



Sigen Energy Controller

5.0 – 30.0kW Three Phase

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

Sigen Energy Controller 5.0–30.0 kW Three Phase Australia

SigenStor EC	5.0 TP	10.0 TP	15.0 TP	20.0 TP	25.0 TP	30.0 TP	Units
DC Input (from PV)							
Max. PV power	8000	16000	24000	32000	40000	48000	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	3	4	4	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	5000	9999	15000	20000	25000	29900	W
Max. output apparent power	5500	9999	15000	22000	27500	29900	VA
Nominal output current	7.6	14.4	21.7	30.4	38.0	43.3	A
Max. output current	8.4	14.4	21.7	33.4	41.8	43.3	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%				
Efficiency							
Max. efficiency	98.1%	98.3%	98.3%	98.3%	98.3%	98.4%	
European efficiency	96.1%	97.5%	97.9%	97.9%	98.0%	98.0%	
AC Output (backup)							
Nominal output power	5000	10000	15000	20000	25000	30000	W
Max. output apparent power	5500	11000	16500	22000	27500	33000	W
Peak output power (10 seconds)	7500	15000	22500	30000	30000	36000	W
Nominal output current	7.6	15.2	22.8	30.4	38.0	45.6	A
Max. output current	8.4	16.7	25.1	33.4	41.8	50.1	A
Peak output current (10 seconds)	11.4	22.8	34.2	45.6	45.6	54.7	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 ¹			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	600 ~ 900						V
Protection							
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter ² , 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	36	36	36	36	38	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)						
Standard Compliance							
Standard ³	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2, AS 4777						

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 Sigenenergy for more information.
3. For all standards refer to the certificates category on the Sigenenergy website.