



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

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

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			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			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	125,000 ¹	W
Max. discharge power	55,000	66,000	88,000	110,000	121,000	125,000 ¹	W
Max. operating current				180			A
AC Output							
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000 ¹	W
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	125,000 ¹	VA
Max. output active power (cosΦ=1)	55,000	66,000	88,000	110,000	121,000	125,000 ¹	W
Nominal output current	76.0	91.2	121.5	151.9	167.1	181.2	A
Max. output current	83.6	100.3	133.7	167.1	183.8	181.2	A
Nominal output voltage	380 / 400 (3 / N / PE, N-wire is optional)					400(3/N/PE)	V
Nominal grid frequency				50 / 60			Hz
Power factor				0.8 leading ~ 0.8 lagging			
Total current harmonic distortion				THDi < 2%			
Efficiency							
Max. efficiency				98.6%			
European efficiency	98.3%	98.3%	98.3%	98.4%	98.4%	98.4%	
Protection							
Safety protection feature	Arc fault circuit interrupter, DC reverse polarity protection, Residual current monitoring, Type II DC/AC surge protection, Anti-islanding protection, Insulation monitoring, AC overcurrent/overvoltage/short-circuit protection.						
General Data							
Dimensions (W / H / D)				918 / 640 / 340			mm
Weight	75	75	81	81	81	81	kg
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
Cooling				Smart air cooling			
Ingress protection rating				IP66			
Communication	WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)						

1. Under specific ambient temperature and grid voltage 400V

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