



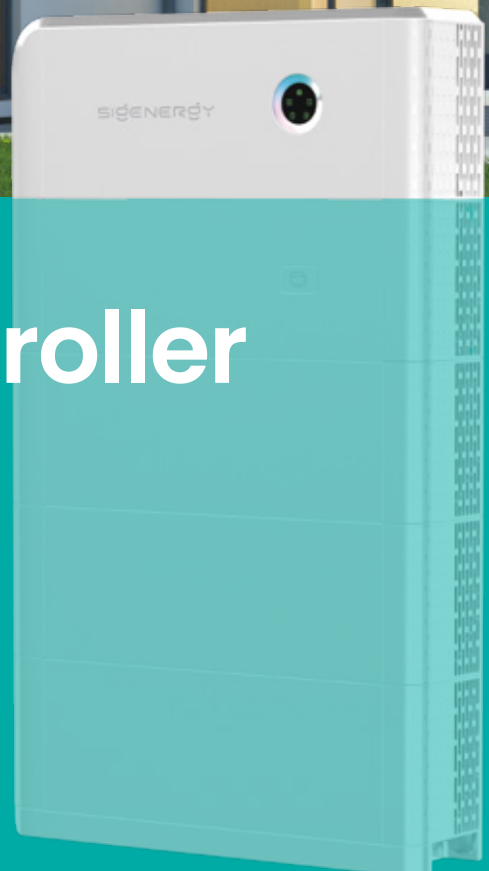
SIGENERGY



# Sigen Energy Controller

3.0 – 6.0 kW Single Phase

- EMS inside for precise control
- Multi-source black start
- IP66 system protection rating
- On & off-grid compatibility
- DC/AC ratio up to 2



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# 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 <sup>1</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								

## 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 <sup>3</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2
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.
2.	This is an optional feature only supported in certain models, please contact Sigenergy for more information.
3.	For all standards refer to the certificates category in the Sigenergy website.

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