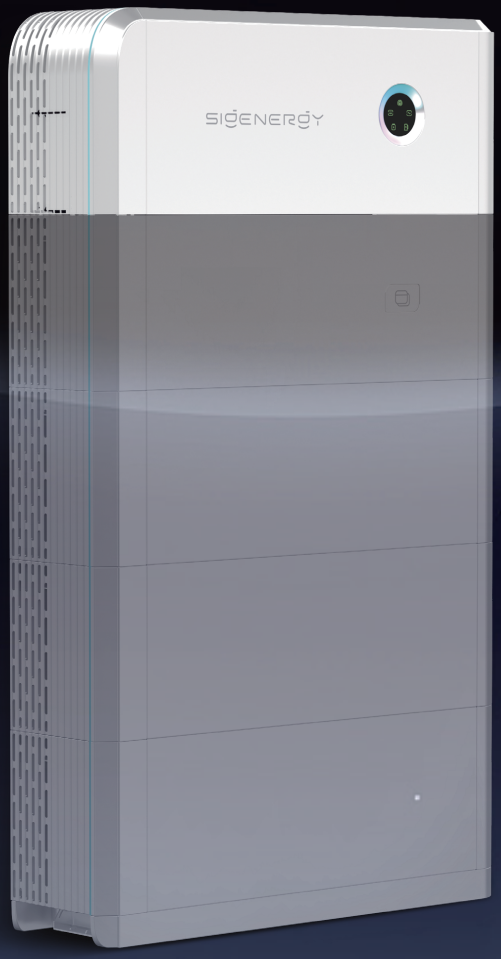
SIGENERGY

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

Enjoy Green Energy

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 (ackup)											
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.

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