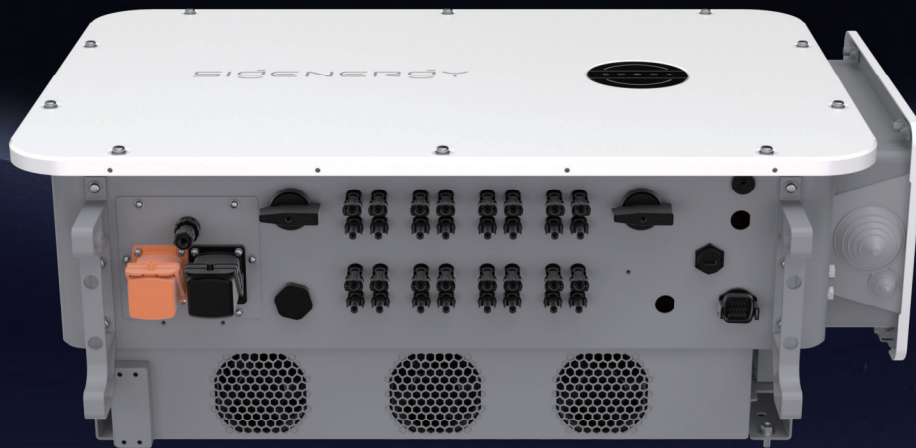


Sigen Hybrid Inverter

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



- Battery ready, easy upgrades to a PV + BESS at any time
- Smaller and lighter, easier installation and transportation
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 500m AFCI, top-tier safety across applications
- On-site self-power supply, removes the need for temporary power
- IP66 protection rating, ensuring worry-free outdoor deployment

Sigen Hybrid Inverter 50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW

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			40				A
Max. short-circuit current per MPPT			60				A
DC Input (Battery)							
Battery module models			SigenStack BAT 12.0				
System configuration quantity range ¹			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 surge protection (Type I + II optional), Type II AC surge protection, Anti-islanding protection						
General Data							
Dimensions (W / H / D)			918 / 640 / 340			999 / 668 / 340	mm
Weight	72	75	75	78	78	95	kg
Nighttime power consumption			< 3.5			< 4	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)				
Standard Compliance							
Standard ²	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2						

- The requirements for the PV string open-circuit voltage in a PV+ESS DC coupling system are as follows: 1) When the system is configured with ≥19 battery modules, the string open-circuit voltage should meet the following minimum requirements: 1.1) If configured with 21 battery modules, the string open-circuit voltage should be > 935 V; 1.2) If configured with 20 battery modules, the string open-circuit voltage should be > 870 V; 1.3) If configured with 19 battery modules, the string open-circuit voltage should be > 805 V. 2) When the system is configured with 4 to 18 battery modules, the string open-circuit voltage has no special requirements.
- For all standards refer to the certificates category on the Sigenergy website.
- 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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