

Sigen Hybrid Inverter

Harmoniously Complementing Your Home

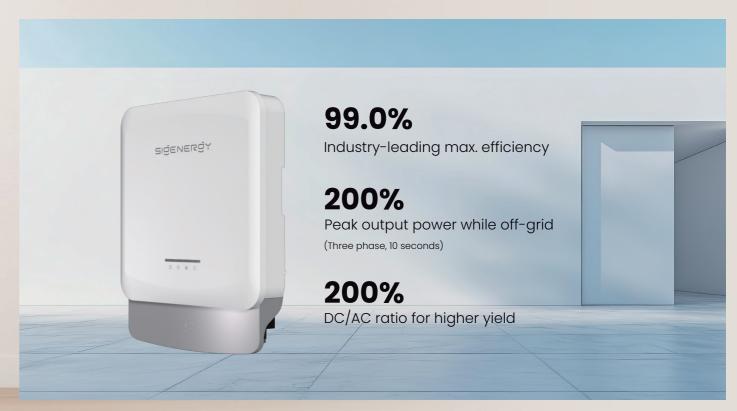












Sigen Hybrid Inverter 3.0-6.0 kW Single Phase

Sigen Hybrid	3.0 SP2	5.0 SP2	6.0 SP2	Units	
DC Input (from PV)					
Max. PV power	6000	10000	12000	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		22		А	
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	3000	5000	6000	W	
Max. output apparent power	3300	5500	6600	VA	
Nominal output current	13.6	22.7	27.3	А	
Max. output current	15.0	25.0	30.0	А	
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)	4500	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 ¹		0		ms	
Efficiency					
Max. efficiency		98.6%			
European efficiency	98.0%	98.3%	98.3%		

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	°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	
Installation method	Wall-mounted	
Night consumption	2.5	W
Noise	25	dB

This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Battery and Sigen Hybrid Inverter. 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.

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	Unit
DC Input (from PV)								
Max. PV power	6000	8000	10000	12000	16000	20000	24000	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				
Number of PV strings per MPPT			1			1/	2	
Max. input current per MPPT			16			16/32	16/32	А
Max. short-circuit current per MPPT			22			22/44	22/44	А
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	Α
Max. output current	5.1	6.7	8.4	10.0	13.4	16.7	20.1	Α
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, 240/4	15 (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 ¹				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%	

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	°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	
Installation method	Wall-mounted	
Night consumption	3	W
Noise	28	dB

This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Battery and Sigen Hybrid Inverter. 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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^{2.} This document reflects current technology and is subject to change without notice. Refer to the Sigenergy website for the latest information.

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