigenStack BC M2-1C-BST	
Compatible inverter	Sigen C&I Hybrid Inverter	
General Data		
Dimensions (W / H / D)	730 / 650 / 217.5	mm
Weight	35	kg
Storage temperature range	-30 ~ 60	°C
Operating temperature range	-40 ~ 70	°C
Relative humidity range	0% ~ 100%	
Max. operating altitude	4,000	m
Cooling	Natural convection	
Ingress protection rating	IP55	
Communication	CAN	
Battery controller connection type	OT / DT terminal (Max. 120 mm²)	
Inverter connection type	OT / DT terminal (Max. 120 mm²)	

► 4-hour backup (0.25C) scenario



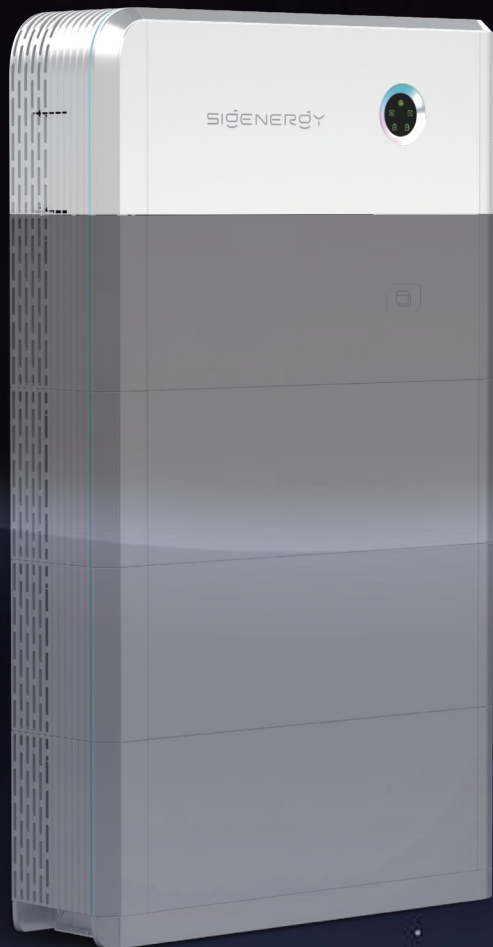
► 8-hour backup (0.125C) scenario



Note: Please refer to the installation guide for detailed system configurations.

Sigen Energy Controller

5.0 – 30.0 kW Three Phase



- EMS-integrated intelligent management for precision control
- Max. 1.6 DC/AC ratio compatibility, higher energy utilization
- 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 5.0–30.0 kW Three Phase ¹

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 (PV)											
Max. PV power	8,000	9,600	12,800	16,000	19,200	24,000	27,200	32,000	40,000	48,000	W
Max. DC input voltage ²	1,100										V
Nominal DC input voltage	600										V
Start-up voltage	180										V
MPPT voltage range	160 ~ 1,000										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	5,000	6,000	8,000	10,000	12,000	15,000	17,000	20,000	25,000	30,000	W
Max. output apparent power	5,500	6,600	8,800	11,000	13,200	16,500	18,700	22,000	27,500	33,000	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) ³	2 times of nominal output power										W
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 ⁴	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										kg
Storage temperature range	-40 ~ 70										°C
Operating temperature range	-30 ~ 60										°C
Relative humidity range	0% ~ 100%										
Max. operating altitude	4,000										m
Cooling	Smart air cooling										
System ingress protection rating	IP66										
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)										
Standard Compliance											
Standard ⁶	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2										

1. Sigen Energy Controller 30.0 kW Three Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.

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

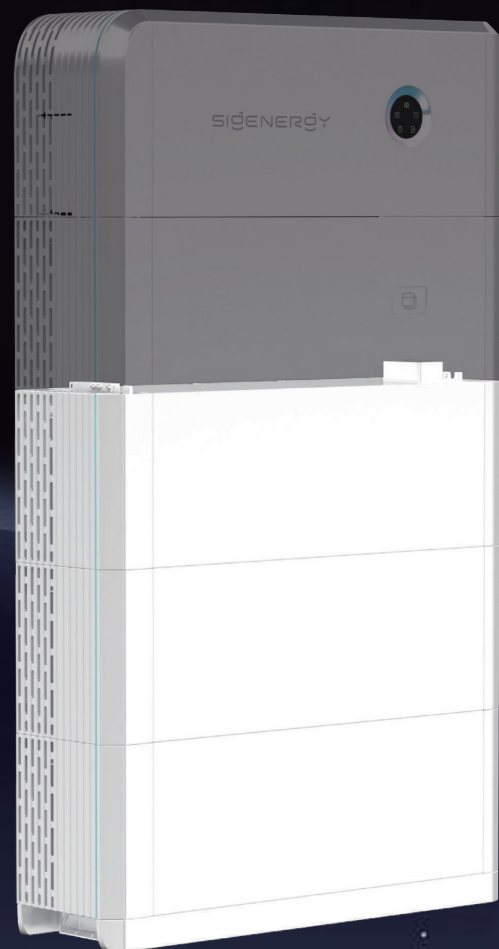
3. Actual load starting performance depends on the load type and its characteristics; practical results may vary.

4. This refers to the load-side disruption time, to achieve this functionality Sigen Energy 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.

5. This is an optional feature only supported in certain models, please contact Sigenenergy for more information.

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

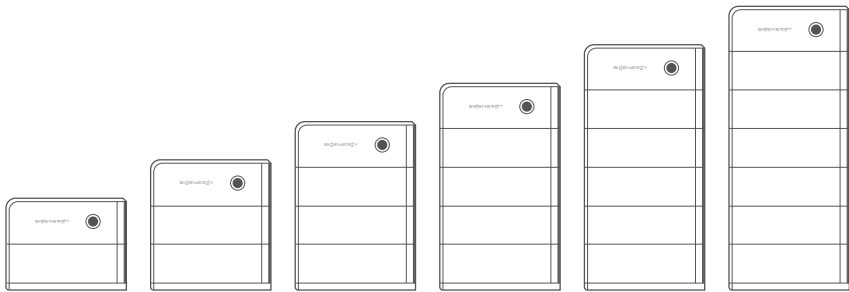
Sigen Battery



- 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	LiFePO ₄		
Cell capacity	314		Ah
Cycle life ¹	10,000		
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	3,000	4,600	W
Peak charge / discharge power (10 seconds)	4,500	6,900	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	4,000		m
Cooling	Natural convection		
System ingress protection rating	IP66		
Installation method	Floor standing / Wall-mounted		
Standard Compliance			
Standard ⁴	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62477		



Number of battery modules ⁵	1	2	3	4	5	6	pcs
Total energy capacity	9.04	18.08	27.12	36.16	45.2	54.24	kWh
Max. charge / discharge power	4.6	9.2	13.8	18.4	23	27.6	kW
Total weight	120	199	279	357	436	515	kg
Total height (with base)	640	910	1,180	1,450	1,720	1,990	mm
Total width (with decorative covers)	850						mm
Total depth (with decorative covers)	265						mm

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 usable capacity. Battery must be recharged within 7 days after being fully discharged to keep battery healthy.
4. For all standards refer to the certificates category on the Sigenergy website.
5. The data in the table is based on the combination of SigenStor BAT 10.0 and SigenStor EC three-phase as an example, with a ground-mounted installation.

Sigen EV DC Charging Module



- Upgradeable from 12 kW to 25 kW for higher demand*
- 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

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



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 upgrade to 25 kW. End users can purchase a license via SigenMall to upgrade 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 details, please contact Sigenergy official support or local distributors.

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.

Sigen Energy Gateway



- Multiple Sigen C&I inverters connections supported for micro-grid system
- 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

Sigen Energy Gateway for Sigen C&I Inverter

Sigen Gateway	C600-B	C1200-B	Units
Grid Connection			
Grid connection type	Three phase		
Nominal AC voltage	380 ~ 400		V
Nominal AC current	912	1,824	A
Nominal AC power	600	1,200	kW
Nominal AC frequency	50 / 60		Hz
Disruption time of backup switch ¹	0		ms
AC Output to Backup Port			
Nominal AC voltage	380 ~ 400		V
Nominal AC current	912	1,824	A
Nominal AC power	600	1,200	kW
Nominal AC frequency	50 / 60		Hz
Overvoltage category	III		
Inverter Connection			
Number of connection ports	10	20	
Nominal AC voltage	380 ~ 400		V
Max. AC input current ²	200 (6 ports), 160 (4 ports)	200 (12 ports), 160 (8 ports)	A
Max. AC power ²	125 (6 ports), 80 (4 ports)	125 (12 ports), 80 (8 ports)	kW
Smart Port Connection			
Generator output voltage	380 ~ 400		V
Nominal AC current	912	1,824	A
Nominal AC power	600	1,200	kW
Generator 2-wire start	Supported		
General Data			
Dimensions (W / H / D)	1,800 / 2,300 / 1,270		mm
Weight	1,100	1,300	kg
Storage temperature range	-40 ~ 70		°C
Operating temperature range ³	-30 ~ 55		°C
Relative humidity range	0% ~ 95%		
Max. operation altitude ³	4,000		m
Cooling	Smart air cooling		
Ingress protection rating	IP20		
Communication	Fast Ethernet, RS485, dry contact		
Installation method	Ground-mounted		

1.

This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Hybrid Inverter and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the total power of the Sigen Hybrid Inverter is higher than the total power of the backup loads.

2.

This series of energy gateway has two types of molded case circuit breakers inside, please refer to the installation guide for their specific mounting locations.

3.

Please consult Sigenergy for detailed power derating information.

Sigen Energy Gateway

Modular design for flexible and precise deployment



- Multiple Sigen C&I inverters connections supported for micro-grid system
- Modular cabinet, effortless side-by-side installation
- 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



Sigen Energy Gateway for Sigen C&I Inverter

Preliminary

Energy Gateway Grid Switch Cabinet ¹

Sigen Gateway	C1600-B-GS	C2000-B-GS	C2400-B-GS	Units
Grid connection type	Three phase			
Nominal AC voltage	380 ~ 400			V
Nominal AC current	2,432	3,039	3,647	A
Nominal AC power	1,600	2,000	2,400	kW
Nominal AC frequency	50 / 60			Hz
Disruption time of backup switch ²	0			ms
Dimensions (W / H / D)	800 / 2,200 / 1,000			mm
Weight	600	660	680	kg

Energy Gateway Smart Load Cabinet (Optional)

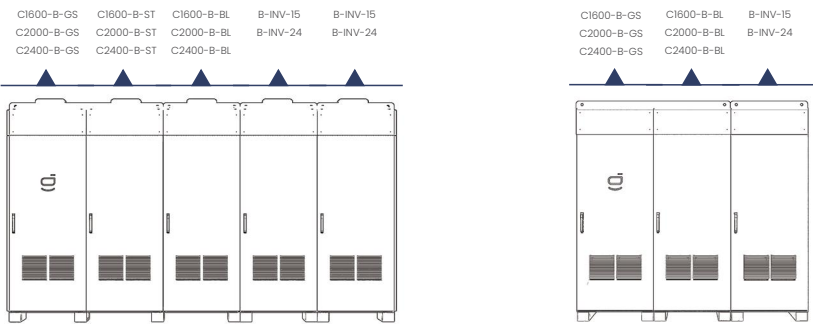
Sigen Gateway	C1600-B-ST	C2000-B-ST	C2400-B-ST	Units
Generator output voltage	380 ~ 400			V
Nominal AC current	2,432	3,039	3,647	A
Nominal AC power	1,600	2,000	2,400	kW
Generator 2-wire start	Supported			
Dimensions (W / H / D)	800 / 2,200 / 1,000			mm
Weight	600	660	680	kg

Energy Gateway Backup Load Cabinet

Sigen Gateway	C1600-B-BL	C2000-B-BL	C2400-B-BL	Units
Nominal AC voltage	380 ~ 400			V
Nominal AC current	2,432	3,039	3,647	A
Nominal AC power	1,600	2,000	2,400	kW
Nominal AC frequency	50 / 60			Hz
Overvoltage category	III			
Dimensions (W / H / D)	800 / 2,200 / 1,000			mm
Weight	600	660	680	kg

Energy Gateway Inverter Cabinet

Sigen Gateway	B-INV-15 ³	B-INV-24 ³	Units
Number of connection ports	15	24	
Nominal AC voltage	380 ~ 400		V
Max. AC input current per connection	200	160	A
Max. AC input power per connection	125	80	kW
Dimensions (W / H / D)	800 / 2,200 / 1,000		mm
Weight	600	660	kg



System General Data

Storage temperature range	-40 ~ 70	°C
Operating temperature range ⁴	-30 ~ 55	°C
Relative humidity range	0% ~ 95%	
Max. operation altitude ⁴	4,000	m
Cooling	Smart air cooling	
Ingress protection rating	IP20	
Communication	Fast Ethernet, RS485, dry contact	
Installation method	Ground-mounted	

1. Grid switch cabinets (C1600-B-GS/C2000-B-GS/C2400-B-GS), backup load cabinets (C1600-B-BL/C2000-B-BL/C2400-B-BL) and smart load cabinets (C1600-B-ST/C2000-B-ST/C2400-B-ST) must be matched exclusively within their respective series. Cross-series combinations are not compatible.

2. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Hybrid Inverter and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the total power of the Sigen Hybrid Inverter is higher than the total power of the backup loads.

3. Sigen Gateway B-INV-15 supports the connection of 15 inverters. Sigen Gateway B-INV-24 supports the connection of 24 inverters. The two types of cabinets can be deployed in combination to expand inverter connection capacity.

4. Please consult Sigenenergy for detailed power derating information.

5. In accordance with IEC 60384-4-43, if the existing load-side distribution cabinet is already fitted with overload protection device and is installed within 3 m of Sigen Energy Gateway, a back load cabinet is not required, and a combiner panel cabinet (Sigen Gateway B-CP) can be selected.

6. If the inverter connection ports of inverter cabinets are insufficient, expansion and customization via a combiner panel cabinet (Sigen Gateway B-CP) are available. Please consult Sigenenergy for details.

Sigen Energy Gateway



- Multiple SigenStor connections supported for micro-grid system
- 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

Sigen Energy Gateway for SigenStor

Sigen Gateway	C60-2	C120-6	C180-9	C300-12	C600	C1200	Units
Grid Connection							
Grid connection type	Three phase						
Nominal AC voltage	380 ~ 400						V
Nominal AC current	91.2	182.4	274	456	912	1,824	A
Nominal AC power	60	120	180	300	600	1,200	kW
Nominal AC frequency	50 / 60						Hz
Disruption time of backup switch ¹	0						ms
AC Output to Backup Port							
Nominal AC voltage	380 ~ 400						V
Nominal AC current	91.2	182.4	274	456	912	1,824	A
Nominal AC power	60	120	180	300	600	1,200	kW
Nominal AC frequency	50 / 60						Hz
Overvoltage category	III						
Inverter Connection							
Number of connection ports	2	6	9	12	30	50	
Nominal AC voltage	380 ~ 400						V
Nominal AC current	45.6						A
Smart Port Connection							
Generator output voltage	380 ~ 400						V
Nominal AC current	91.2	182.4	274	456	912	1,824	A
Nominal AC power	60	120	180	300	600	1,200	kW
Generator 2-wire start	Supported						
General Data							
Dimensions (W / H / D)	510 / 795 / 173	850 / 1,152 / 305	800 / 2,300 / 830		1,800 / 2,300 / 1,270		mm
Weight	35	74	350	400	1,100	1,300	kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range ²	-30 ~ 55						°C
Relative humidity range	0% ~ 100%		0% ~ 95%		0% ~ 95%		
Max. operation altitude ²	4,000						m
Cooling	Natural convection		Natural convection		Smart air cooling		
Ingress protection rating	IP55		IP20		IP20		
Communication	Fast Ethernet , RS485, dry contact						
Installation method	Wall-mounted		Ground-mounted		Ground-mounted		

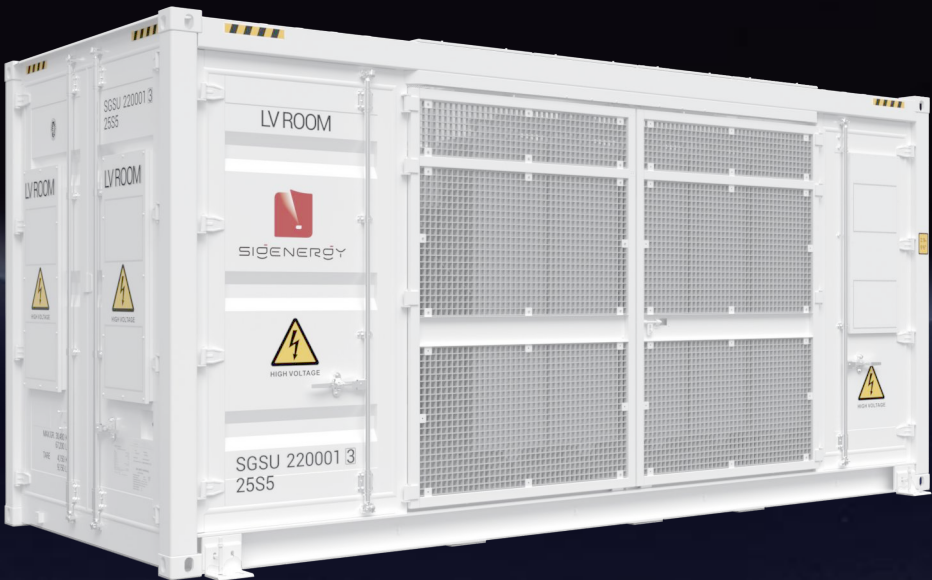
1.

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 total power of the Sigen Energy Controller is higher than the total power of the backup loads.

2.

Please consult Sigenergy for detailed power derating information and customized requirements.

Sigen Transformer Station



- Higher efficiency, Tier 2 PEI available
- Upward arc exhaust channel, enhanced personnel safety
- Form 2b compartment design, preventing fault propagation
- Prefabricated design, minimized on-site workload
- Supports up to 92 inverters, ideal for 0.25C long-duration backup

Sigen Transformer Station

Preliminary

SigenMVT	5000M1	Units
Input		
Compatible Inverters	Sigen PV (50-125)M1 / Sigen PV (50-125)M1-HYA	
AC Power	5,060 kVA@40°C	
Rated Input Voltage	400 / 480	V
LV Main Inputs (ACB)	5,000 A / 3P, 2 x 1 pcs	
LV Main Inputs (MCCB)	250 A / 3P, 2 x 23 pcs	
Output		
Rated Output Voltage ¹	10 / 11 / 13.2 / 13.8 / 15 / 20 / 22 / 25 / 30 / 33 / 34.5 / 35 / 36	kV
Frequency	50 / 60	Hz
Transformer Type	Oil-immersed, Conservator Type	
Transformer Cooling Type	ONAN	
Transformer Tapping	± 2 x 2.5%	
Transformer Oil Type	Mineral Oil (PCB Free)	
Transformer Vector Group	Dy11-y11	
Transformer Min. Peak Efficiency Index	Tier 1 or Tier 2	
RMU Type	SF ₆ / SF ₆ -free ²	
RMU Transformer Protection Unit	MV Vacuum Circuit Breaker Unit	
RMU Cable Incoming / Outgoing Unit	Direct Cable Unit or Cable Load Break Switch Unit	
Auxiliary Transformer	Dry Type Transformer, 5 kVA, li0	
Output Voltage of Auxiliary Transformer	230	V
Protection		
Transformer Monitoring & Protection	Oil Level, Oil Temperature, Oil Pressure and Buchholz	
Protection Degree of MV & LV Room	IP54	
Internal Arcing Fault	IAC A 20 kA 1s (default) / IAC A 25 kA 1s (optional)	
MV Relay Protection	50/51, 50N/51N	
LV Overvoltage Protection	Type I+II	
Anti-corrosion Protection ³	C5-M in accordance with ISO 12944	
Features ⁴		
UPS	Optional	
MV Surge Arrester for Transformer	Optional	
Insulation Monitor Device	Optional	
24kV SF6-free RMU	Optional	
General Data ⁵		
Dimensions (W / H / D)	6,058 / 2,896 / 2,438 (20' HQ Container)	mm
Weight	< 25	t
Operating Temperature Range ⁶	-25°C ~ 60°C (-13°F ~ 140°F)	°C / °F
Relative Humidity	0% ~ 95%	
Prefabrication	Support	
LV & MV Room Cooling	Without air-across for higher availability	

1. Rated output voltage from 10 kV to 35 kV, more available upon request.
2. 24kV SF₆-free RMU is optional.
3. Sigenergy offers C5-H as an optional feature.
4. Extra expense needed for optional features which standard product doesn't contain, more options upon request.
5. For higher operating altitude, please consult with Sigenergy.
6. When ambient temperature ≥55°C, awning shall be equipped for SigenMVT series on site by customer.

Sigen Communication Module



- IP66 protection rate, 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	4,000	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 ≥ 4 bars, 3G/4G signal ≥ 3 bars.
2. This product is only available in specific regions. Please contact Sigenergy or local distributors for details.

Sigen Power Sensor



Sigen Sensor SubIG Kit



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 1P size, plug-in design for easy installation
- Integrate smoothly with Sigenergy devices, no need for setup
- 50 ms data refresh rate, instantaneous data feed

Sigen Power Sensor

Sigen Sensor ¹	TP-CT100 ²	TP-CT300 ²	TP-CT600 ²	TPX-CH	TP-CT5	Units
Power Supply						
Grid connection type			3P3W/3P4W			
AC input voltage range			176 ~ 276 (L~N), 277 ~ 304 (L-L)	100 ~ 480	52 ~ 264 (L~N) 90 ~ 456 (L-L)	Vac
Nominal AC frequency			50 / 60			Hz
Measurement Accuracy						
Voltage accuracy			0.5%			
Current accuracy			0.5%			
Power accuracy			1%			
Frequency accuracy			0.5%	0.2%		
Communication						
Interface			RS485			
Baud rate			9,600			bps
Protocol			Modbus RTU			
General Data						
Dimensions (W / H / D)			19 / 94.5 / 68.5 or 18 / 100 / 65.5 ²	72 / 100 / 65.5	72 / 98 / 65.5	mm
Weight			0.08	0.35	0.23	kg
Storage temperature range			-40 ~ 70			°C
Operating temperature range			-25 ~ 55			°C
Relative humidity range			0% ~ 95%			
Ingress protection rating			IP20			
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 ²			24 / 16	24 / 24	34 / 50	mm
Weight of CT ²			0.2 / 0.43	1.06 / 0.77	1.09 / 2.62	kg
Max. operating current of CT			100	300	600	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 Power Sensor

with Rogowski coil



- Split-core installation for compact retrofitting on irregular busbars
- High overcurrent resilience with negligible signal distortion
- Ultra-wide frequency response spanning 30Hz to 5kHz
- Scalable 300/1000/3000A ranges for 0.2MVA–2MVA scenarios
- Industrial-grade Class B precision for energy measurement
- Fast 50ms data refresh for robust anti-backflow control

Sigen Power Sensor Rogowski Coil

Sigen Sensor ¹	TP-RC300	TP-RC1000	TP-RC3000	Units	
Power Supply					
Grid connection type	3P4W				
AC input voltage range	176 ~ 276 L-N 304 ~ 477 L-L				Vac
Nominal AC frequency	50 / 60				Hz
Measurement Accuracy					
Voltage accuracy	0.5%				
Current accuracy	0.5%				
Power accuracy	1%				
Frequency accuracy	0.5%				
Rogowski Coil Position Error	1%				
Communication					
Interface	RS485				
Baud rate	9600				bps
Protocol	Modbus RTU				
General Data					
Dimensions (W / H / D)	18 / 100 / 65.5				mm
Weight	0.076				kg
Storage temperature range	-40 ~ 70				°C
Operating temperature range	-25 ~ 55				°C
Relative humidity range	0% ~ 95%				
Ingress protection rating	IP20				
Installation method	DIN Rail 35 mm				
Rogowski Coil Accessory					
Number of Coil	3				pcs
Cable length of Coil	6				m
Weight of Coil	0.56	0.66	0.87	kg	
Max. operating current of Coil	300	1000	3000	A	
Standard Compliance					
Standard	EN 61010-1:2010, EN 61010-2-030:2010				

1. For more models refer to the Sigenenergy website.

Sigen Communication Bridge

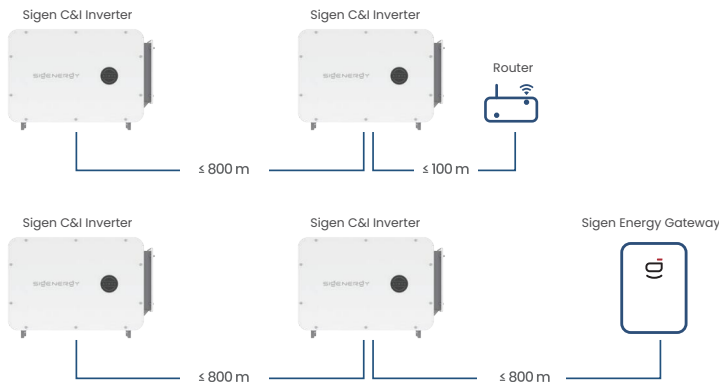


- Built-in signal codec chip, enabling high-speed communication up to 800m
- Inverters automatic networking, making system commissioning easier
- Dual power supply with automatic switching, ensuring stable power supply

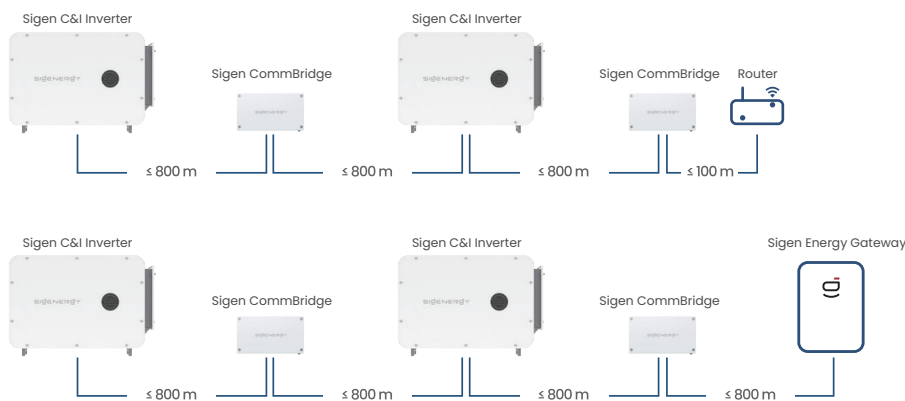
Sigen Communication Bridge

	Sigen CommBridge	Units
Performance		
Communication distance with Sigen C&I inverters	Up to 800	m
Communication distance with routers	Up to 100	m
Features		
Communication Interface	ETH × 4, 10 / 100 Mbps, RJ45	
Communication Protocol (Northbound)	IEEE 802.3, IEEE 802.3x	
Electrical		
AC power supply	100 V ~ 277 V, 0.3 A, 50 Hz / 60 Hz	
DC power supply	12 V ± 10%, 0.5 A	
Power consumption	Typical 3, Maximum 6	W
General Data		
Dimensions (W / H / D)	150 / 91 / 35	mm
Weight	0.3	kg
Storage temperature range	-40 ~ 70	°C
Operating tempe range	-30 ~ 60	°C
Relative humidity range	0% ~ 95%	
Max. operating altitude	4,000	m
Ingress protection rating	IP20	
Installation method	DIN rail mounted	

Without Sigen CommBridge



With Sigen CommBridge



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



Organization Management

In-organization Member Management

Company Information

Installer Company Hierarchical Management

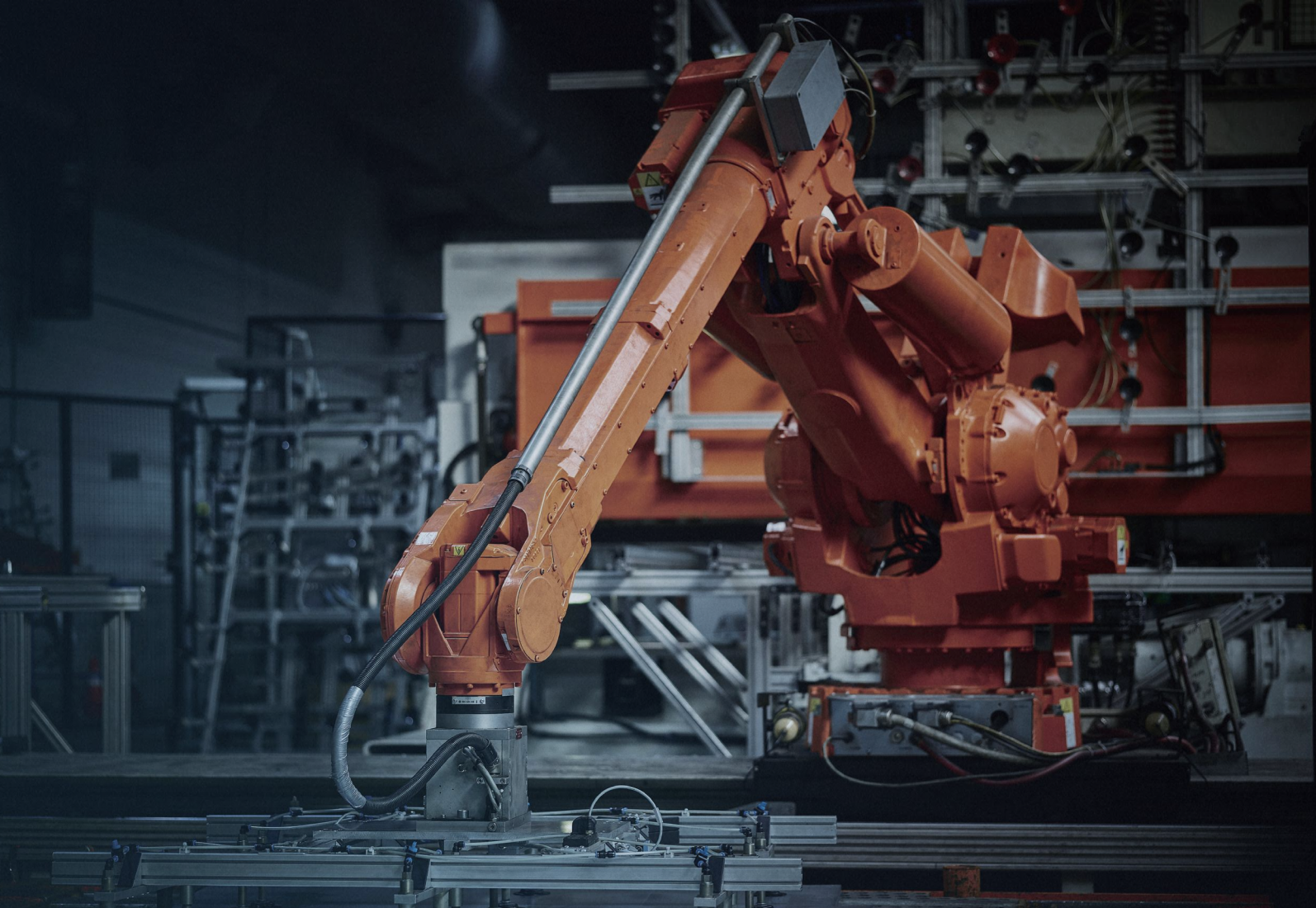


Value-Added Services

AI Smart Assistant

Third-party VPP Integration

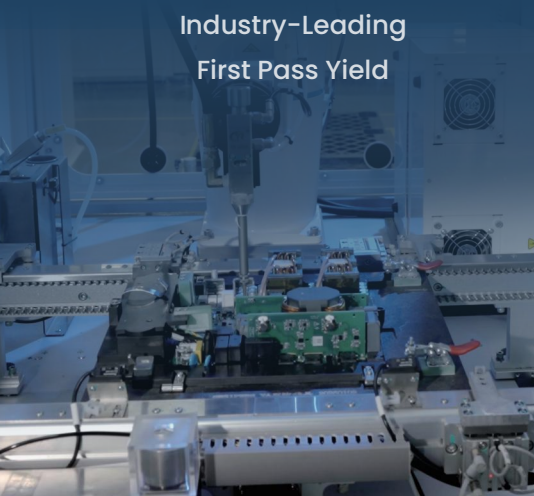
Open Northbound Integration



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



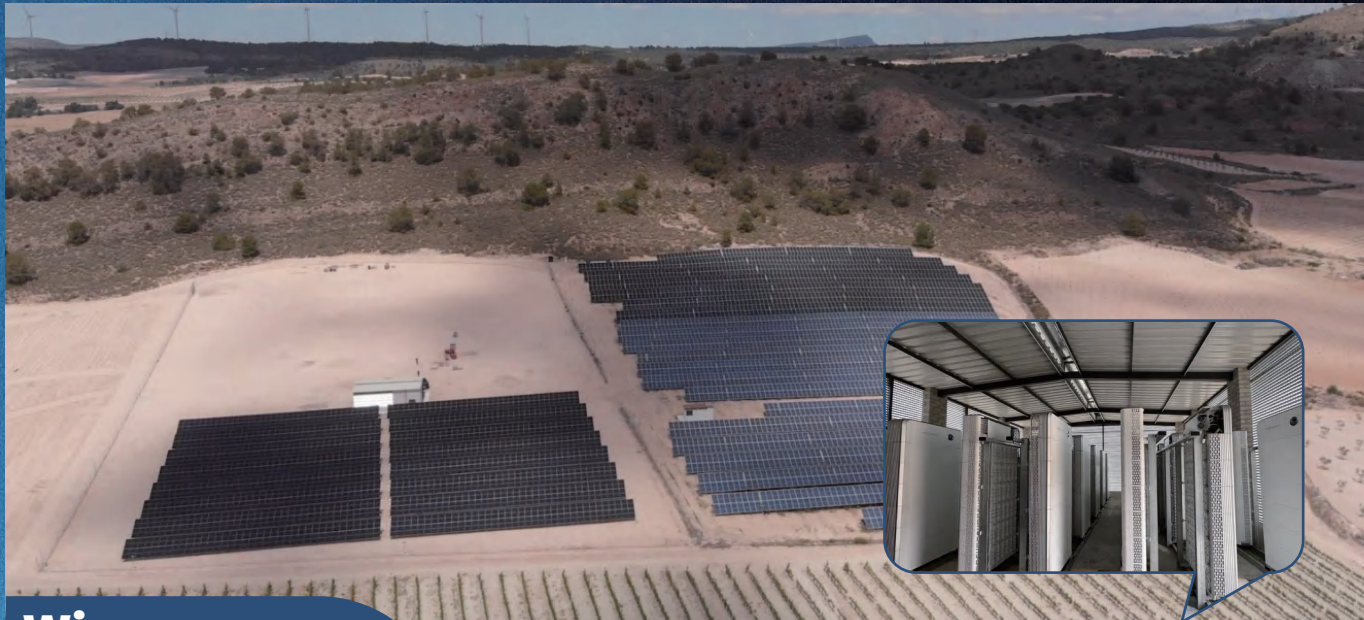
Shanghai Pudong Manufacturing Center

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.

Global Cases

Unlocking the Potential of C&I Energy Systems



Winery
Spain

1.5 MW AC output | 3 MWh ESS capacity



Office
China

250 kW AC output | 448 kWh ESS capacity



Factory
Sweden

140 kW AC output | 280 kWh ESS capacity



Factory
Spain

200 kW AC output | 400 kWh ESS capacity



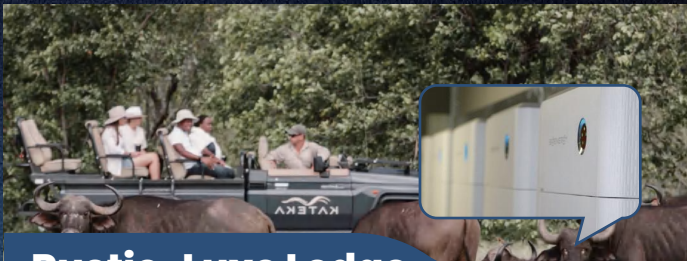
Poultry farm
Myanmar

150 kW AC output | 144 kWh ESS capacity



Factory
South Africa

2.4 MW AC output | 4.1 MWh ESS capacity



Rustic-Luxe Lodge
South Africa

125 kW AC output | 240 kWh ESS capacity



Game Ranch
Namibia

300 kW AC output | 960 kWh ESS capacity



Hotel
Mauritius

50 kW AC output | 96 kWh ESS capacity



Community
Australia

70 kW AC output | 336 kWh ESS capacity

Global Cases

Unlocking the Potential of C&I Energy Systems

