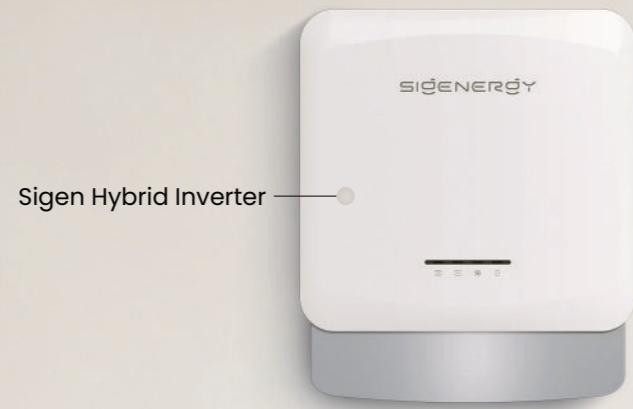




# Sigen Hybrid Inverter

Harmoniously Complementing Your Home



**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
<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

### 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 <sup>2</sup>	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
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### 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

### Standard Compliance

Standard <sup>3</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2
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- The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
- 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.
- 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	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)							
Nominal grid frequency	50 / 60							
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)							
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>2</sup>	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
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### 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

### Standard Compliance

Standard <sup>3</sup>	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2
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- The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
- 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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