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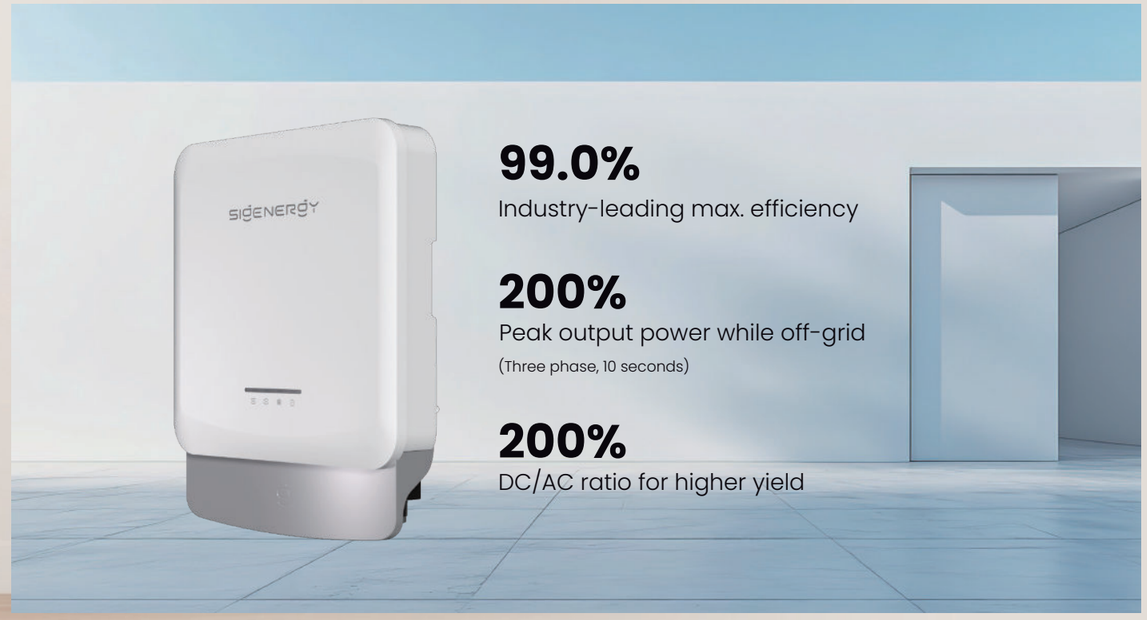
Sigen Hybrid Inverter

Harmoniously Complementing Your Home



Sigen Hybrid Inverter 2.0-6.0 kW Single Phase

Sigen Hybrid	2.0 SP2	3.0 SP2	3.6 SP2	4.0 SP2	4.6 SP2	5.0 SP2	6.0 SP2	Units
DC Input (from PV)								
Max. PV power	4000	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage [1]	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	22							A
Battery Connection								
Battery controller models	SigenStor BC							
Battery module models	SigenStor BAT series							
Number of modules per controller	1 ~ 6							pcs
Battery module voltage range	300 ~ 600							V
AC Output (on-grid)								
Nominal output power	2000	3000	3680	4000	4600	5000	6000	W
Max. output apparent power	2200	3300	3680	4400	5000	5500	6600	VA
Nominal output current	9.1	13.6	16.0	18.2	20.9	22.7	27.3	A
Max. output current	10.0	15.0	16.0	20.0	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 < 3%							
AC Output (backup)								
Peak output power (10 seconds)	3000	4500	5520	6000	6900	7500	9000	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 < 3%							
Disruption time of backup switch [2]	0							ms
Efficiency								
Max. efficiency	98.6%							
European efficiency	97.5%	98.0%	98.1%	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)	373 / 473 / 99							mm
Weight	11.5							kg
Storage temperature range	-40 ~ 70							℃
Operating temperature range	-30 ~ 60							℃
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)							
Installation method	Wall-mounted							
Night consumption	2.5							W
Noise	25							dB
Standard Compliance								
Standard [3]	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2							

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, to achieve this functionality Sigen Hybrid Inverter needs 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 Hybrid Inverter is higher than the total power of the home loads.
3. For all standards refer to the certificates category on the Sigenergy website.

Sigen Hybrid Inverter 3.0-12.0 kW Three Phase

Sigen Hybrid	3.0 TP2	4.0 TP2	5.0 TP2	6.0 TP2	8.0 TP2	10.0 TP2	12.0 TP2	Units
DC Input (from PV)								
Max. PV power	6000	8000	10000	12000	16000	20000	24000	W
Max. DC input voltage [1]	1100							V
Nominal DC input voltage	600							V
Start-up voltage	180							V
MPPT voltage range	160 ~ 1000							V
Number of MPP. trackers	2							
Number of PV strings per MPPT	1					1/2		
Max. input current per MPPT	16					16/32	16/32	A
Max. short-circuit current per MPPT	22					22/44	22/44	A
Battery Connection								
Battery controller models	SigenStor BC							
Battery module models	SigenStor BAT series							
Number of modules per controller	1 ~ 6							pcs
Battery module voltage range	600 ~ 900							V
AC Output (on-grid)								
Nominal output power	3000	4000	5000	6000	8000	10000	12000	W
Max. output apparent power	3300	4400	5500	6600	8800	11000	13200	VA
Nominal output current	4.6	6.1	7.6	9.1	12.2	15.2	18.2	A
Max. output current	5.1	6.7	8.4	10.0	13.4	16.7	20.1	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 < 3%							
AC Output (backup)								
Peak output power (10 seconds)	6000	8000	10000	12000	16000	20000	24000	W
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 < 3%							
Disruption time of backup switch [2]	0							ms
Efficiency								
Max. efficiency	98.8%	98.9%	98.9%	99.0%	99.0%	99.0%	99.0%	
European efficiency	97.2%	97.8%	98.1%	98.5%	98.5%	98.5%	98.6%	
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							
General Data								
Dimensions (W / H / D)	477 / 568 / 99							mm
Weight	19.5							kg
Storage temperature range	-40 ~ 70							℃
Operating temperature range	-30 ~ 60							℃
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)							
Installation method	Wall-mounted							
Night consumption	3							W
Noise	28							dB
Standard Compliance								
Standard [3]	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2							

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