SIGENERGY

Sigen Hybrid Inverter

Harmoniously Complementing Your Home

Sigen Hybrid Inverter

Sigen Battery Controller
(SigenStor BC)

Sigen Battery
(SigenStor BAT)

**99mm
ultra slim design**

**25 dB
Super silent**

IP66

Wide operating temperature
From −30 °C to 60 °C

99.0%
Industry-leading max. efficiency

200%
Peak output power while off-grid
(Three phase, 10 seconds)

200%
DC/AC ratio for higher yield
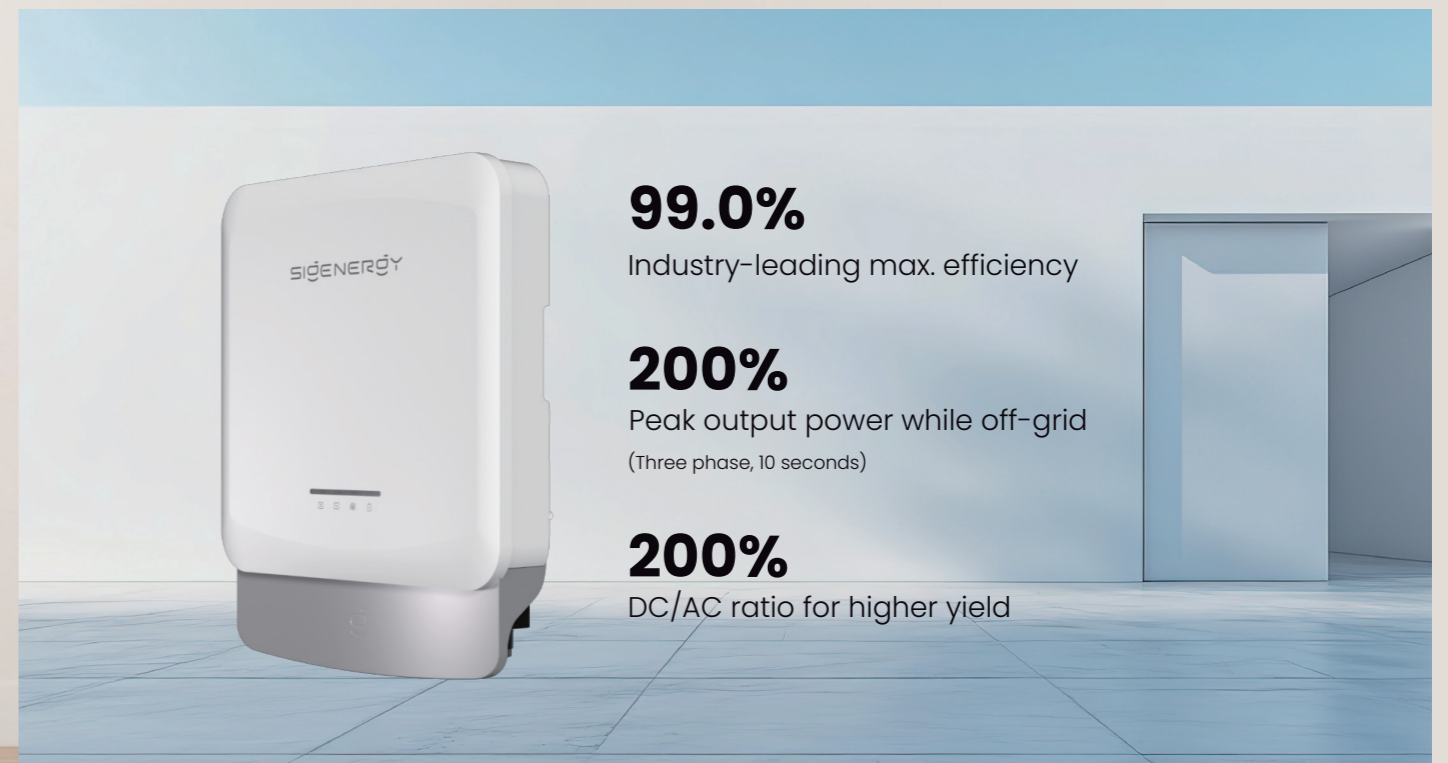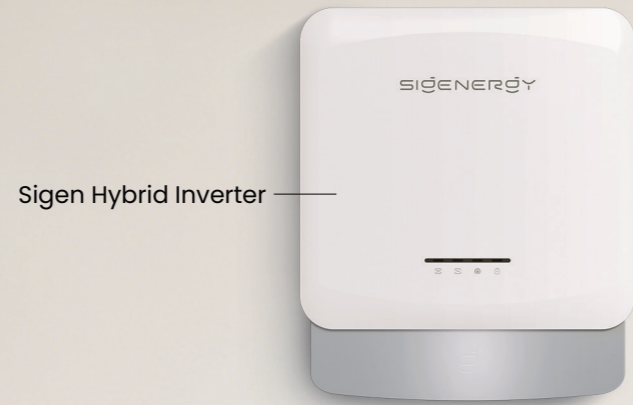
Sigen Hybrid Inverter 2.0–6.0 kW Single Phase

Sigen Hybrid	2.0 SP2	3.0 SP2	3.6 SP2	4.0 SP2	4.6 SP2	5.0 SP2	6.0 SP2	Units
DC Input (from PV)								
Max. PV power	4000	6000	7360	8000	9200	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				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 [1]				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	°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

1. 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.
2. This document reflects current technology and is subject to change without notice. Refer to the Sigenergy website for the latest information.

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				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 [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%	
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	°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

1. 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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