

Sigen Energy Controller 3.0–4.6 kW Single Phase for Belgium

SigenStor EC	3.0 SP	3.6 SP	4.0 SP	4.6 SP	Units
DC Input (from PV)					
Max. PV power	6000	7360	8000	9200	W
Max. DC input voltage			600		V
Nominal DC input voltage			350		V
Start-up voltage			100		V
MPPT voltage range		50 ~ 550			V
Number of MPP. trackers		2			
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	3000	3680	4000	4600	W
Max. output apparent power	3300	3680	4400	5000	VA
Nominal output current	13.6	16.0	18.2	20.9	A
Max. output current	15.0	16.0	20.0	22.7	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%			
Efficiency					
Max. efficiency		98.0%			
European efficiency	97.0%	97.1%	97.2%	97.3%	
AC Output (backup)					
Peak output power (10 seconds)	4500	5520	6000	6900	W
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 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		300 ~ 600			V
Protection					
Safety protection feature	DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Type II DC/AC surge protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection.				
General Data					
Dimensions (W / H / D)		700 / 300 / 245			mm
Weight		18			kg
Storage temperature range		-40 ~ 70			°C
Operating temperature range		-30 ~ 60			°C
Relative humidity range		0% ~ 95%			
Max. operating altitude		4000			m
Cooling		Natural convection			
System ingress protection rating		IP66			
Communication		WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)			
Standard Compliance					
Standard ²	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2				

- 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.
- For all standards refer to the certificates category in the Sigenenergy website.