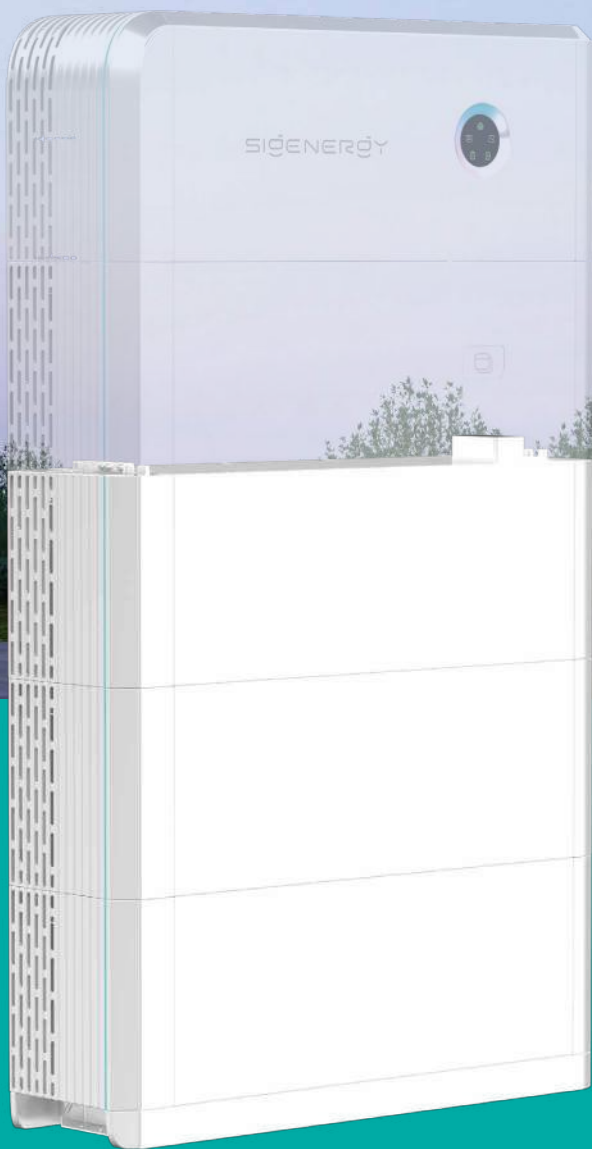


Datasheets

Energieopslag pakket Back-up Sigenergy 1-fase 5kW/10kWh



VDH SOLAR

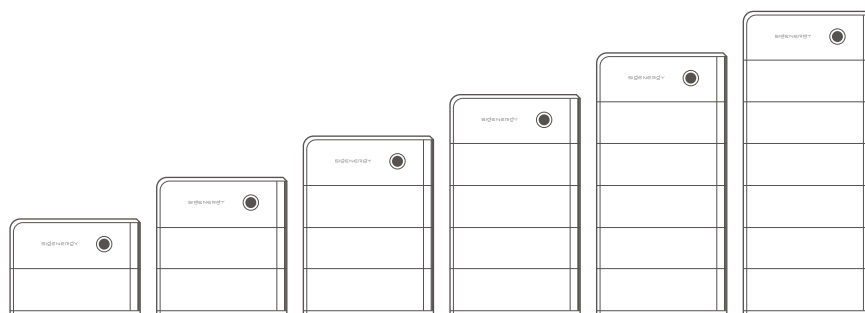


Sigen Battery

- Large cell capacity, low voltage & durable
- Multi-layer full battery safety protection
- Visible battery status on mySigen App
- Quick connectors for fast installation
- AI enablement, optimized battery cycle life
- Parallel connections for flexible battery mix

Sigen Battery 5.0 / 8.0 kWh

SigenStor BAT	5.0	8.0	Units
Performance Specification			
Battery type	LiFePO4		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity ¹	5.2	7.8	kWh
Battery modules voltage range (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		°C
Operating temperature range	-20 ~ 55		°C
Relative humidity range	5% ~ 95%		
Max. operating altitude	4000		m
Cooling	Natural convection		
System ingress protection rating	IP66		
Installation method	Floor standing / Wall-mounted		
Standard Compliance			
Standard	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040		



Number of battery modules ²	1	2	3	4	5	6	pcs
Total energy capacity	8.06	16.12	24.18	32.24	40.3	48.36	kWh
Max. charge / discharge power	4	8	12	16	20	24	kW
Total weight	112	183	254	325	396	467	kg
Total height (with base)	640	910	1180	1450	1720	1990	mm
Total width (with decorative covers)	850						mm
Total depth (with decorative covers)	260						mm

1. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.
2. The data in the table is based on the combination of SigenStor BAT 8.0 and SigenStor EC three-phase as an example, with a ground-mounted installation.

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Sigen Energy Controller

3.0 – 6.0 kW Single Phase

- EMS inside for precise control
- On & off-grid compatibility
- DC ground-fault protection
- DC/AC ratio up to 2
- Multi-source black start
- 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%				
Disruption time of backup switch ¹			0				ms
Battery Connection							
Battery module models			SigenStor BAT 5.0 / 8.0				
Number of modules per controller			1 ~ 6				pcs
Battery module voltage range			300 ~ 600				V
Protection							
Safety protection feature	DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Type II DC/AC surge protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection.						

General Data

Dimensions (W / H / D)	700 / 300 / 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
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- 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.
- For all standards refer to the certificates category in the Sigenenergy website.

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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 ¹	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
Standard Compliance					
Standard	EN 61010-1:2010, EN 61010-2-030:2010				

1. For more models refer to the Sigenergy website.



Sigen Energy Gateway HomeMax Series

- 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	
Nominal AC input / output voltage	220 / 230 / 240	380 / 400	V
Nominal AC input / output current	100	76	A
Nominal AC input / output power	22 / 23 / 24	50 / 52.6	kW
Nominal AC frequency	50 / 60		Hz
Disruption time of backup switch ¹	0		ms
AC Output to Backup Port			
Nominal AC output voltage	220 / 230 / 240	380 / 400	V
Nominal AC output current	100	76	A
Nominal AC output power	22 / 23 / 24	50 / 52.6	kW
Nominal AC frequency	50 / 60		Hz
Overvoltage category	III		
Inverter Connection / EV Charger Port (optional)			
Max. number of connection	3	2	
Nominal AC voltage	220 / 230 / 240	380 / 400	V
Nominal AC input current	32	38	A
Compatible EV charger power	7	11 / 22	kW
EV charging mode	Solar boost charging, time-based charging, load balancing		
Smart Port Connection			
Generator output voltage	220 / 230 / 240	380 / 400	
Nominal input / output current	63	76	A
Nominal AC input / output power	13.8 / 14.5 / 15.1	50 / 52.6	kW
Generator 2-wire start	Supported		
General Data			
Dimensions (W / H / D)	455 / 660 / 179	510 / 750 / 179	mm
Weight	19	23	kg
Storage temperature range	-40 ~ 70		°C
Operating temperature range	-30 ~ 55		°C
Relative humidity range	0% ~ 95%		
Max. operation altitude	4000		m
Cooling	Natural convection		
Ingress protection rating	IP54		
Communication	Fast Ethernet, RS485, dry contact		
Installation method	Wall mounted		

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

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