## Datasheets

Energieopslag pakket Basis Sigenergy 3-fase 5kW/5kWh

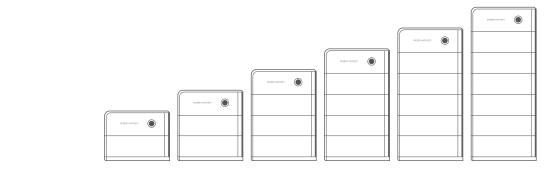






### Sigen Battery 5.0 / 8.0 kWh

SigenStor BAT	5.0	8.0	Units			
Performance Specification			'			
Battery type	LiFe	PO4				
Total energy capacity	5.38	8.06	kWh			
Usable energy capacity <sup>1</sup>	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	767 / 270 / 260				
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 <sup>2</sup>	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	Ctor DAT 5	n / o n				
Number of modules per controller		SigenStor BAT 5.0 / 8.0						noc		
Battery module voltage range					600 ~ 900	<u> </u>				pcs V
Protection					000 * 300	,				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.							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 Ethe	ernet / RS	485 / Sige	n Comml	Mod (4G/	3G/2G)		
Standard Compliance										
Standard <sup>2</sup>		IEC/EN 63	2109-1, IFC	/EN 62109	)-2, IEC/EN	61000-6-	1, IEC/FN F	61000-6-2		
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<sup>1.</sup> 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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<sup>2.</sup> 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 <sup>1</sup>	SP-DH	SP-CT120-DH	TP-DH	TP-CT120-DH	Units				
Power Supply									
Grid connection type	1P	2W	3P3W						
AC input voltage range	176	~ 276	173	~ 480	Vac				
Nominal AC frequency		50 /	60		Hz				
Max. operating current	100	-	100 -						
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% ~ 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	kg				
Max. operating current of CT	-	120	-	120	А				
Standard Compliance									

<sup>1.</sup> For more models refer to the Sigenergy website.



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