Sigen Energy Controller 2.5 - 6.0 kW SE Single Phase

SigenStor Neo EC	2.5 SE SP	3.0 SE SP	3.6 SE SP	4.6 SE SP	5.0 SE SP	6.0 SE SP	Units
DC Input (from PV)							
Max. PV power	7500	9000	10800	12000	12000	12000	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	2						
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	W
Max. output apparent power	2500	3300	3680	5000	5500	6600	VA
Nominal output current	11.4	13.7	16.0	20.9	22.8	27.3	A
Max. output current	11.4	15.0	16.0	22.7	25.0	30.0	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	W
Max. output apparent power	2750	3300	4048	5000	5500	6600	VA
Peak output power (10 seconds)	5000	6000	7360	9200	10000	12000	VA
Max. AC passthrough (grid to load)	45						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
Efficiency							
Max. efficiency	97.94%	98.01%	98.02%	98.13%	98.02%	98.04%	
European efficiency	96.72%	97.04%	97.30%	97.57%	97.53%	97.61%	
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 / 280 / 220						mm
Weight	< 20						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 document reflects current technology and is subject to change without notice. Refer to the Sigenergy website for the latest information