Sigen Energy Controller 2.5 - 12.0 kW Single Phase

SigenStor Neo EC	2.5 SP	3.0 SP	3.6 SP	4.6 SP	5.0 SP	6.0 SP	8.0 SP	10.0 SP	12.0 SP	Units
DC Input (from PV)										
Max. PV power	7500	9000	10800	13800	15000	18000	24000	24000	24000	W
Max. DC input voltage [1]	600									V
Nominal DC input voltage	350									V
Start-up voltage	40									V
MPPT voltage range	40 ~ 565									V
Number of MPP. trackers	4									
Number of PV strings per MPPT	1									
Max. input current per MPPT	22									A
Max. short-circuit current per MPPT	30									A
Battery Connection										
Battery module models	SigenStor Neo BAT series									
Number of modules per controller	1 ~ 6									pcs
Battery module voltage range	300 ~ 600									V
AC Output (on-grid)										
Nominal output power	2500	3000	3680	4600	5000	6000	8000	10000	12000	W
Max. output apparent power	2500	3300	3680	5000	5500	6600	8800	11000	12000	VA
Nominal output current	11.4	13.7	16.0	20.9	22.8	27.3	36.4	45.5	54.6	A
Max. output current	11.4	15.0	16.0	22.7	25.0	30.0	40.0	50.0	54.6	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%									
AC Output (backup)										
Nominal output power	2500	3000	3680	4600	5000	6000	8000	10000	12000	W
Max. output apparent power	2750	3300	4048	5000	5500	6600	8800	11000	12000	VA
Peak output power (10 seconds)	5000	6000	7360	9200	10000	12000	16000	20000	20000	VA
Max. AC passthrough (grid to load)	63									A
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 [2]	0									ms
Smart Port Connection [3]										
Generator output voltage	220 / 230 / 240									V
Max. input / output current	63									A
Nominal AC output power	2500	3000	3680	4600	5000	6000	8000	10000	12000	W
Max. input / output apparent power	15100									W
Generator 2-wire start	Supported									
Efficiency										
Max. efficiency	97.8%	97.8%	97.9%	97.9%	97.9%	97.8%	97.9%	97.9%	97.9%	
European efficiency	95.9%	96.3%	96.7%	97.1%	97.1%	97.3%	97.5%	97.6%	97.6%	
Protection										
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection, Potential induced degradation									
General Data										
Dimensions (W / H / D)	800 / 360 / 235									mm
Weight	< 27									kg
Storage temperature range	-40 ~ 70									°C
Operating temperature range	-40 ~ 65									°C
Relative humidity range	0% ~ 100%									
Max. operating altitude	4000									m
Cooling	Natural convection									
System ingress protection rating	IP66									
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) / Sub-1G / Bluetooth									

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2. This refers to the load-side disruption time. 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.
3. This specified value represents the port capability only. The actual supported value varies depending on the installation scenario and system configuration. Please consult your installer for the appropriate setup.
4. This document reflects current technology and is subject to change without notice. Refer to the Sigenergy website for the latest information

Sigen Energy Controller 3.0-15.0 kW Three Phase

SigenStor Neo EC	3.0 TP	4.0 TP	5.0 TP	6.0 TP	8.0 TP	10.0 TP	12.0 TP	15.0 TP	Units
DC Input (from PV)									
Max. PV power	9000	12000	15000	18000	24000	30000	30000	30000	W
Max. DC input voltage [1]	1100								V
Nominal DC input voltage	600								V
Start-up voltage	140								V
MPPT voltage range	120 ~ 1000								V
Number of MPP. trackers	3								
Number of PV strings per MPPT	1								
Max. input current per MPPT	22								A
Max. short-circuit current per MPPT	30								A
Battery Connection									
Battery module models	SigenStor Neo BAT series								
Number of modules per controller	1 ~ 6								pcs
Battery module voltage range	600 ~ 1000								V
AC Output (on-grid)									
Nominal output power	3000	4000	5000	6000	8000	10000	12000	15000	W
Max. output apparent power	3300	4400	5500	6600	8800	11000	13200	16500	VA
Nominal output current	4.6	6.1	7.6	9.1	12.2	15.2	18.2	22.8	A
Max. output current	5.0	6.7	8.4	10.0	13.4	16.7	20.0	25.0	A
Nominal output voltage	220/380, 230/400, 240/415, 3W+N+PE								V
Nominal grid frequency	50 / 60								Hz
Power factor	0.8 leading ~ 0.8 lagging								
Total current harmonic distortion	THDi < 2%								
AC Output (backup)									
Nominal output power	3000	4000	5000	6000	8000	10000	12000	15000	W
Max. output apparent power	3300	4400	5500	6600	8800	11000	13200	16500	VA
Peak output power (10 seconds)	6000	8000	10000	12000	16000	20000	24000	30000	VA
Max. AC passthrough (grid to load)	63								A
Nominal output voltage	220/380, 230/400, 240/415 , 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
Smart Port Connection [3]									
Generator output voltage	220/380, 230/400, 240/415 , 3W+N+PE								V
Max. input / output current	63								A
Nominal AC output power	3000	4000	5000	6000	8000	10000	12000	15000	W
Max. input / output apparent power	45300								W
Generator 2-wire start	Supported								
Efficiency									
Max. efficiency	98.9%	98.9%	99.0%	99.0%	99.0%	99.0%	99.0%	98.9%	
European efficiency	97.2%	97.7%	98.1%	98.3%	98.6%	98.7%	98.7%	98.7%	
Protection									
Safety protection feature	DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection, Potential induced degradation								
General Data									
Dimensions (W / H / D)	800 / 360 / 240								mm
Weight	< 30								kg
Storage temperature range	-40 ~ 70								°C
Operating temperature range	-40 ~ 65								°C
Relative humidity range	0% ~ 100%								
Max. operating altitude	4000								m
Cooling	Natural convection								
System ingress protection rating	IP66								
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) / Sub-1G / Bluetooth								

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