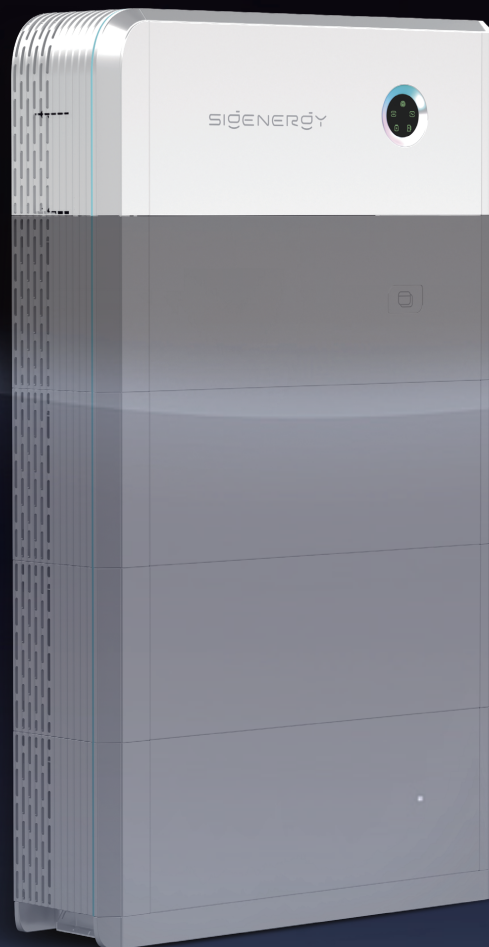


Sigen Energy Controller

5.0 – 30.0 kW Three Phase



- EMS-integrated intelligent management for precision control
- Max. 1.6 DC/AC ratio compatibility, higher energy utilization
- Unbalanced 3-phase power output, ensuring efficient operation
- 150% peak output power in off-grid mode, instant high-power boost
- Up to 4 MPP trackers for maximum solar energy extraction

Sigen Energy Controller 5.0–30.0 kW Three Phase ¹

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	
DC Input (PV)												
Max. PV power	8,000	9,600	12,800	16,000	19,200	24,000	27,200	32,000	40,000	48,000	W	
Max. DC input voltage											1,100	V
Nominal DC input voltage											600	V
Start-up voltage											180	V
MPPT voltage range											160 ~ 1,000	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
AC Output (On-grid)												
Nominal output power	5,000	6,000	8,000	10,000	12,000	15,000	17,000	20,000	25,000	30,000	W	
Max. output apparent power	5,500	6,600	8,800	11,000	13,200	16,500	18,700	22,000	27,500	33,000	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											380 / 400, 3W+N+PE	V
Nominal grid frequency											50 / 60	Hz
Power factor											0.8 leading ~ 0.8 lagging	
Total current harmonic distortion											THDi < 2%	
Efficiency												
Max. efficiency	98.1%	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%		
AC Output (Backup)												
Peak output power (10 seconds)	7,500	9,000	12,000	15,000	18,000	22,500	25,500	30,000	30,000	36,000	W	
Nominal output voltage											380 / 400, 3W+N+PE	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 ²											0	ms
Battery Connection												
Battery module models											SigenStor BAT series	
Number of modules per controller											1 ~ 6	pcs
Battery module voltage range											600 ~ 900	V
Protection												
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter ³ , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection											
General Data												
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% ~ 100%	
Max. operating altitude											4,000	m
Cooling											Smart air cooling	
System ingress protection rating											IP66	
Communication											WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)	
Standard Compliance												
Standard ⁴	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2											

1. Sigen Energy Controller 30.0 kW Three Phase is only available in specific regions. Please contact Sigenergy or local distributors for details.
2. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Controller needs to be used together with Sigen Battery and Sigen Energy Gateway. 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 backup loads.
3. This is an optional feature only supported in certain models, please contact Sigenergy for more information.
4. For all standards refer to the certificates category on the Sigenergy website.

Disclaimer: The information in this file is provided on an "as is" basis. To the fullest extent permitted by law, Sigenergy Technology Co., Ltd. excludes all representations and warranties relating to this file and its contents or which is or may be provided by any affiliates or any other third party, including in relation to any inaccuracies or omissions in this file.