



# Sigen Energy Controller

5.0 – 30.0 kW Three Phase

- EMS inside for precise control
- On & off-grid compatibility
- Up to 4 MPP. trackers
- DC/AC ratio up to 1.6
- Multi-source black start
- IP66 system protection rating

# Sigen Energy Controller 5.0–30.0 kW Three Phase <sup>1</sup>

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	30.0 TP	Units
<b>DC Input (from PV)</b>											
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	48000	W
Max. DC input voltage											V
Nominal DC input voltage											V
Start-up voltage											V
MPPT voltage range											V
Number of MPP trackers	2		3			4					
Number of PV strings per MPPT											
Max. input current per MPPT											A
Max. short-circuit current per MPPT											A
<b>AC Output (on-grid)</b>											
Nominal output power	5000	6000	8000	10000	12000	15000	17000	20000	25000	30000	W
Max. output apparent power	5500	6600	8800	11000	13200	16500	18700	22000	27500	33000	VA
Nominal output current	7.6	9.1	12.2	15.2	18.2	22.8	25.8	30.4	38.0	45.5	A
Max. output current	8.4	10.0	13.4	16.7	20.1	25.1	28.4	33.4	41.8	50.0	A
Nominal output voltage											V
Nominal grid frequency											Hz
Power factor											
Total current harmonic distortion											
<b>Efficiency</b>											
Max. efficiency	98.1%	98.2%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.4%	
European efficiency	96.1%	96.6%	97.1%	97.5%	97.7%	97.9%	97.9%	97.9%	98.0%	98.0%	
<b>AC Output (backup)</b>											
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	36000	W
Nominal output voltage											V
Nominal output frequency											Hz
Power factor											
Total voltage harmonic distortion											
Disruption time of backup switch <sup>2</sup>											ms
<b>Battery Connection</b>											
Battery module models											
Number of modules per controller											pcs
Battery module voltage range											V
<b>Protection</b>											
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>3</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection										
<b>General Data</b>											
Dimensions (W / H / D)											mm
Weight											kg
Storage temperature range											°C
Operating temperature range											°C
Relative humidity range											
Max. operating altitude											m
Cooling											
System ingress protection rating											
Communication											
<b>Standard Compliance</b>											
Standard <sup>4</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2										

- Sigen Energy Controller 30.0 kW Three Phase is only available in specific regions. Please contact Sigenergy or local distributors for details.
- 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.
- This is an optional feature only supported in certain models, please contact Sigenergy for more information.
- For all standards refer to the certificates category on the Sigenergy website.

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