



# Sigen Energy Controller

5.0 – 6.0kW Single Phase

5.0 – 25.0kW 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 5.0–6.0 kW Single Phase Australia

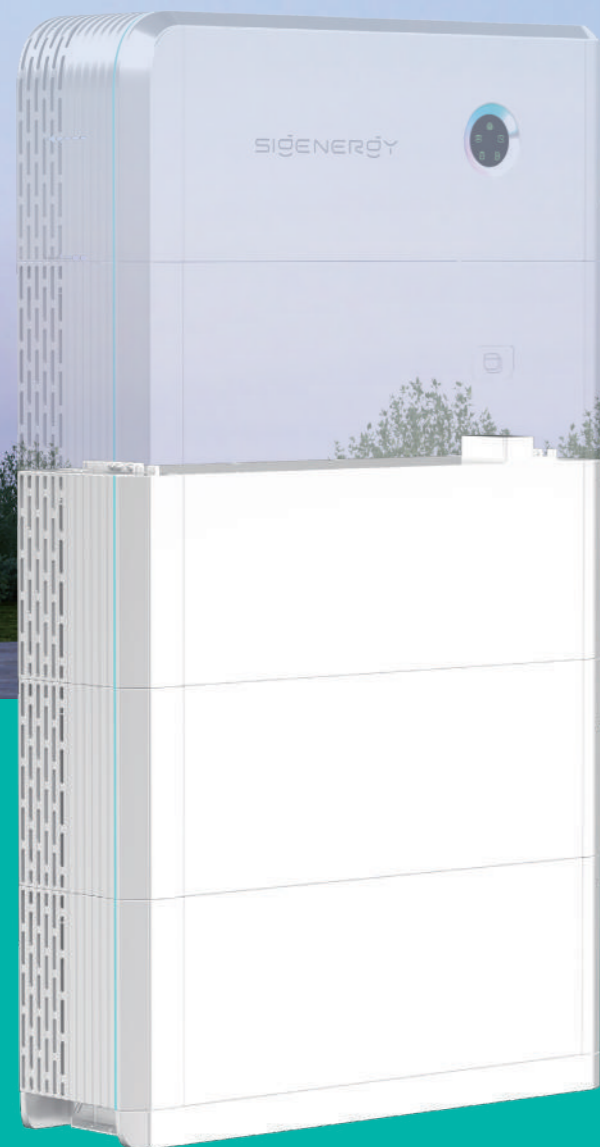
SigenStor EC	5.0 SP	6.0 SP	Units
<b>DC Input (from PV)</b>			
Max. PV power	10000	12000	W
Max. DC input voltage		600	V
Nominal DC input voltage		350	V
Start-up voltage		100	V
MPPT voltage range	50 ~ 550		V
Number of MPP. trackers	2		
Number of PV strings per MPPT	1		
Max. input current per MPPT	16		A
Max. short-circuit current per MPPT	20		A
<b>AC Output (on-grid)</b>			
Nominal output power	4999	6000	W
Max. output apparent power	4999	6600	VA
Nominal output current	21.7	27.3	A
Max. output current	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 < 2%		
<b>Efficiency</b>			
Max. efficiency	98.0%		
European efficiency	97.4%		
<b>AC Output (backup)</b>			
Nominal output power	5000	6000	W
Max. output apparent power	5500	6600	W
Peak output power (10 seconds)	7500	9000	W
Nominal output current	22.7	27.3	A
Max. output current	25.0	30.0	A
Peak output current (10 seconds)	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 < 2%		
Disruption time of backup switch <sup>1</sup>	0		ms
<b>Battery Connection</b>			
Battery module models	SigenStor BAT 5.0 / 8.0		
Number of modules per controller	1 ~ 6		pcs
Battery module voltage range	300 ~ 600		V
<b>Protection</b>			
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.		
<b>General Data</b>			
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)		
<b>Standard Compliance</b>			
Standard <sup>2</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2		

- 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.
- For all standards refer to the certificates category in the Sigenenergy website.

## Sigen Energy Controller 5.0–25.0 kW Three Phase Australia

SigenStor EC	5.0 TP	10.0 TP	15.0 TP	25.0 TP	Units
<b>DC Input (from PV)</b>					
Max. PV power	8000	16000	24000	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
<b>AC Output (on-grid)</b>					
Nominal output power	5000	9999	15000	25000	W
Max. output apparent power	5500	9999	15000	27500	VA
Nominal output current	7.6	14.4	21.7	38.0	A
Max. output current	8.4	14.4	21.7	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%			
<b>Efficiency</b>					
Max. efficiency	98.1%	98.3%	98.3%	98.3%	A
European efficiency	96.1%	97.5%	97.9%	98.0%	A
<b>AC Output (backup)</b>					
Nominal output power	5000	10000	15000	25000	W
Max. output apparent power	5500	11000	16500	27500	W
Peak output power (10 seconds)	7500	15000	22500	30000	W
Nominal output current	7.6	15.2	22.8	38.0	A
Max. output current	8.4	16.7	25.1	41.8	A
Peak output current (10 seconds)	11.4	22.8	34.2	45.5	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>1</sup>		0			ms
<b>Battery Connection</b>					
Battery module models	SigenStor BAT 5.0 / 8.0				
Number of modules per controller	1 ~ 6				pcs
Battery module voltage range	600 ~ 900				V
<b>Protection</b>					
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				
<b>General Data</b>					
Dimensions (W / H / D)	700 / 300 / 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)				
<b>Standard Compliance</b>					
Standard <sup>2</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2				

- 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.
- For all standards refer to the certificates category in the Sigenenergy website.



# 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
<b>Performance Specification</b>			
Battery type	LiFePO4		
Total energy capacity	5.38	8.06	kWh
Usable energy capacity <sup>1</sup>	5.2	7.8	kWh
Battery modules voltage range	300 ~ 900		V
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
<b>General Data</b>			
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		
<b>Standard Compliance</b>			
Standard	IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040		

<sup>1</sup>. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.