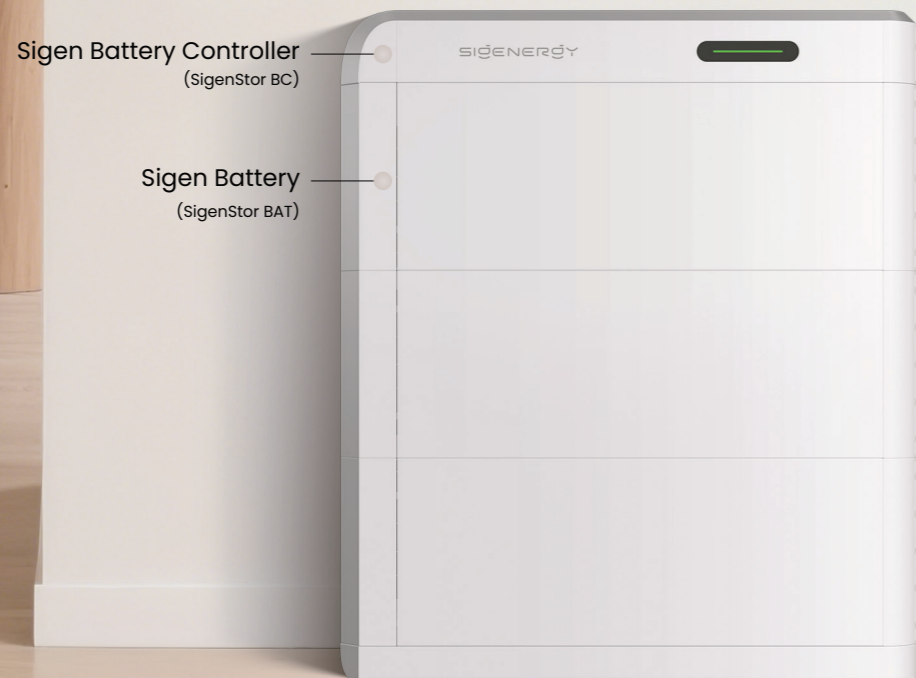
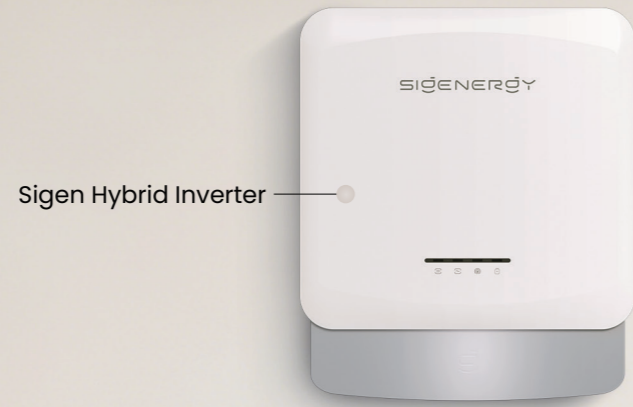





# Sigen Hybrid Inverter

Harmoniously Complementing Your Home

- 99.0%**  
Industry-leading max. efficiency
- 200%**  
Peak output power while off-grid
- 200%**  
DC/AC ratio for higher yield

## 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
<b>DC Input (from PV)</b>								
Max. PV power	4000	6000	7360	8000	9200	10000	12000	W
Max. DC input voltage <sup>1</sup>				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
<b>Battery Connection</b>								
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
<b>AC Output (on-grid)</b>								
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%							
<b>AC Output (backup)</b>								
Peak output power (10 seconds) <sup>2</sup>	2 times of nominal output power							
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 <sup>3</sup>	0							ms
<b>Efficiency</b>								
Max. efficiency	98.6%							
European efficiency	97.5%	98.0%	98.1%	98.2%	98.3%	98.3%	98.3%	
<b>Protection</b>								
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							
<b>General Data</b>								
Dimensions (W / H / D)	373 / 473 / 99							mm
Weight	11.5							kg
Storage temperature range	-40 ~ 70							°C
Operating temperature range	-30 ~ 60							°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)							
Installation method	Wall-mounted							
Night consumption	2.5							W
Noise	25							dB
<b>Standard Compliance</b>								
Standard <sup>4</sup>	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. Actual load starting performance depends on the load type and its characteristics; practical results may vary.

3. 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.

4. For all standards refer to the certificates category on the Sigenenergy 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
<b>DC Input (from PV)</b>								
Max. PV power	6000	8000	10000	12000	16000	20000	24000	W
Max. DC input voltage <sup>1</sup>				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	16/32	A
Max. short-circuit current per MPPT	22				22/44	22/44	22/44	A
<b>Battery Connection</b>								
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
<b>AC Output (on-grid)</b>								
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)							
Nominal grid frequency	50 / 60							
Power factor	0.8 leading ~ 0.8 lagging							
Total current harmonic distortion	THDi < 3%							
<b>AC Output (backup)</b>								
Peak output power (10 seconds) <sup>2</sup>	2 times of nominal output power							
Nominal output voltage	220/380, 230/400, 240/415 (3W/N+PE)							
Nominal output frequency	50 / 60							
Power factor	0.8 leading ~ 0.8 lagging							
Total voltage harmonic distortion	THDv < 3%							
Disruption time of backup switch <sup>3</sup>	0							ms
<b>Efficiency</b>								
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%	
<b>Protection</b>								
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							
<b>General Data</b>								
Dimensions (W / H / D)	477 / 568 / 99							mm
Weight	19.5							kg
Storage temperature range	-40 ~ 70							°C
Operating temperature range	-30 ~ 60							°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)							
Installation method	Wall-mounted							
Night consumption	3							W
Noise	28							dB
<b>Standard Compliance</b>								
Standard <sup>4</sup>	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. Actual load starting performance depends on the load type and its characteristics; practical results may vary.

3. 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.

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