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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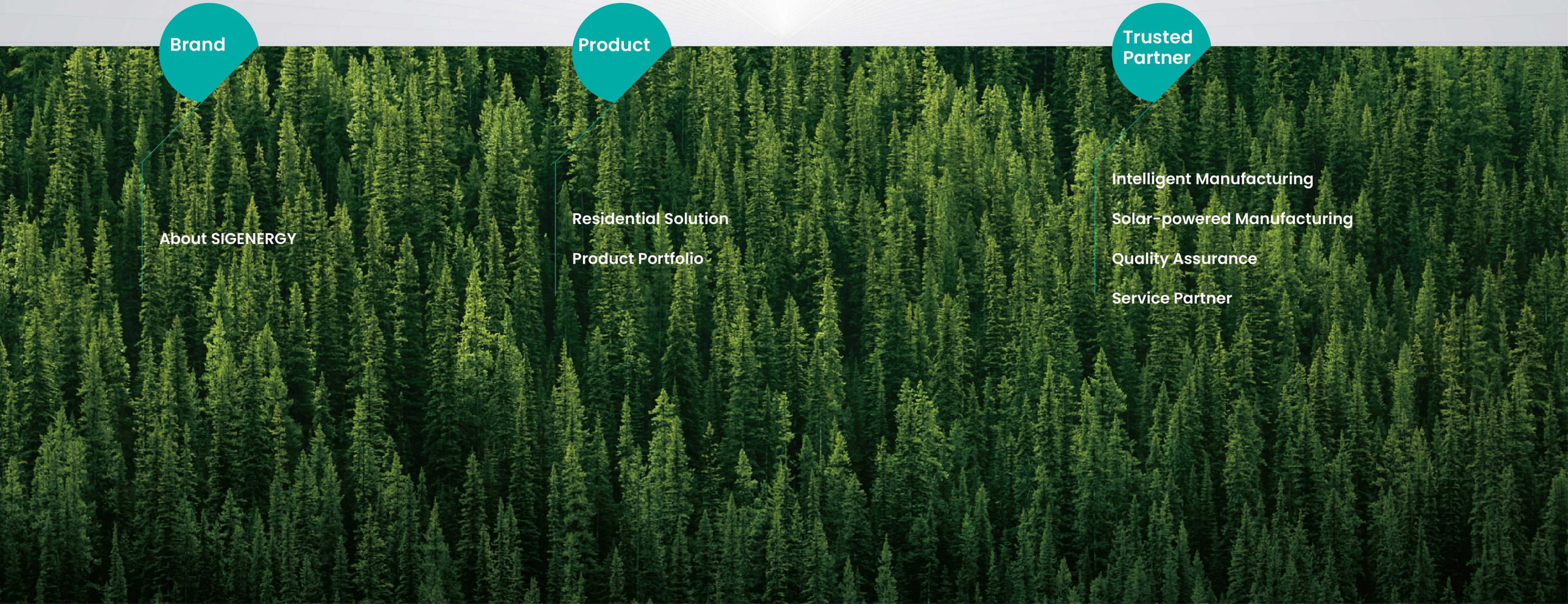
SIGENERGY

SIGENERGY
Home Energy Solution

Let the world enjoy green energy

CONTENTS



Brand

About SIGENERGY

Product

Residential Solution

Product Portfolio

Trusted Partner

Intelligent Manufacturing

Solar-powered Manufacturing

Quality Assurance

Service Partner

ABOUT SIGENERGY

Sigenergy focuses on developing cutting-edge home and business energy solutions, with products ranging from energy storage systems to solar inverters and EV chargers. Our world-class R&D team of hundreds of top industry experts shares the vision of making the world greener via continuous innovation. With global sales and services, we aim to become our customers' most trusted partner on their journey to a more sustainable future.

VISION

Enjoy Green Energy

MISSION

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

SIGEN

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

SIGENERGY HOME ENERGY SOLUTION

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

Let numbers talk
Sigenergy is raising industry standards

15 mins
stackable installation

5 layers
battery protection

280 Ah
long cycle-life battery cell

0 ms
switchover time

5 mins
fast commissioning

4 layers
system protection

V2X
bi-directional charging

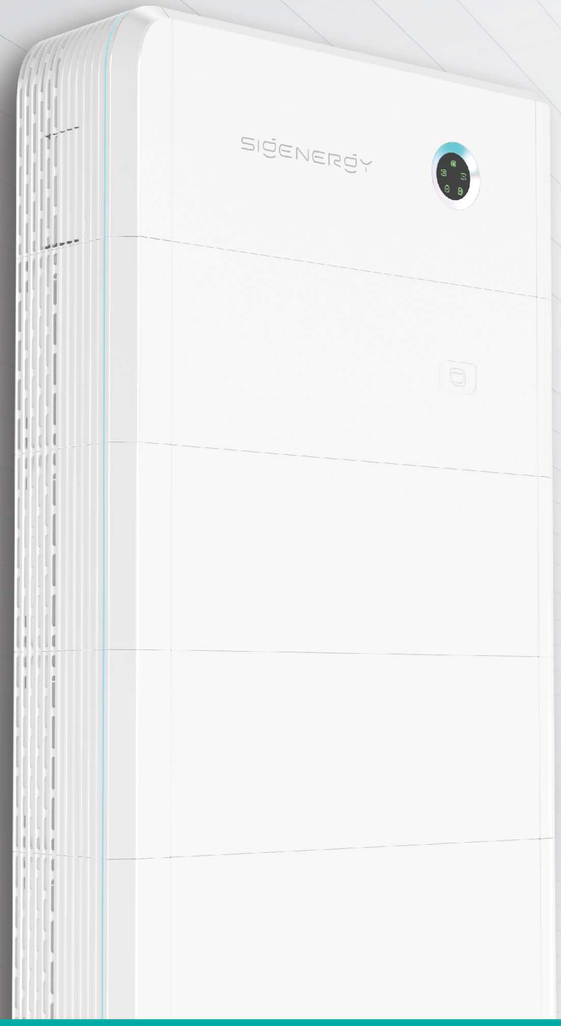
1-click
full system diagnosis

Simple

Versatile

Robust

Intelligent



Sigen Energy Controller
for solar + energy storage system

Sigen Storage Controller
for AC-coupled energy storage system

Sigen EV DC Charging Module
Ready for V2X

Sigen Battery

8.0 | 5.0

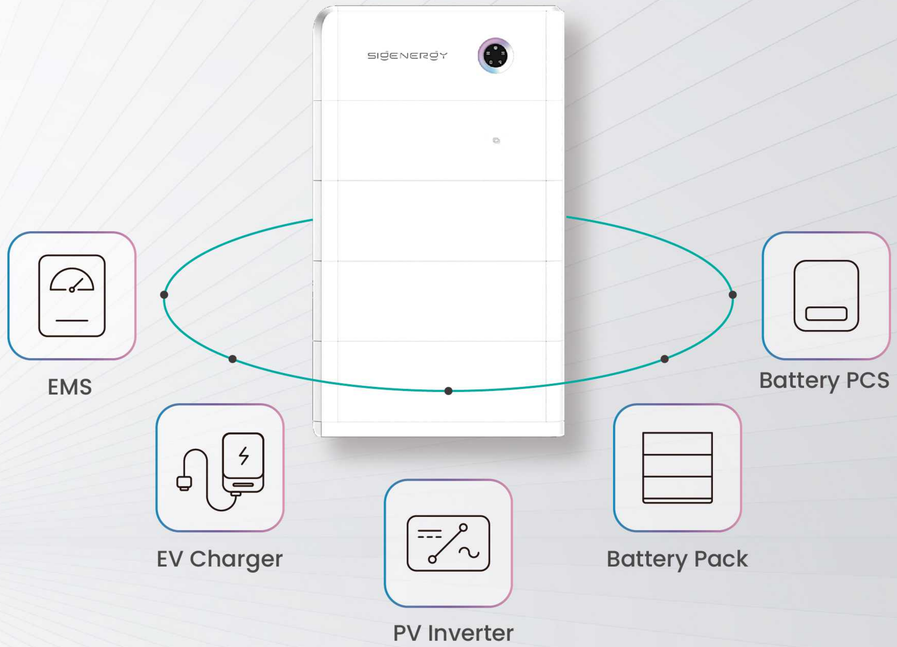
Energy capacity(kWh)

1 – 6
batteries stackable for a single system

5 kWh – 48 kWh
energy capacity range for a single system

Multiple
systems supported in parallel connection

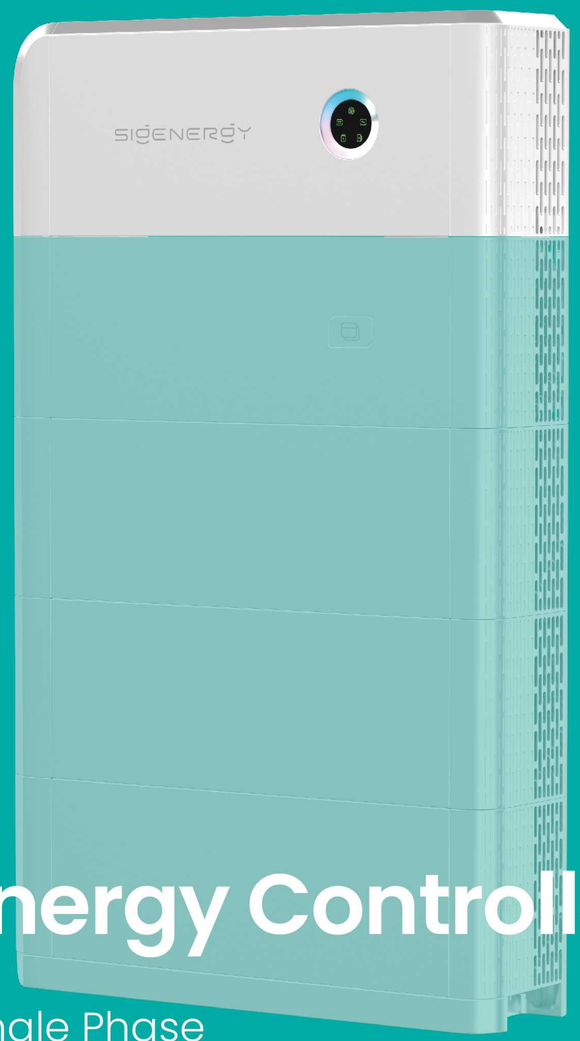
5-in-One, highly integrated design



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

Start small, grow on demand

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



Sigen Energy Controller

3.0 – 6.0 kW Single Phase

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 2 (single phase)
- IP66 system protection rating

Sigen Energy Controller 3.0-6.0 kW Single Phase

SigenStor EC	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	Units
DC Input (from PV)							
Max. PV power	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage	600						V
Nominal DC input voltage	350						V
Start-up voltage	100						V
MPPT voltage range	50 ~ 550						V
Number of MPP. trackers	2						
Number of PV strings per MPPT	1						
Max. input current per MPPT	16						A
Max. short-circuit current per MPPT	20						A
AC Output (on-grid)							
Nominal output power	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	3300	3680	4400	5000	5500	6600	VA
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	15.0	16.0	20.0	22.7	25.0	30.0	A
Nominal output voltage	220 / 230 / 240						V
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 2%						
Efficiency							
Max. efficiency	98.0%						
European efficiency	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	
AC Output (backup)							
Peak output power (10 seconds)	4500	5520	6000	6900	7500	9000	W
Nominal output voltage	220 / 230 / 240						V
Nominal output frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total voltage harmonic distortion	THDv < 2%						
Switch time to backup mode [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	300 ~ 600						V
General Data							
Dimensions (W / H / D)	700 / 300 / 245						mm
Weight	18						kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 95%						
Max. operating altitude	4000						m
Cooling	Natural convection						
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 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2						

1. Need to be used together with Sigen Energy Gateway 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 Sigenergy website.

Sigen Energy Controller 5.0-25.0 kW Three Phase

Preliminary

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	98.4%									
European efficiency	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%									
Switch time to backup mode [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
General Data										
Dimensions (W / H / D)	700 / 300 / 260									mm
Weight	30									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)									

1. Need to be used together with Sigen Energy Gateway 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.

Sigen Storage Controller

3.0 - 6.0 kW Single Phase

5.0 - 25.0 kW Three Phase

- EMS inside for precise control
- Max. 6 batteries for a single system
- 0 ms quick switch to backup mode
- IP66 system protection rating
- WLAN, Ethernet & 4G communication
- Visible energy tracking on mySigen App

Sigen Storage Controller 3.0-6.0 kW Single Phase

SigenStor AC	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	Units
AC Output (on-grid)							
Nominal output power	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	3300	3680	4400	5000	5500	6600	VA
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	15.0	16.0	20.0	22.7	25.0	30.0	A
Nominal output voltage	220 / 230 / 240						V
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 2%						
Efficiency							
Max. efficiency	98.0%						
AC Output (backup)							
Peak output power (10 seconds)	4500	5520	6000	6900	7500	9000	W
Nominal output voltage	220 / 230 / 240						V
Nominal output frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total voltage harmonic distortion	THDv < 2%						
Switch time to backup mode [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	300 ~ 600						V
General Data							
Dimensions (W / H / D)	700 / 300 / 245						mm
Weight	16.5						kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 95%						
Max. operating altitude	4000						m
Cooling	Natural convection						
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 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2						

1. Need to be used together with Sigen Energy Gateway and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Storage Controller is higher than the total power of the home loads.
2. For all standards refer to the certificates category in the Sigenergy website.

Sigen Storage Controller 5.0-25.0 kW Three Phase

Preliminary

SigenStor AC	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
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	98.4%									
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%									
Switch time to backup mode [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
General Data										
Dimensions (W / H / D)	700 / 300 / 260									mm
Weight	30									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)									

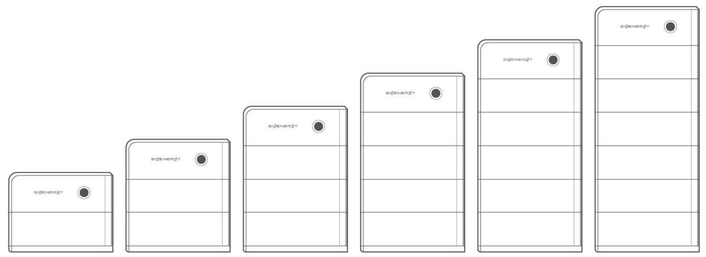
1. Need to be used together with Sigen Energy Gateway and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Storage Controller is higher than the total power of the home loads.

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	$LiFePO_4$		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity [1]	5.2	7.8	kWh
Battery modules voltage range (single phase system)	300 ~ 600		V
Battery modules voltage range (three phase system)	600 ~ 900		V
Max. charge / discharge power	2500	4000	W
Peak charge / discharge power (10 seconds)	3750	6000	W
General Data			
Weight	55	70	kg
Dimensions (W / H / D)	767 / 270 / 260		mm
Storage temperature range	-25 ~ 60		ºC
Operating temperature range	-20 ~ 55		ºC
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
Peak charge / discharge power (10 seconds)	6	12	18	24	30	36	kW
Total weight	94	165	236	307	378	449	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 25ºC.
2. The combination of SigenStor BAT 8.0 and SigenStor EC single phase as example.

Sigen EV DC Charging Module

- V2H power supply, ample backup energy
- V2G power transfer, ready for energy trading
- EV-supported home energy system black start
- Max. 25 kW stable bi-directional charging
- 150V ~ 1000V charging, wide EV compatibility
- Charge EV with 100% solar power
- Track & schedule charging on mySigen App
- IP66 system protection, maintenance free

Sigen EV DC Charging Module 12 / 25 kW

Preliminary

SigenStor EVDC [1]	12	25	Units
DC Output			
Max. charging power	12.5	25	kW
Max. discharging power (V2H, V2G)	12.5	25	kW
Output voltage range	150 ~ 500 (CHAdeMO), 150 ~ 1000 (CCS1 / CCS2)		V
Max. output current	40	80	A
Charging interfaces	CHAdeMO / CCS1 / 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 / Auto. charging (no authentication)		
Application	Bi-directional charging (V2H, V2G), Smart load management, Reservation		
User interfaces	LED indicator, App, RFID / NFC reader		
Remote function	OTA, Remote diagnosis		

1. Sigen EV DC Charging Module needs to be used together with Sigen Energy Controller / Sigen Storage 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.

Sigen Hybrid Inverter

3.0 - 6.0 kW Single Phase

5.0 - 25.0 kW Three Phase

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

Sigen Hybrid Inverter 3.0-6.0 kW Single Phase

Sigen Hybrid	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	Units
DC Input							
Max. PV power	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage	600						V
Nominal DC input voltage	350						V
Start-up voltage	100						V
MPPT voltage range	50 ~ 550						V
Number of MPP. trackers	2						
Number of PV strings per MPPT	1						
Max. input current per MPPT	16						A
Max. short-circuit current per MPPT	20						A
AC Output (on-grid)							
Nominal output power	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	3300	3680	4400	5000	5500	6600	VA
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	15.0	16.0	20.0	22.7	25.0	30.0	A
Nominal output voltage	220 / 230 / 240						V
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 2%						
Efficiency							
Max. efficiency	98.0%						
European efficiency	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	
Additional Features							
Compatible battery module	SigenStor BAT 5.0 / 8.0						
Number of modules per controller	1 ~ 6						pcs
Battery module voltage range	300 ~ 600						V
Peak output power (10 seconds)	4500	5520	6000	6900	7500	9000	W
Nominal output voltage	220 / 230 / 240						V
General Data							
Dimensions (W / H / D)	700 / 300 / 268						mm
Weight	18						kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 95%						
Max. operating altitude	4000						m
Cooling	Natural convection						
Ingress protection rating	IP66						
Installation method	Wall-mounted						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						
Standard Compliance							
Standard [1]	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2						

Sigen Hybrid Inverter 5.0-25.0 kW Three Phase

Preliminary

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	98.4%									
European efficiency	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
General Data										
Dimensions (W / H / D)	700 / 300 / 283									mm
Weight	30									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)									

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

Sigen PV Inverter

3.0 - 6.0 kW Single Phase

5.0 - 25.0 kW Three Phase

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

Sigen PV Inverter 3.0-6.0 kW Single Phase

Sigen PV Max	3.0 SP	3.6 SP	4.0 SP	4.6 SP	5.0 SP	6.0 SP	Units
DC Input							
Max. PV power	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage	600						V
Nominal DC input voltage	350						V
Start-up voltage	100						V
MPPT voltage range	50 ~ 550						V
Number of MPP. trackers	2						
Number of PV strings per MPPT	1						
Max. input current per MPPT	16						A
Max. short-circuit current per MPPT	20						A
AC Output							
Nominal output power	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	3300	3680	4400	5000	5500	6600	VA
Nominal output current	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	15.0	16.0	20.0	22.7	25.0	30.0	A
Nominal output voltage	220 / 230 / 240						V
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 2%						
Efficiency							
Max. efficiency	98.0%						
European efficiency	97.0%	97.1%	97.2%	97.3%	97.4%	97.4%	
General Data							
Dimensions (W / H / D)	700 / 300 / 268						mm
Weight	18						kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 95%						
Max. operating altitude	4000						m
Cooling	Natural convection						
Ingress protection rating	IP66						
Installation method	Wall-mounted						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						
Monitoring & Protection							
Anti-islanding protection	Supported						
DC reverse polarity protection	Supported						
Insulation monitoring	Supported						
DC surge protection	Supported						
AC surge protection	Supported						
Residual current monitoring	Supported						
AC overcurrent protection	Supported						
AC short-circuit protection	Supported						
AC overvoltage protection	Supported						
Standard Compliance							
Standard [1]	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, 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

Preliminary

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	98.4%									
European efficiency	98.0%									
General Data										
Dimensions (W / H / D)	700 / 300 / 283									mm
Weight	30									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)									
Monitoring & Protection										
Anti-islanding protection	Supported									
DC reverse polarity protection	Supported									
Insulation monitoring	Supported									
DC surge protection	Supported									
AC surge protection	Supported									
Residual current monitoring	Supported									
AC overcurrent protection	Supported									
AC short-circuit protection	Supported									
AC overvoltage protection	Supported									

Sigen Energy Gateway

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

Sigen Energy Gateway HomeMax Single / Three Phase

Preliminary

Sigen Gateway	HomeMax SP	HomeMax TP	Units
Grid Connection			
Grid connection type	Single phase	Three phase	
Max. AC input / output power	22	50	kW
Max. AC input current	100	76	A
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Nominal AC frequency	50 / 60		Hz
Grid disconnection switchover time [1]	0		ms
AC Output to Backup Port			
Max. AC output power	22	50	kW
Max. AC output current	100	76	A
Nominal AC frequency	50 / 60		Hz
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Overvoltage category	III		
Inverter Connection / EV Charger Port (optional)			
Max. number of connection	3	2	
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Max. AC circuit breaker	32	42	A
Max. AC nominal power per inverter connection	6	25	kW
Compatible EV charger power	7	11 /22	kW
EV charging mode	Solar boost charging, time-based charging, load balancing		
Smart Port Connection			
Max. AC input / output power	14.5	50	kW
Max. continuous input / output current	63	76	A
Generator output voltage	220 / 230 / 240	380 / 400	V
Dry contact switch voltage rating	250 / 30		Vac/Vdc
Dry contact switch current rating	1		A
Generator 2-wire start	Supported		
General Data			
Dimensions (W / H / D)	455 / 660 / 179		mm
Weight	< 20	< 30	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		

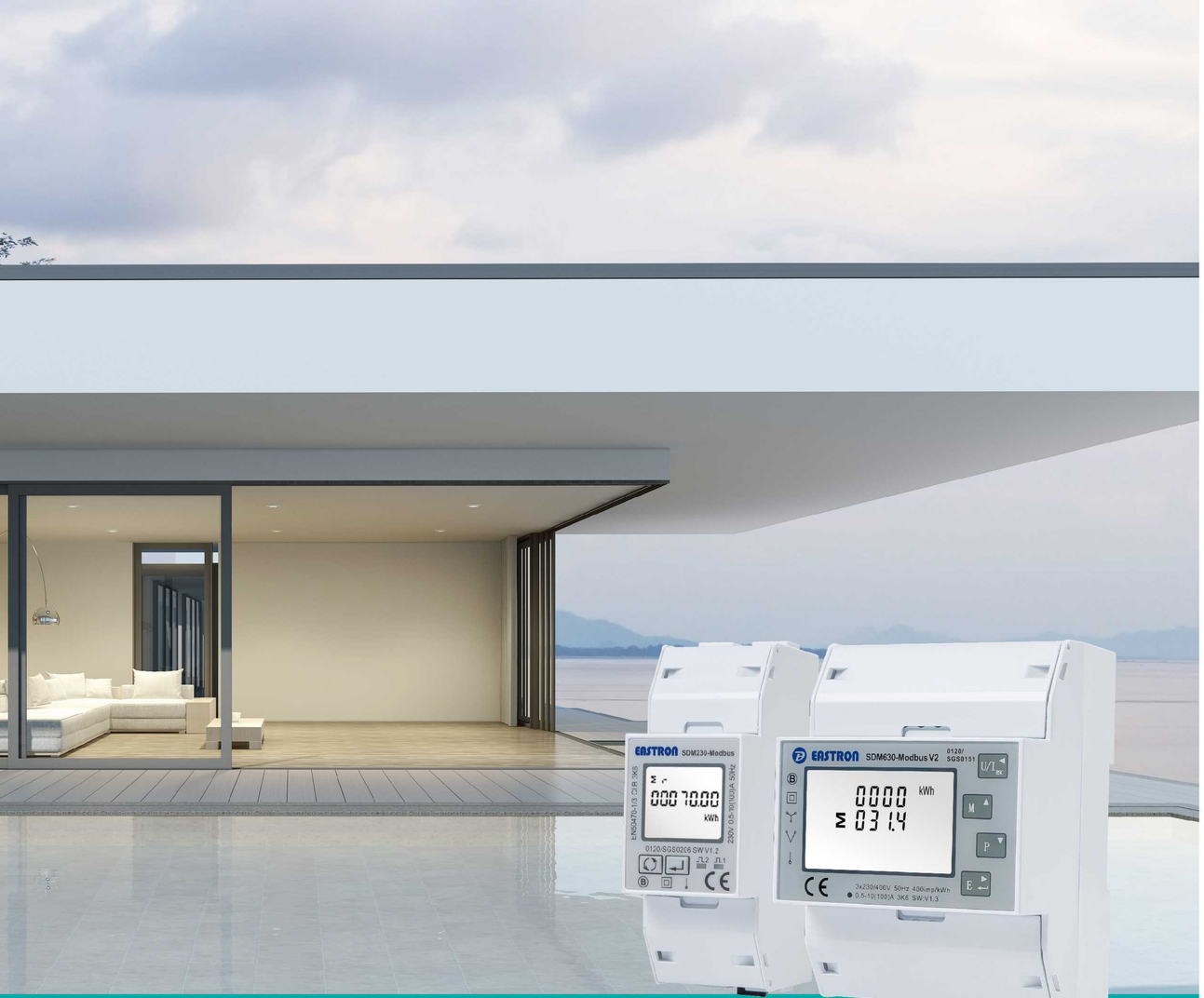
1. Need to be used together with Sigen Energy Controller / Sigen Storage Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller / Sigen Storage Controller is higher than the total power of the home loads.

Sigen Communication Module

- IP66 protection rating, 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 Storage 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
- Top class 100 A direct connection in power sensor with built-in CT
- Support export/import limitations and ready for AI evolving
- 100 ms data refresh rate, instantaneous data feed

Sigen Power Sensor

Sigen Sensor	SP-DH	SP-CT120-DH	TP-DH	TP-CT120-DH	Units
Power Supply					
Grid connection type	1P2W		3P3W/3P4W		
AC input voltage range	176 ~ 276		173 ~ 480		Vac
Nominal AC frequency	50 / 60				Hz
Max. operating current	100	-	100	-	A
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)	36 / 100 / 63	18 / 118 / 64	72 / 100 / 66	72 / 94.5 / 65	mm
Weight	0.20	0.07	0.32	0.20	kg
Storage temperature range	-40 ~ 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	-	1	-	3	pcs
Cable length of CT	-	1	-	1	m
Inner diameter of CT	-	16	-	16	mm
Weight of CT	-	0.09	-	0.09	kg
Max. operating current of CT	-	120	-	120	A
Output current of CT	-	0.04	-	0.04	A
Standard Compliance					
Standard	EN 61010-1:2010, EN 61010-2-030:2010				

Sigen EV AC Charger

- Green power charging with Sigenergy home energy solution
- Data tracking & scheduled charging on mySigen App
- Dynamic load management to prevent overload, user-friendly charging*
- Easy installation with less steps and top/bottom entry option
- Integrated residual current failure protection reduces installation costs
- IP65 and wall/pole-mounted installation provide high adaptability

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

Sigen EV AC Charger 7 / 11 / 22 kW

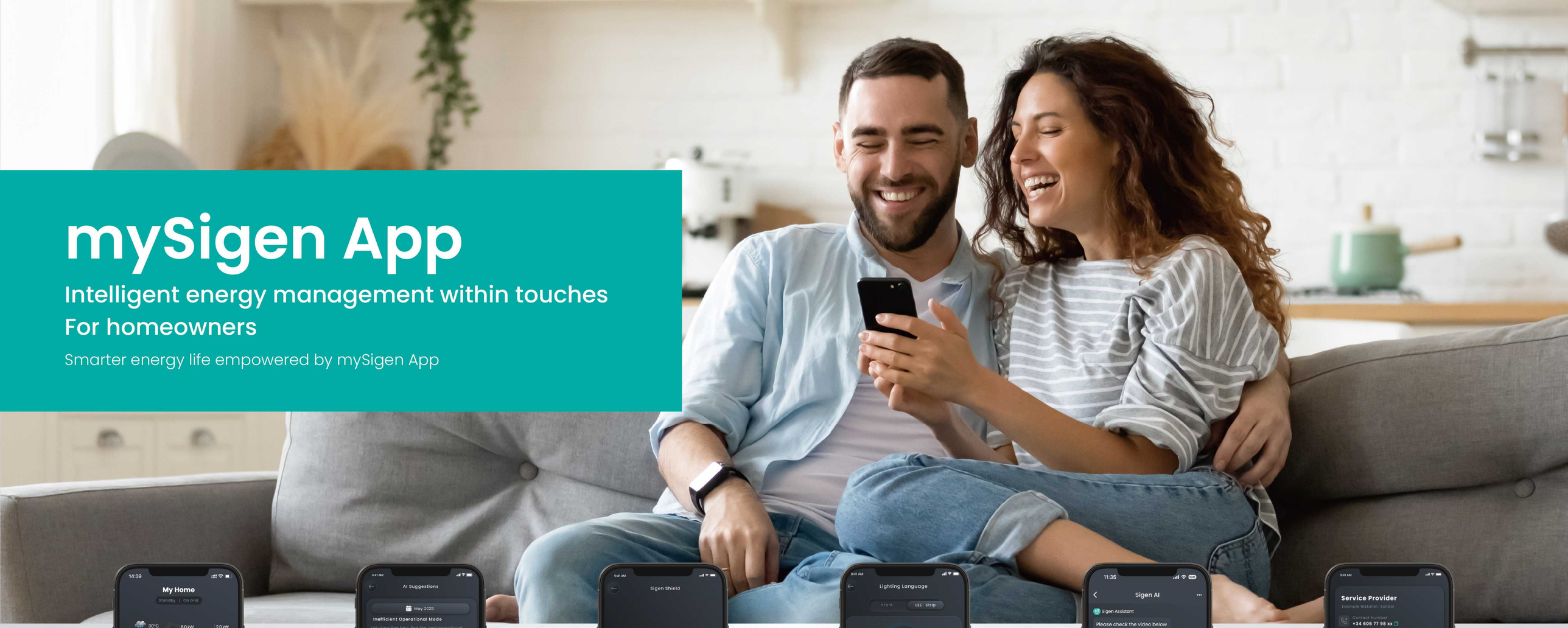
Preliminary

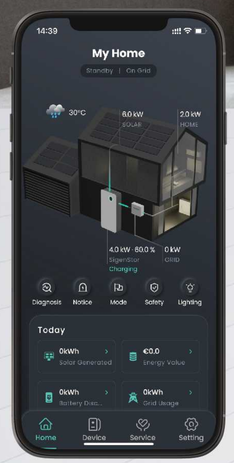
Sigen EVAC	7	11	22	Units
AC Input & Output				
Nominal charging power	7	11	22	kW
Nominal output voltage	1P/N/PE, 220 ~ 240	3P/N/PE, 220 ~ 240 / 380 ~ 415	3P/N/PE, 220 ~ 240 / 380 ~ 415	V
Output current range	6 ~ 32	6 ~ 16	6 ~ 32	A
Nominal AC frequency	50 / 60			Hz
Vehicle connection	Type 1 connector / Type 2 connector / Type 2 socket with shutters			
AC input cable width range	2.5 ~ 10.0			mm^2
Protection				
Integrated DC fault detection	6			mA
Integrated AC fault detection	30			mA
Flame retardant rating	UL94-V0			
Over / Under voltage protection	Supported			
Overload protection	Supported			
Over temperature protection	Supported			
PEN protection	Supported			
TIC electricity meter interface	Supported			
Randomized charging delay	Supported			
Ground fault protection	Supported			
Surge protection	Supported			
Grounding system	TT, TN, IT			
User Interface & Communication				
Protocol	Modbus TCP			
Communication	4G / Wi-Fi / Bluetooth / Fast Ethernet			
Authentication	RFID card / App / Auto-charge (no authentication)			
Display	LED indicator / App			
Charging mode	Standard charging / Scheduled charging / Solar boost charging			
Metering	External meter with RS485 / Integrated metering IC			
Dynamic load management	Supported			
Phase switching	Supported			
General Data				
Dimensions (W / H / D)	210 / 380 / 125			mm
Weight	4			kg
Storage temperature range	-40 ~ 70			°C
Operating temperature range	-30 ~ 55			°C
Relative humidity range	5% ~ 95%			
Max. operating altitude	4000			m
Cooling	Natural convection			
Ingress protection rating	IP65			
Installation method	Wall-mounted / Pole-mounted (optional)			
Application environment	Outdoor / Indoor			
Standby self-consumption	< 3.6			W
Integrated charging cable length	5			m

mySigen App

Intelligent energy management within touches
For homeowners

Smarter energy life empowered by mySigen App





Real-time monitoring

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

AI Mode

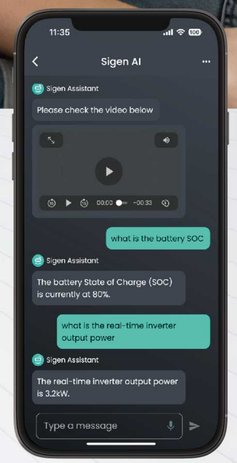
Provide intelligent optimization
suggestions on system mode,
battery capacity and energy usage

Sigen Shield

Discover industry-leading
battery safety features

Fun ambient lighting

Customizable lighting language
Add personality to your system



Sigen AI

After-sales engineer
Home energy analyst
Device mgmt. assistant

Interactive services

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

mySigen App

Intelligent energy management within touches
For installers

Simplify your installation process, one App does it all

Step 0
Scan to add a new system

Step 1
Fill out details

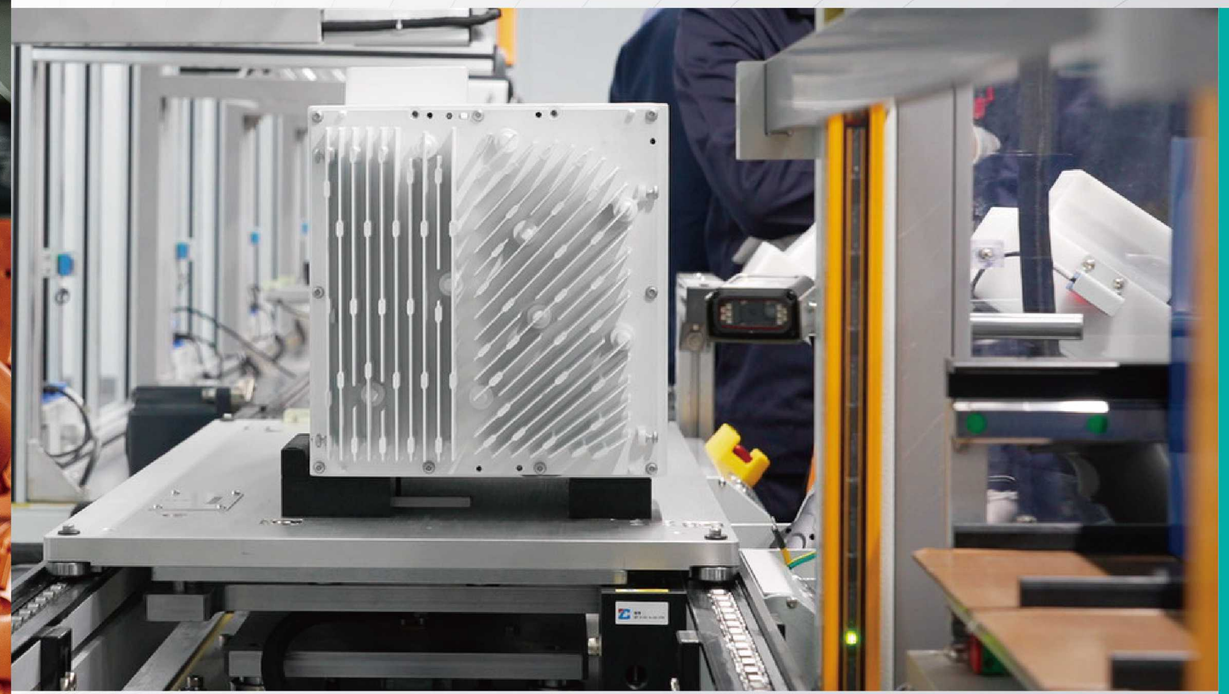
Step 2
Fast software upgrade

Step 3
Confirm preset parameters

Step 4
One-click full system check

Step 5
Confirm

Leading the Way in Intelligent Manufacturing



6 GWh
Battery production capacity

12 GW
Power production capacity

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

Runs on Solar by Sigenergy solutions for a Sustainable Tomorrow

By adopting Sigenergy products and embracing solar energy, our factory has realized green manufacturing. With a 3,000 sqm PV plant on the rooftop, We have significantly reduced our reliance on fossil fuels and effectively cut carbon foot-print 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

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.

Join Us
Achieve Together

As service partners, you can enjoy

More Credibility

As an official service partner, you may get more access to financial support, as well as helping your customers qualify for government rebates.

Operations Care

Whatever you need, your business gets priority support from us. Large premium partners also receive spare parts without up-front payment.

Training & Certification

We offer continuous technical training to prepare you and uplift your skills. You can earn more customer trust by getting certified.

Simplified Process

Whether for installation or service, our one-stop mobile App will assist you all the way to ensure a quick and smooth experience.

Recognition & Rewards

The higher customer satisfaction rating you get, the more prizes and financial rewards you'll receive.

Exclusive Promotion

As a certified service partner, your business potential is maximized by our priority recommendation to your local customers.