



# 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	
<b>DC Input (PV)</b>								
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
<b>DC Input (Battery)</b>								
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 <sup>1</sup>	W	
Max. discharge power	55,000	66,000	88,000	110,000	121,000	125,000 <sup>1</sup>	W	
Max. operating current							180	A
<b>AC Output</b>								
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000 <sup>1</sup>	W	
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	125,000 <sup>1</sup>	VA	
Max. output active power (cosΦ=1)	55,000	66,000	88,000	110,000	121,000	125,000 <sup>1</sup>	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%	
<b>Efficiency</b>								
Max. efficiency							98.6%	
European efficiency	98.3%	98.3%	98.3%	98.4%	98.4%	98.4%		
<b>Protection</b>								
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.							
<b>General Data</b>								
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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