



Sigen Energy Controller

5.0 – 25.0 kW Three Phase

- EMS inside for precise control
- DC ground-fault protection
- Multi-source black start
- On & off-grid compatibility
- DC/AC ratio up to 1.6
- IP66 system protection rating

Sigen Energy Controller 5.0–25.0 kW Three Phase

Preliminary

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	Units
DC Input (from PV)										
Max. PV power	8000	9600	12800	16000	19200	24000	27200	32000	40000	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			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	6000	8000	10000	12000	15000	17000	20000	25000	W
Max. output apparent power	5500	6600	8800	11000	13200	16500	18700	22000	27500	VA
Nominal output current	7.6	9.1	12.2	15.2	18.2	22.8	25.8	30.4	38.0	A
Max. output current	8.4	10.0	13.4	16.7	20.1	25.1	28.4	33.4	41.8	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					98.4%					
European efficiency					98.0%					
AC Output (backup)										
Peak output power (10 seconds)	7500	9000	12000	15000	18000	22500	25500	30000	30000	W
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%					
Switch time to backup mode 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
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% ~ 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)					

1. Need to be used together with Sigen Energy Gateway 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.

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