



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	32	32	32	32	32	40	A
Max. short-circuit current per MPPT	50						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 @380Vac	83.6	100.3	133.7	167.1	183.8	208.9	A
Max. output current @400Vac	79.7	95.7	127.5	159.4	175.4	199.3	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. 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 Sigenergy website.

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