



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

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**Home Energy Solution**  
Let the world enjoy green energy

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Residential Solution

Why Sigenergy?

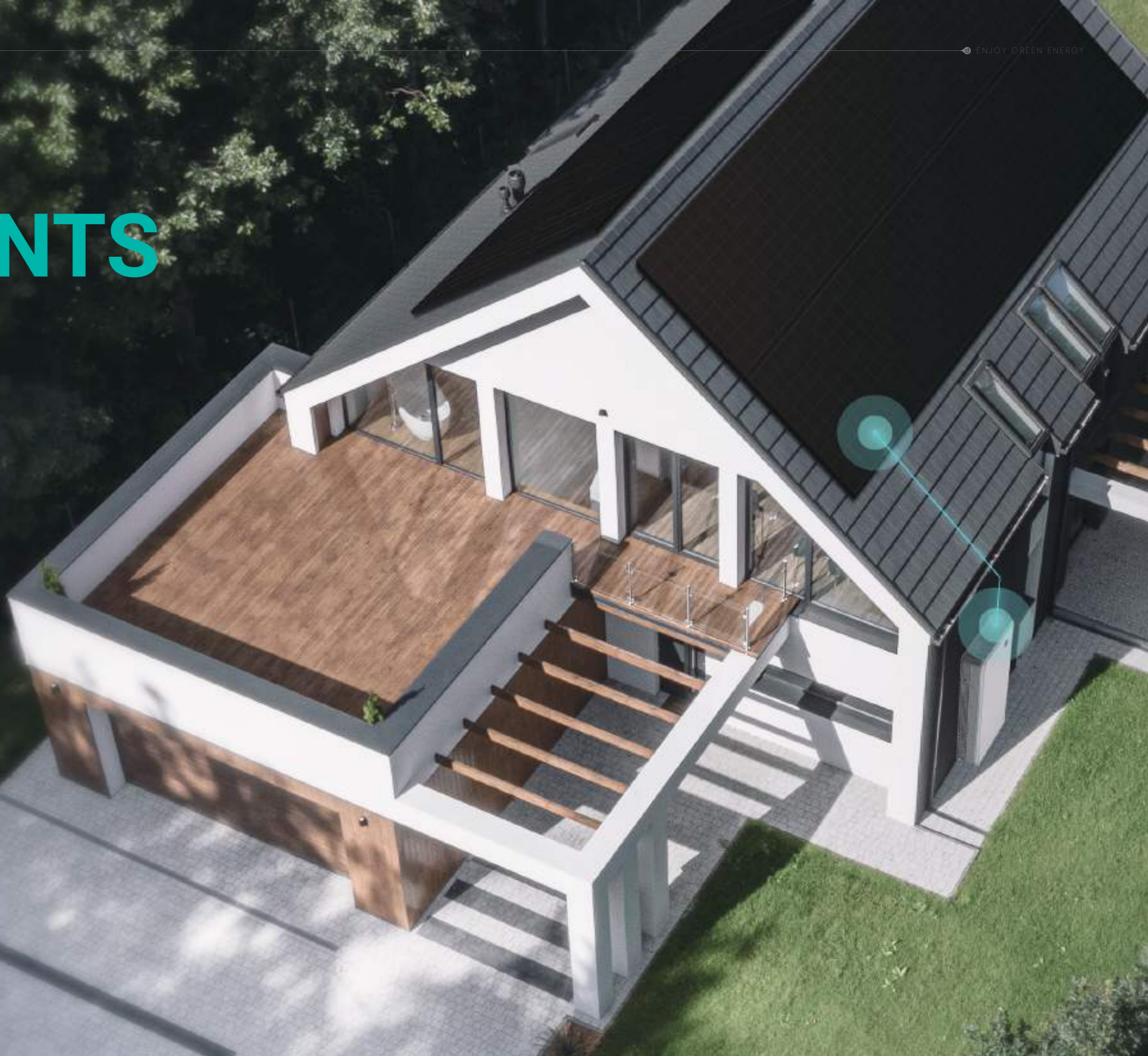
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## Trusted Partner

Solar-powered Manufacturing

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# ABOUT SIGENERGY

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## VISION

Enjoy Green Energy

## MISSION

Be a distributed energy pioneer.

Build intelligent energy solutions with superior safety, ultra simplicity, and outstanding performance.

# SIGEN

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



# Sigenergy Home Energy Solutions



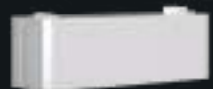
## 5-in-One SigenStor



**SigenStor EC**  
For solar + Energy storage system



**SigenStor EVDC**  
Bi-directional EV charger



**SigenStor BAT**  
Modular BESS

## Energy Gateway



**Sigen Gateway**  
Powerful home energy hub

## Micro Inverter



**SigenMicro Inverter**  
Ideal for rooftop and balcony solar

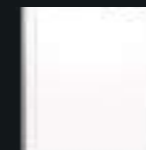
## Hybrid Inverter



**Sigen Hybrid Inverter**  
Efficient & elegant



**SigenStor BC**  
Connect Sigen Battery  
to Sigen Hybrid Inverter



**SigenStor BAT**  
Modular BESS

## EV AC Charger



**Sigen EVAC Charger**  
Power drives with smart energy

## App & Cloud



**Sigen Cloud**  
A platform for device lifecycle  
mgmt. and business  
decision-making



**mySigen App**  
Intelligent energy mgmt.  
within touches

Why Sigenenergy?

## 01 Visualise Every Ray of Energy

Track energy flow with precision—from power generation to consumption. Gain clear insights into your battery's green energy composition, ensuring transparency and efficiency in every charge.

### System-level

Know every watt's source and destination

### Load-level

See the power source behind every watt



Why Sigenenergy?

## 02 Let AI Power Your Energy Freedom

mySigen App integrates AI deeply with Sigen AI Mode, AI-driven insights, and a GPT-4o - powered smart assistant, using advanced AI to boost system efficiency, convenience, and performance.

Intelligent diagnostics powered by AI deep thinking

AI-empowered system operation strategy analysis



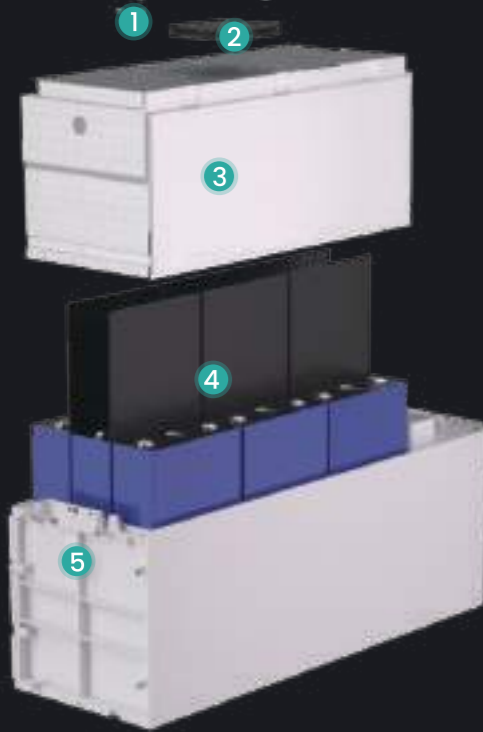
Why Sigenergy?

## 03 Superior Battery Safety

Sigen Battery uses highly reliable LFP cells and features industry-leading protections. Offering 10,000 life cycles\* and setting a new benchmark for battery safety.

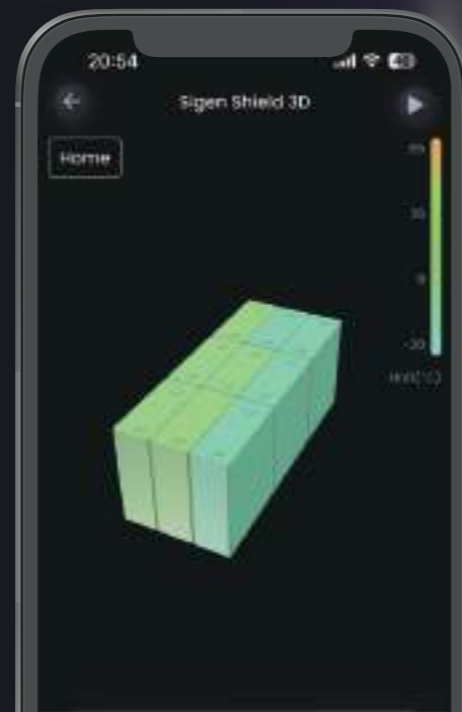
# 5 Layers

## Battery Safety Protection



- 1 Cell-level temperature monitoring
- 2 Internal fire extinguishing kit
- 3 High-temp. resistance insulated pads
- 4 Aerogel insulated pads
- 5 Decompression valve

Real-time battery monitoring  
**mySigen APP**



\*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%.

Why Sigenergy?

## 04 Goodbye to Power Outage

Sigenergy provides the ultimate backup solution. Our patented power control algorithm enables seamless energy switching and robust off-grid performance.

# 0 ms

## Load-side disruption



Why Sigenergy?

## 05 Innovative DC-Coupled Architecture

Direct DC bus connection among PV, ESS and EV chargers boosts system efficiency and power density. With a smart battery optimizer for each pack, it supports mixed use of new/aged batteries and active balancing.



**DC BUS**  
Patented architecture

**Optimiser**  
for each battery

**Mixed use**  
Of new/aged batteries

Why Sigenergy?

## 06 Pioneering Future-proof V2X

The world's first V2X-powered home energy revolution. SigenStor EVDC pioneers 25kw bidirectional EV - Home integration, bringing limitless possibilities to the energy industry.



\*V2X functionality is limited by the EVs capabilities. Once the relevant standards are published, V2X feature can be upgraded through the OTA. For the official support of vehicle models and support timelines, please refer to future announcement made on the official website.

# Sigen Energy Controller

5.0-12.0 kW

Single Phase

5.0-30.0 kW

Three Phase

- EMS-integrated intelligent management for precision control
- Max. 2.0 DC/AC ratio compatibility, higher energy utilization (Single Phase)
- Unbalanced 3-phase power output, ensuring efficient operation
- 150% peak output power in off-grid mode, instant high-power boost
- Up to 4 MPP trackers for maximum solar energy extraction



Sigen Energy Controller 5.0–12.0 kW Single Phase Australia

SigenStor EC	5.0 SP	6.0 SP	8.0 SP	10.0 SP	12.0 SP	Units
DC Input (from PV)						
Max. PV power	10000	12000	16000	20000	24000	W
Max. DC input voltage <sup>1</sup>			600			V
Nominal DC input voltage			350			V
Start-up voltage			100			V
MPPT voltage range			50 ~ 550			V
Number of MPP. trackers	2	2	3	4	4	
Number of PV strings per MPPT			1			
Max. input current per MPPT			16			A
Max. short-circuit current per MPPT			20			A
AC Output (on-grid)						
Nominal output power	4999	6000	8000	9999	12000	W
Max. output apparent power	4999	6600	8800	9999	12000	VA
Nominal output current	21.7	27.3	36.4	43.4	54.6	A
Max. output current	21.7	30.0	40.0	43.4	54.6	A
Nominal output voltage	220 / 230 / 240			220 / 230		V
Nominal grid frequency			50 / 60			Hz
Power factor		0.8 leading ~ 0.8 lagging				
Total current harmonic distortion			THDi < 2%			
Efficiency						
Max. efficiency	98.0%	98.0%	97.6%	97.6%	97.6%	
European efficiency	97.4%	97.4%	97.0%	97.0%	97.0%	
AC Output (backup)						
Nominal output power	5000	6000	8000	10000	12000	W
Max. output apparent power	5500	6600	8800	11000	13200	VA
Peak output power (10 seconds)	7500	9000	12000	15000	18000	W
Nominal output current	22.7	27.3	36.4	45.5	54.6	A
Max. output current	25.0	30.0	40.0	50.0	60.0	A
Peak output current (10 seconds)	34.1	40.9	54.6	68.2	81.8	A
Nominal output voltage	220 / 230 / 240			220 / 230		V
Nominal output frequency			50 / 60			Hz
Power factor		0.8 leading ~ 0.8 lagging				
Total voltage harmonic distortion			THDv < 2%			
Disruption time of backup switch <sup>2</sup>			0			ms
Battery Connection						
Battery module models	SigenStor BAT 5.0 / 8.0					
Number of modules per controller	1 ~ 6					pcs
Battery module voltage range	300 ~ 600					V
Protection						

Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>3</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection
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General Data			
Dimensions (W / H / D)	700 / 300 / 245	700 / 300 / 260	mm
Weight	18	36	kg
Storage temperature range		-40 ~ 70	°C
Operating temperature range		-30 ~ 60	°C
Relative humidity range		0% ~ 100%	
Max. operating altitude		4000	m
Cooling	Natural convection	Smart air cooling	
System ingress protection rating		IP66	
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)		

Standard Compliance						
Standard <sup>4</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2, AS 4777					

1.

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

This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.
3.

This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
4.

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

Sigen Energy Controller 5.0–30.0 kW Three Phase Australia

SigenStor EC	5.0 TP	10.0 TP	15.0 TP	20.0 TP	25.0 TP	30.0 TP	Units
DC Input (from PV)							
Max. PV power	8000	16000	24000	32000	40000	48000	W
Max. DC input voltage <sup>1</sup>			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	3	4	4	4	
Number of PV strings per MPPT			1				
Max. input current per MPPT			16				A
Max. short-circuit current per MPPT			20				A
AC Output (on-grid)							
Nominal output power	5000	9999	15000	20000	25000	29999	W
Max. output apparent power	5000	9999	15000	22000	27500	29999	VA
Nominal output current	7.2	14.4	21.7	30.4	38.0	43.4	A
Max. output current	7.2	14.4	21.7	33.4	41.8	43.4	A
Nominal output voltage			380 / 400				V
Nominal grid frequency			50 / 60				Hz
Power factor			0.8 leading ~ 0.8 lagging				
Total current harmonic distortion			THDi < 2%				
Efficiency							
Max. efficiency	98.1%	98.3%	98.3%	98.3%	98.3%	98.4%	
European efficiency	96.1%	97.5%	97.9%	97.9%	98.0%	98.0%	
AC Output (backup)							
Nominal output power	5000	10000	15000	20000	25000	30000	W
Max. output apparent power	5500	11000	16500	22000	27500	33000	VA
Peak output power (10 seconds)	7500	15000	22500	30000	30000	36000	W
Nominal output current	7.6	15.2	22.8	30.4	38.0	45.6	A
Max. output current	8.4	16.7	25.1	33.4	41.8	50.1	A
Peak output current (10 seconds)	11.4	22.8	34.2	45.6	45.6	54.7	A
Nominal output voltage			380 / 400				V
Nominal output frequency			50 / 60				Hz
Power factor			0.8 leading ~ 0.8 lagging				
Total voltage harmonic distortion			THDv < 2%				
Disruption time of backup switch <sup>2</sup>			0				ms
Battery Connection							
Battery module models		SigenStor BAT 5.0 / 8.0					
Number of modules per controller		1 ~ 6					
Battery module voltage range		600 ~ 900					
Protection							

Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>3</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection
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General Data							
Dimensions (W / H / D)	700 / 300 / 260						mm
Weight	36	36	36	36	36	38	kg
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 100%						
Max. operating altitude	4000						m
Cooling	Smart air cooling						
System ingress protection rating	IP66						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						

Standard Compliance							
Standard <sup>4</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2, AS 4777						

1.

The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
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3.

This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
4.

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

# Sigen EV DC Charging Module

- World's first V2X-integrated all-in-one home energy system
- 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

## Sigen EV DC Charging Module

SigenStor EVDC <sup>1</sup>	12	25	Units
DC Charging			
Max. charging power of charging port	12.5	25	kW
Max. discharging power of charging port	12.5	25	kW
Operation voltage range	150 ~ 1000		V
Max. operation current	40	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 <sup>2</sup>	37 (5m cable) / 39 (7.5m cable) / 41 (10m cable)		kg
Storage temperature range	-40 ~ 70		°C
Operating temperature range	-30 ~ 60		°C
Relative humidity range	5% ~ 95%		
Max. operating altitude	4000		m
Cooling	Smart air cooling		
System ingress protection rating	IP66		
Integrated charging cable length <sup>3</sup>	5 / 7.5 / 10		m
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 <sup>4</sup> , Smart load management		
User interfaces	LED indicator, App, RFID		
Remote function	OTA, Remote diagnostics		
OCPP protocol	OCPP 1.6J ED 2		
Standard Compliance			
Standard <sup>5</sup>	EN IEC 61851-1, EN 61851-23, EN IEC 61851-21-2, ETSI EN 303 645		

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

2. The net weight includes the CCS2 cable-assembly also, but excludes the exteriors, wall-mounting fixtures and the related attachments.

3. Integrated charging cable length refers to the length of the cable that extends from the Sigen EV DC Charging Module, not the length of the exposed cable.

4. V2X functionality is limited by the EV's capabilities. Once the relevant standards are published and tested, V2X feature can be upgraded through the OTA. For the official support of vehicle models and support timelines, please refer to future announcement made on the official website.

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

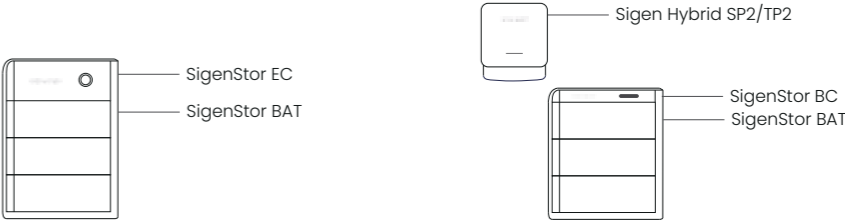
# Sigen Battery

- Premium 280Ah cells with 10,000 cycles, long-lasting & reliable
- 5-layer battery safety protection redefines safety standards
- Pack-level battery optimisation, mix and match, upgrade with ease
- Higher energy density, efficient storage & compact design
- 100% depth of discharge, maximum energy utilisation

## Sigen Battery

SigenStor BAT	5.0	8.0	Units
Performance Specification			
Battery type	LiFePO4		
Cell capacity	280		Ah
Cycle life <sup>1</sup>	10000		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity <sup>2</sup>	5.2	7.8	kWh
Depth of discharge <sup>3</sup>	100%		
Max. charge / discharge power	2500	4000	W
Max. charge / discharge current	7.5	12.0	A
Peak charge / discharge power (10 seconds)	3750	6000	W
General Data			
Weight	55	70	kg
Dimensions (W / H / D)	767 / 270 / 260		mm
Storage temperature range	-25 ~ 60		°C
Operating temperature range	-20 ~ 55		°C
Relative humidity range	5% ~ 95%		
Max. operating altitude	4000		m
Cooling	Natural convection		
System ingress protection rating	IP66		
Installation method	Floor standing / Wall-mounted		
Number of modules per controller	1 ~ 6		pcs
Compatible inverters	SigenStor EC series Sigen Hybrid SP2/TP2 series <sup>4</sup>		

Standard Compliance		
Standard	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040	
	SigenStor BC	
Operating voltage range (Single Phase)	300 ~ 600	V
Operating voltage range (Three Phase)	600 ~ 900	V
Weight	8	kg
Dimensions (W / H / D)	765 / 109 / 260 (without decorative cover)	mm
Compatible battery system	SigenStor BAT series	
Compatible inverter	Sigen Hybrid SP2/TP2 series	
Communication	CAN	



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 the usable energy capacity.
4. SigenStor BC must be used if Sigen Hybrid SP2/TP2 is to be connected to the Sigen Battery.
5. For all standards refer to the certificates category on the Sigenergy website.

# Sigen Hybrid Inverter

Harmoniously Complementing Your Home



Sigen Battery Controller  
(SigenStor BC)

Sigen Battery  
(SigenStor BAT)



**99mm**  
**ultra slim design**



**25 dB**  
**Super silent**



**IP66**



Wide operating temperature

**From -30 °C to 60 °C**



**99.0%**

Industry-leading max. efficiency

**200%**

Peak output power while off-grid  
(Three phase, 10 seconds)

**200%**

DC/AC ratio for higher yield



Sigen Hybrid Inverter 3.0–6.0 kW Single Phase Australia

Sigen Hybrid	3.0 SP2	5.0 SP2	6.0 SP2	Units
DC Input (from PV)				
Max. PV power	6000	10000	12000	W
Max. DC input voltage <sup>1</sup>		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		22		A
Battery Connection				
Battery controller models	SigenStor BC			
Battery module models	SigenStor BAT series			
Number of modules per controller		1 ~ 6		pcs
Battery module voltage range		300 ~ 600		V
AC Output (on-grid)				
Nominal output power	3000	4999	6000	W
Max. output apparent power	3300	4999	6600	VA
Nominal output current	13.6	21.7	27.3	A
Max. output current	15.0	21.7	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 < 3%		
AC Output (backup)				
Nominal output power	3000	5000	6000	W
Max. output apparent power	3300	5500	6600	VA
Peak output power (10 seconds)	4500	7500	9000	W
Nominal output current	13.6	22.7	27.3	A
Max. output current	15.0	25.0	30.0	A
Peak output current (10 seconds)	20.5	34.1	40.9	A
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 < 3%		
Disruption time of backup switch <sup>2</sup>		0		ms
Efficiency				
Max. efficiency		98.6%		
European efficiency	97.5%	98.3%	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/AC surge protection, Anti-islanding protection			
General Data				
Dimensions (W / H / D)	373 / 473 / 99			mm
Weight	11.5			kg
Storage temperature range	-40 ~ 70			°C
Operating temperature range	-30 ~ 60			°C
Relative humidity range	0% ~ 100%			
Max. operating altitude	4000			m
Cooling	Natural convection			
System ingress protection rating	IP66			
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)			
Installation method	Wall-mounted			
Night consumption	2.5			W
Noise	25			dB

1.
- The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2.
- This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Battery and Sigen Hybrid Inverter. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Hybrid Inverter is higher than the total power of the home loads.

Sigen Hybrid Inverter 5.0–12.0 kW Three Phase Australia

Sigen Hybrid	5.0 TP2	6.0 TP2	8.0 TP2	10.0 TP2	12.0 TP2	Units
DC Input (from PV)						
Max. PV power	10000	12000	16000	20000	24000	W
Max. DC input voltage <sup>1</sup>			1100			V
Nominal DC input voltage			600			V
Start-up voltage			180			V
MPPT voltage range			160 ~ 1000			V
Number of MPP. trackers			2			
Number of PV strings per MPPT		1		1/2		
Max. input current per MPPT		16		16/32	16/32	A
Max. short-circuit current per MPPT		22		22/44	22/44	A
Battery Connection						
Battery controller models	SigenStor BC					
Battery module models	SigenStor BAT series					
Number of modules per controller	1 ~ 6 pcs					
Battery module voltage range	600 ~ 900 V					
AC Output (on-grid)						
Nominal output power	5000	6000	8000	9999	12000	W
Max. output apparent power	5000	6600	8800	9999	13200	VA
Nominal output current	7.2	9.1	12.2	14.4	18.2	A
Max. output current	7.2	10.0	13.4	14.4	20.1	A
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)					V
Nominal grid frequency	50 / 60					Hz
Power factor	0.8 leading ~ 0.8 lagging					
Total current harmonic distortion	THDi < 3%					
AC Output (backup)						
Nominal output power	5000	6000	8000	10000	12000	W
Max. output apparent power	5500	6600	8800	11000	13200	VA
Peak output power (10 seconds)	10000	12000	16000	20000	24000	W
Nominal output current	7.6	9.1	12.2	15.2	18.2	A
Max. output current	8.4	10.0	13.4	16.7	20.1	A
Peak output current (10 seconds)	15.2	18.2	24.3	30.4	36.5	A
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)					V
Nominal output frequency	50 / 60					Hz
Power factor	0.8 leading ~ 0.8 lagging					
Total voltage harmonic distortion	THDv < 3%					
Disruption time of backup switch <sup>2</sup>	0					ms
Efficiency						
Max. efficiency	98.9%	99.0%	99.0%	99.0%	99.0%	
European efficiency	98.1%	98.5%	98.5%	98.5%	98.6%	
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)	477 / 568 / 99					mm
Weight	19.5					kg
Storage temperature range	-40 ~ 70					°C
Operating temperature range	-30 ~ 60					°C
Relative humidity range	0% ~ 100%					
Max. operating altitude	4000					m
Cooling	Natural convection					
System ingress protection rating	IP66					
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)					
Installation method	Wall-mounted					
Night consumption	3					W
Noise	28					dB

1.
- The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2.
- This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Battery and Sigen Hybrid Inverter. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Hybrid Inverter is higher than the total power of the home loads.

# Sigen Energy Gateway

- 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
- PV / ESS / grid / generator / V2X, multi-source seamless switching
- Whole-house backup & smart prioritized backup supported



## Sigen Energy Gateway for Australia

Sigen Gateway	Home SP AU	Home TP AU	Units
Grid Connection			
Grid connection type	Single phase	Three phase	
Nominal AC input / output voltage	220 / 230 / 240	380 / 400	V
Nominal AC input / output current	54.6	45.6	A
Nominal current of circuit breaker <sup>1</sup>		63	A
Nominal AC input / output power	12	30	kW
Nominal AC frequency		50 / 60	Hz
Disruption time of backup switch <sup>2</sup>		0	ms
AC Output to Backup Port			
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Nominal AC output current	54.6	45.6	A
Nominal current of circuit breaker <sup>1</sup>		63	A
Nominal AC output power	12	30	kW
Nominal AC frequency		50 / 60	Hz
Overvoltage category		III	
AC Output to Non-Backup Port			
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Nominal AC output current	54.6	45.6	A
Nominal AC output power	12	30	kW
Nominal AC frequency		50 / 60	Hz
Inverter Connection			
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Nominal AC input current	54.6 (INV1), 32 (INV2) <sup>3</sup>	45.6 (INV1), 32 (INV2) <sup>4</sup>	A
Nominal current of circuit breaker <sup>1</sup>		63 (INV1), 40 (INV2)	A
Smart Port Connection			
Generator output voltage	220 / 230 / 240	380 / 400	V
Nominal input / output current	54.6	45.6	A
Nominal current of circuit breaker <sup>1</sup>		63	A
Nominal AC input / output power	12	30	kW
Generator 2-wire start		Supported	
General Data			
Dimensions (W / H / D)	450 / 570 / 197 (without decorative cover)		mm
Weight	22.5 (without decorative cover)	25.5 (without decorative cover)	kg
Storage temperature range	-40 ~ 70		°C
Operating temperature range	-30 ~ 55		°C
Relative humidity range	0% ~ 100%		
Max. operation altitude	4000		m
Cooling	Natural convection		
Ingress protection rating	IP54		
Communication	Fast Ethernet , RS485, dry contact		
Installation method	Wall mounted, rear wiring supported		

1. The circuit breaker can be adjusted according to actual requirements and cable specifications.
2. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the backup loads.
3. For Sigenenergy single phase inverter products, 8.0-12.0 kW inverters should be connected to the INV1 port, 3.0-6.0 kW inverters should be connected to the INV2 port. The sum of the parallel power of the Sigenenergy inverters cannot exceed 12 kW.
4. For Sigenenergy three phase inverter products, 15.0-30.0 kW inverters should be connected to the INV1 port, 5.0-15.0 kW inverters should be connected to the INV2 port. The sum of the parallel power of the Sigenenergy inverters cannot exceed 30 kW.

# SigenMicro Inverter

400 W / 500 W 1-in-1 | 800 W / 1000 W 2-in-1

- Innovative DAB Topology, highest efficiency in the industry\*
- The world's first WLAN Mesh, more reliable and scalable
- The world's first EMS inside, free from network gateway
- AI layout recognition, 5 minutes fast commissioning
- Whitelisting security, enhanced data protection

Rooftop solar

Balcony solar

\* At 1 kW level

## SigenMicro Inverter

Preliminary

SigenMicro	400				500				800				1000				Units
DC Input																	
Commonly used module power	320 ~ 540+				400 ~ 670+				(320 ~ 540+) x 2				(400 ~ 670+) x 2				W
Start-up voltage					20												V
Min. / Max. PV input voltage					16 ~ 60												V
MPPT voltage range					16 ~ 60												V
Number of modules connected	1				1				2				2				
Max. input current	16 x 1				16 x 1				16 x 2				16 x 2				A
Max. input short-circuit current	25 x 1				25 x 1				25 x 2				25 x 2				A
AC Output																	
Grid type					Single Phase												
Nominal output power	400				500				800				1000				W
Nominal output current	1.82	1.74	1.67	2.27	2.17	2.08	3.64	3.48	3.33	4.55	4.35	4.17	A				
Nominal output voltage	220	230	240	220	230	240	220	230	240	220	230	240	V				
Nominal output voltage range <sup>1</sup>					184 ~ 275												V
Nominal grid frequency					50 / 60												Hz
Grid frequency range <sup>1</sup>					45 ~ 55 / 57 ~ 63												Hz
Total current harmonic distortion					THDi < 3% (at nominal power)												
Power factor					0.8 leading ~ 0.8 lagging												
Max. units per branch <sup>2</sup> (2.5 mm <sup>2</sup> , 20A)	8	9	9	7	7	7	4	4	4	3	3	3					
Max. units per branch <sup>2</sup> (4.0 mm <sup>2</sup> , 30A)	13	13	14	10	11	11	6	6	7	5	5	5					
Efficiency																	
Max. efficiency					97.5%												
European efficiency					96.7%												
Monitoring & Protection																	
Grid monitoring					Supported												
Ground fault detection					Supported												
PV module-level monitoring					Supported												
Rapid shutdown					Supported												
Surge protection					Supported												
General Data																	
Dimensions (W / H / D)					232 / 186 / 35 (without bracket)												mm
Weight					2.8												kg
Storage temperature range					-40 ~ 85												°C
Operating temperature range					-40 ~ 65												°C
Relative humidity range					0% ~ 100%												
Max. operation altitude					4000												m
Cooling					Natural convection												
Topology					High Frequency Transformers, Galvanically Isolated												
Night power consumption					< 50												mW
Ingress protection rating					IP67												
Display					LED												
Communication					WLAN												
AC connection type					Plug and play connector												
Installation method					Bracket mounted												

1. Nominal output voltage range and grid frequency range can vary depending on local requirements.
2. Limitations may differ by region. For the exact number of microinverters permitted per branch circuit, please refer to local regulations and standards. The current capacity of the cable is under normal temperature environment.
3. SigenMicro is only available in specific regions. Please contact Sigenergy or local distributors for details.

# Sigen Power Sensor

- RS485 or WLAN for communication
- Plug-and-play antenna for easy installation
- -40°C to +65°C wide operation range
- Class 1 direct connection in power sensor
- Perfect for SigenMicro series



## Sigen Power Sensor For SigenMicro only

Sigen Sensor <sup>1</sup>	SP-CT100-WI	TP-CT100-WI	Units
Power Supply			
Grid connection type	1P2W	3P3W/3P4W	
AC input voltage range	100 ~ 276	90 ~ 277 (L~N) 156 ~ 480 (L~L)	Vac
Nominal AC frequency	50/60		Hz
Max. operating current	100		A
Measurement Accuracy			
Voltage accuracy	0.5%		
Current accuracy	0.5% (4~120A), 1% (1~4A), 3% (0.06~1A)		
Power accuracy	1%		
Frequency accuracy	0.2%		
Communication			
Interface	RS485 / WLAN		
Baud rate	9600		bps
Protocol	Modbus RTU / Modbus TCP		
General Data			
Dimensions (W / H / D)	19 / 94.5 / 68.5		mm
Weight	0.07		kg
Storage temperature range	-40 ~ 85		°C
Operating temperature range	-40 ~ 70		°C
Relative humidity range	0% ~ 95%		
Ingress protection rating	IP20		
Installation method	DIN Rail 35 mm		
Standard Compliance			
Standard	IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6		

1. For more models refer to the Sigenergy website.

# Sigen EVAC Charger

- 100% Green power charging with Sigenergy home energy solution
- IP65 & IK10 protection rating, worry-free outdoor usage with easy O&M
- Dynamic load management to prevent overload, user-friendly charging\*
- Easy installation with less steps and top/bottom/rear wiring option
- Enable dynamic tariff & Sigen AI mode for smarter scheduling



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

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 2 connector / Type 2 socket with shutter			
AC input cable width range	2.5 ~ 6.0			mm²
Protection				
Integrated DC fault detection <sup>1</sup>	6			mA
Integrated AC fault detection <sup>1</sup>	30			mA
Flame retardant rating	UL94-5VB			
Over / Under voltage protection	Supported			
Overload protection	Supported			
Over temperature protection	Supported			
PEN protection	Supported			
Randomized charging delay	Supported			
Ground fault protection	Supported			
Surge protection	Supported			
Grounding system	TT, TN, IT			
User Interface & Communication				
Protocol	RS485, Modbus RTU			
Communication	4G / WLAN / Fast Ethernet			
Authentication	RFID card / App / Auto-charge (no authentication)			
Display	LED indicator / App			
Smart Charging	Smart Schedule	The system supports setting the charging start and stop times, charging frequency, and charging mode. Each scheduled time slot allows the charging mode to be set separately between PV Surplus charging and Fast Charging. The system uses PV Surplus to charge EVs, enabling 100% green power.		
	PV Surplus Charging	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.		
Metering	External meter with RS485 / Integrated metering IC			
Dynamic load management <sup>3</sup>	Supported			
Phase switching	Supported			
OCPP protocol	OCPP 1.6J ED 2			
General Data				
Dimensions (W / H / D)	234 / 384 / 126			mm
Weight (case B / case C)	4.5 / 6.4			kg
Storage temperature range	-40 ~ 70			°C
Operating temperature range	-30 ~ 55			°C
Relative humidity range	5% ~ 95%			
Max. operating altitude	4000			m
Cooling	Natural convection			
Ingress protection rating	IP65			
Installation method	Wall-mounted			
Application environment	Outdoor / Indoor			
Standby self-consumption	< 3.6			W
Standard charging cable length	5			m
Cable entries	Bottom, Top and Rear cable entries			
Standard Compliance				
Standard <sup>4</sup>	EN IEC 61851-1, IEC 62995, EN IEC 61851-21-2, ETSI EN 300 330 V2.1.1, ETSI EN 301 511 V12.5.1, EN IEC 62311, EN50665, ETSI EN 300 328 V2.2.2			

1. Residual direct current protective device (RDC-PD) with integrated AC pulsating DC and 6mA DC detection, evaluation and mechanical switching in the Sigen EV AC Charger is tested according to IEC 62955.

2. This function needs to be used with SigenStor.

3. This function needs to be used with Sigen Power Sensor.

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

\*This function needs to be used with Sigen Power Sensor.

# 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 IP size, plug-in design for easy installation
- Integrate smoothly with Sigenergy devices, no need for setup

Sigen Sensor SubIG Kit



Sigen Power Sensor



## Sigen Power Sensor

Sigen Sensor <sup>1</sup>	SP-DH	SP-CT100 <sup>2</sup>	TP-DH	TP-CT100 <sup>2</sup>	Units
Power Supply					
Grid connection type	1P2W		3P3W/3P4W		
AC input voltage range	176 ~276	100 ~ 276	173 ~ 480	176 ~ 276 (L-N) 277 ~ 304 (L-L)	Vac
Nominal AC frequency	50 / 60				
Max. operating current	100	-	100	-	A
Measurement Accuracy					
Voltage accuracy	0.5%				
Current accuracy	0.5%	0.5% (4 ~ 100A)	0.5%	0.5% (4 ~ 100A)	
Power accuracy	1%				
Frequency accuracy	0.2%	0.5%	0.2%	0.5%	
Communication					
Interface	RS485				
Baud rate	9,600				
Protocol	Modbus RTU				
General Data					
Dimensions (W / H / D)	36 / 100 / 63	19 / 94.5 / 68.5 or 18 / 100 / 65.5	72 / 100 / 66	19 / 94.5 / 68.5 or 18 / 100 / 65.5	mm
Weight	0.20	0.07	0.32	0.08	kg
Storage temperature range	-40 ~ 70				
Operating temperature range	-25 ~ 65				
Relative humidity range	0% ~ 90%				
Ingress protection rating	IP20				
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	-	24 / 16	-	24 / 16	mm
Weight of CT	-	0.09 / 0.13	-	0.2 / 0.43	kg
Max. operating current of CT	-	100	-	100	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	
Network protocol	IEEE 802.11ah	
Operating voltage	85 ~ 277	Vac
Maximum power	2	W
Operating temperature	-25 ~ 55	°C
Dimensions (W/H/D)	18 / 118 /66	mm
Wireless frequency	915	MHz
Wireless transmission distance <sup>2</sup>	≤ 200	m
Way to install	DIN35mm Rail mounting	

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 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 SIM card	Micro-SIM (12mm * 15mm)	
Supported standards	LTE-FDD B1/3/7/8/20/28A LTE-TDD B38/40/41 WCDMA B1/8 GSM/EDGE B3/8	
Storage temperature range	-40 ~ 70	°C
Operating temperature range	-30 ~ 60	°C
Relative humidity range	0% ~ 95%	
Max. operating altitude	4000	m
Controller / Inverter compatibility	Sigen Energy Controller series Sigen Hybrid Inverter series	

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

# mySigen App

Intelligent energy management within touches

Smarter energy life empowered by mySigen App



## Real-time Monitoring

Monitor real-time energy flow on home screen



## Sigen AI Mode

Max savings via smart scheduling that adapts to weather, tariffs and your energy usage pattern



## Energy Sankey Diagram

Know where every watt comes from and where it goes



## Sigen AI Assistant

Intelligent diagnostics powered by AI deep thinking



## Strategy Insight

AI-empowered system operation strategy analysis



## Battery Energy Source

Real-time visibility on battery power source composition



# Sigen Cloud

A platform for device lifecycle management and business decision-making.



- Instantly grasp business trends with data visualisation and interaction
- Batch remote system parameter configuration and auto command retry
- Enhanced system monitoring with real-time multi-layer information
- System data updates every 10 seconds, offering quick energy insights
- Sigen AI smart energy assistant, real-time help, always online



## Business Operation

- Interactive BI Dashboard
- Installer Points Dashboard
- Points Redemption Mall



## Efficient Maintenance

- Alert Management
- Ownership Management
- Fleet Management



## System Monitoring

- Status Management
- Real-time Energy Flow
- System Energy Graphs
- Reporting and Download
- Device Management



## Device Monitoring

- Real-time Device information
- Parameter Check and Remote Configuration
- Device Historical Curves



## After-sales Service

- Warranty Lookup



## Organisation Management

- Member Management
- Company Information
- Hierarchy Management



## Value-Added Services

- AI Smart Assistant
- Third-party VPP Integration
- Open Northbound Integration

# Runs on Solar by Sigenergy Solutions for a Sustainable Tomorrow

By adopting Sigenergy products and embracing solar energy, our factory has realized green manufacturing. With a 3,000 sqm PV plant on the rooftop, We have significantly reduced our reliance on fossil fuels and effectively cut carbon footprint during the manufacturing process. Our solar-powered production also translates into better efficiency and higher cost savings for our business. We are proud to be making a positive impact on the environment, and are committed to continuing to lead our sustainability practices to help build a better world for future generations. Additionally, Sigenergy's core production base, the Nantong Smart Manufacturing Hub, is under construction. Once completed, the facility is expected to produce 300,000+ inverters and battery packs yearly, providing strong manufacturing support to meet growing global demand.

## Plant Size

3,000 m<sup>2</sup> 362 kW<sub>p</sub>

240 kW<sub>ac</sub> 432 kWh

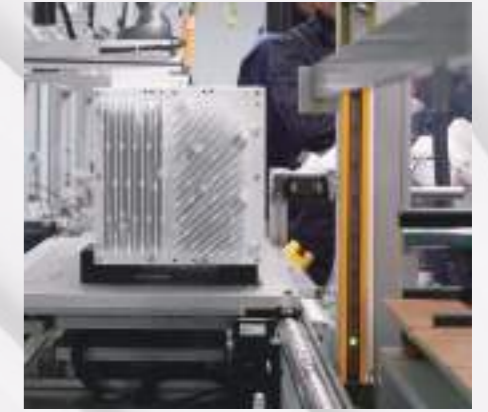
## Estimated Annual Generation

398,200 kWh

## Community Contribution per Year

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

269 equivalent of trees planted



# Powering Homes Worldwide

