

SiGen PV	50M1-HYB	60M1-HYB	80M1-HYB	100M1-HYB	110M1-HYB	Units
DC Input (PV)						
Max. PV input power	100,000	120,000	160,000	200,000	220,000	Wp
Max. DC input voltage				1,100		
Nominal DC input voltage	600 @380/400 Vac, 720 @480 Vac					
Start-up voltage	180					
MPPT voltage range	160 ~ 1,000					
Number of MPP trackers	4	5	6	8	8	
Number of PV strings per MPPT	2					
Max. input current per MPPT	40					
Max. short-circuit current per MPPT	60					

DC Input (Battery)						
Battery module models	SiGenStack BAT 12.0					
Battery controller models	SiGenStack BC M2-0.5C-BST / SiGenStack BC M2-1C-BST					
System configuration quantity range ¹	4 ~ 21					
Max. charge power	55,000	66,000	88,000	110,000	121,000	W
Max. discharge power	55,000	66,000	88,000	110,000	121,000	W
Max. operating current	180					

AC Output (On-grid)						
Nominal output active power	50,000	60,000	80,000	100,000	110,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	VA
Max. output active power (cosΦ=1)	55,000	66,000	88,000	110,000	121,000	W
Nominal output current @380Vac	76.0	91.2	121.5	151.9	167.1	A
Nominal output current @400Vac	72.5	87.0	115.9	144.9	159.4	A
Nominal output current @480Vac	60.2	72.2	96.3	120.3	132.4	A
Max. output current @380/400Vac	83.6	100.3	133.7	167.1	183.8	A
Max. output current @480Vac	66.2	79.4	105.9	132.4	145.6	A
Nominal output voltage	380 / 400 / 480, 3W+N+PE					Vac
Nominal grid frequency	50 / 60					Hz
Power factor	0.8 leading ~ 0.8 lagging					
Total current harmonic distortion	THDi < 3%					

AC Input (On-grid)						
Max. input apparent power	100,000	120,000	160,000	160,000	160,000	VA
Max. input current @380/400Vac	151.9	182.3	243.1	243.1	243.1	A
Max. input current @480Vac	120.3	144.4	192.5	192.5	192.5	A
Max. continuous AC passthrough (grid to load)	83.6	100.3	133.7	167.1	183.8	A

AC Output (Backup)						
Nominal output active power	50,000	60,000	80,000	100,000	110,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	VA
Peak output power (10 seconds)	75,000	90,000	120,000	150,000	150,000	W
Nominal output voltage	380 / 400 / 480, 3W+N+PE					V
Nominal output frequency	50 / 60					Hz
Power factor	0.8 leading ~ 0.8 lagging					
Total voltage harmonic distortion	THDv < 3%					
Disruption time of backup switch ²	0					ms

Efficiency						
Max. efficiency @380/400 Vac			98.3%			
European efficiency @380/400 Vac	97.9%	97.9%	98.0%	98.0%	98.0%	
Max. efficiency @480 Vac			98.5%			
European efficiency @480 Vac	98.2%	98.2%	98.3%	98.3%	98.3%	

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					

General Data						
Dimensions (W / H / D)	1097 / 668 / 340					mm
Weight	99	102	102	105	105	kg
Storage temperature range	-40 ~ 70					
Operating temperature range	-30 ~ 60					
Relative humidity range	0% ~ 100%					
Max. operating altitude	5,000 (Derating at 4,000m)					m
Cooling	Smart air cooling					
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					

- The requirements for the PV string open-circuit voltage in a PV+ESS DC coupling system are as follows: 1) When the system is configured with ≥19 battery modules, the string open-circuit voltage should meet the following minimum requirements: 1.1) If configured with 21 battery modules, the string open-circuit voltage should be > 935 V; 1.2) If configured with 20 battery modules, the string open-circuit voltage should be > 870 V; 1.3) If configured with 19 battery modules, the string open-circuit voltage should be > 805 V. 2) When the system is configured with 4 to 18 battery modules, the string open-circuit voltage has no special requirements.
- This refers to the load-side disruption time. Test conditions: In the open-circuit state of the power grid, the total power of the SiGen Hybrid Inverter is higher than the total power of the loads.
- For all standards refer to the certificates category on the Sigenergy website.
- For SiGen energy gateway connections, the inverter should be connected to the gateway via its AC output port (Grid).
- The information in this document reflects the current state of technology and is subject to change without notice. For the latest updates, please refer to the Sigenergy website.