Datasheets

Energieopslag pakket Back-up Sigenergy 3-fase 5kW/10kWh

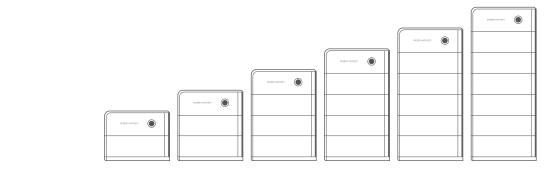






Sigen Battery 5.0 / 8.0 kWh

SigenStor BAT	5.0	8.0	Units			
Performance Specification			'			
Battery type	LiFe	PO4				
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	300 ~ 600				
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 / 27	70 / 260	mm			
Storage temperature range	-25	-25 ~ 60				
Operating temperature range	-20	-20 ~ 55				
Relative humidity range	5% ~	5% ~ 95%				
Max. operating altitude	40	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 620)40			



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

5.0 - 25.0 kW Three Phase

- EMS inside for precise control
- DC ground-fault protection
- Multi-source black start
- On & off-grid compatibility
- DC/AC ratio up to 1.6
- IP66 system protection rating

Sigen Energy Controller 5.0-25.0 kW Three Phase

SigenStor EC	5.0 TP	6.0 TP	8.0 TP	10.0 TP	12.0 TP	15.0 TP	17.0 TP	20.0 TP	25.0 TP	Units
DC Input (from PV)										
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	W
Max. DC input voltage					1100					V
Nominal DC input voltage					600					V
Start-up voltage					180					V
MPPT voltage range					160 ~ 1000)				V
Number of MPP. trackers		2			3			4		
Number of PV strings per MPPT					1					
Max. input current per MPPT					16					А
Max. short-circuit current per MPPT					20					А
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	А
Max. output current	8.4	10.0	13.4	16.7	20.1	25.1	28.4	33.4	41.8	А
Nominal output voltage					380 / 400)				V
Nominal grid frequency					50 / 60				-	Hz
Power factor				0.8 lea	ding ~ 0.8	lagging			-	
Total current harmonic distortion					THDi < 2%	,				
Efficiency										
Max. efficiency	98.1%	98.2%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	
European efficiency	96.1%	96.6%	97.1%	97.5%	97.7%	97.9%	97.9%	97.9%	98.0%	
AC Output (backup)										
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	W
Nominal output voltage	7300	3000	12000		380 / 400		20000	30000	30000	V
Nominal output frequency					50 / 60					Hz
Power factor				0.8 lead	ding ~ 0.8	lagging				112
Total voltage harmonic distortion					THDv < 2%					
Disruption time of backup switch 1					0					ms
Battery Connection										
Battery module models				Sigon	Stor BAT 5	n / o n				
Number of modules per controller				sigeri	1~6	.0 / 0.0				200
Battery module voltage range					600 ~ 900	`				pcs V
Protection					000 % 900	,				
Protection										
Safety protection feature	Ins	ulation m	onitoring,	Residual	current m	onitoring,	Type II D	C/AC surg	rity protecti ge protecti protection	on,
General Data										
Dimensions (W / H / D)				70	0/300/2	260				mm
Weight		36					kg			
Storage temperature range					-40 ~ 70					°C
Operating temperature range		-30 ~ 60					°C			
Relative humidity range					0% ~ 95%					
Max. operating altitude					4000					m
Cooling	Smart air cooling									
System ingress protection rating	IP66									
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)									
Standard Compliance										
Standard ²		IEC/EN 63	2109-1, IFC	/EN 62109)-2, IEC/EN	61000-6-	1, IEC/FN 6	61000-6-2		
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^{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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^{2.} For all standards refer to the certificates category in the Sigenergy website.





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	1P	22W	3P3W				
AC input voltage range	176	~ 276	173	Vac			
Nominal AC frequency		50 /	60		Hz		
Max. operating current	100	-	100	-	А		
Measurement Accuracy							
Voltage accuracy		0.5	%				
Current accuracy		0.5	%				
Power accuracy		1%	,				
Frequency accuracy		0.2	%				
Communication							
Interface		RS4	85				
Baud rate		960	00		bps		
Protocol		Modbu	s 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% ~ 9	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		0.09	kg		
Max. operating current of CT	-	120	-	120	А		
Standard Compliance							
Standard	EN 61010-1:2010, EN 61010-2-030:2010						

^{1.} For more models refer to the Sigenergy website.



- 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 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	А			
Nominal AC input / output power	22 / 23 / 24	50 / 52.6	kW			
Nominal AC frequency	50 /	60	Hz			
Disruption time of backup switch ¹	C)	ms			
AC Output to Backup Port						
Nominal AC output voltage	220 / 230 / 240	380 / 400	V			
Nominal AC output current	100	76	А			
Nominal AC output power	22 / 23 / 24	50 / 52.6	kW			
Nominal AC frequency	50 /	60	Hz			
Overvoltage category	II	II				
Inverter Connection / EV Cha	rger Port (optional)					
Max. number of connection	3	2				
Nominal AC voltage	220 / 230 / 240	380 / 400	V			
Nominal AC input current	32	38	А			
Compatible EV charger power	7	11 /22	kW			
EV charging mode	Solar boost charging, time-bo	ised charging, load balancing				
Smart Port Connection						
Generator output voltage	220 / 230 / 240	380 / 400				
Nominal input / output current	63	76	А			
Nominal AC input / output power	13.8 / 14.5 / 15.1	50 / 52.6	kW			
Generator 2-wire start	Supp	orted				
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	°C				
Relative humidity range	0% ~					
Max. operation altitude	40	m				
Cooling	Natural convection					
Ingress protection rating	IPS					
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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