



Sigen Hybrid Inverter

50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW

- Battery ready, easy upgrades to a PV + ESS system
- Lightweight design, saves transportation and installation costs
- Multiple units in parallel connection, no data logger needed
- Industry-leading AFCI detection, superior safety and reliability
- Instant PV reverse connection alert, ensuring correct installation
- IP66 protection rating, worry-free outdoor usage with easy O&M

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Sigen PV	50M1-HYA	60M1-HYA	80M1-HYA	100M1-HYA	110M1-HYA	125M1-HYA	Units
DC Input (PV)							
Max. PV input power	100,000	120,000	160,000	200,000	220,000	220,000	Wp
Max. DC input voltage	1,100						V
Nominal DC input voltage	600 @380/400 Vac, 720 @480 Vac						V
Start-up voltage	180						V
MPPT voltage range	160 ~ 1,000						V
Number of MPP. trackers	4	5	6	8	8	8	
Number of PV strings per MPPT	2						
Max. input current per MPPT ¹	40						A
Max. short-circuit current per MPPT ¹	60						A
DC Input (Battery)							
Battery module models	SigenStack BAT 12.0						
System configuration quantity range	4 ~ 21						pcs
Max. charge power	55,000	66,000	88,000	110,000	121,000	137,500	W
Max. discharge power	55,000	66,000	88,000	110,000	121,000	137,500	W
Max. operating current	180						A
AC Output							
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	137,500	VA
Max. output active power (cosΦ=1)	55,000	66,000	88,000	110,000	121,000	137,500	W
Nominal output current @380Vac	76.0	91.2	121.5	151.9	167.1	189.9	A
Nominal output current @400Vac	72.5	87.0	115.9	144.9	159.4	181.2	A
Nominal output current @480Vac	60.2	72.2	96.3	120.3	132.4	150.4	A
Max. output current @380 / 400Vac	83.6	100.3	133.7	167.1	183.8	208.9	A
Max. output current @480Vac	66.2	79.4	105.9	132.4	145.6	165.5	A
Nominal output voltage	380 / 400 / 480, 3W+(N)+PE						Vac
Nominal grid frequency	50 / 60						Hz
Power factor	0.8 leading ~ 0.8 lagging						
Total current harmonic distortion	THDi < 3%	THDi < 3%	THDi < 2%	THDi < 2%	THDi < 2%	THDi < 2%	
Efficiency							
Max. efficiency @380/400 Vac	98.6%						
European efficiency @380/400 Vac	98.3%	98.3%	98.3%	98.4%	98.4%	98.3%	
Max. efficiency @480 Vac	98.8%						
European efficiency @480 Vac	98.4%	98.4%	98.4%	98.6%	98.6%	98.4%	
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)	918 / 640 / 340						mm
Weight	78						kg
Nighttime power consumption	< 3.5						W
Storage temperature range	-40 ~ 70						°C
Operating temperature range	-30 ~ 60						°C
Relative humidity range	0% ~ 100%						
Max. operating altitude	5,000 (Derating at 4,000m)						m
PV connection type	MC4 (Max. 6 mm²)						
AC connection type	OT / DT terminal (Max. 240 mm²)						
Cooling	Smart air cooling						
Ingress protection rating	IP66						
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						

1. This parameter is optimised and adjusted, please refer to the product nameplate and batch.
2. The information in this document reflects the current state of technology and is subject to change without notice. For the latest updates, please refer to the Sigenenergy website.

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