



Sigen Hybrid Inverter

50.0 / 99.9 / 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 / 99.9 / 110.0 / 125.0 kW for Australia

Sigen PV	50M1-HYA-AU	99.9M1-HYA-AU	110M1-HYA-AU	125M1-HYA-AU ¹	Units
DC Input (PV)					
Max. PV input power	100,000	199,800	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	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	50,000	99,900	110,000	121,000 ¹	W
Max. discharge power	50,000	99,900	110,000	125,000 ¹	W
Max. operating current	180				A
AC Output					
Nominal output active power	50,000	99,900	110,000	125,000 ¹	W
Max. output apparent power	50,000	99,900	110,000	125,000 ¹	VA
Max. output active power (cosΦ=1)	50,000	99,900	110,000	125,000 ¹	W
Nominal output current @400Vac	72.5	144.8	159.4	181.2	A
Nominal output current @480Vac	60.2	120.2	132.4	150.4	A
Max. output current @400Vac	72.5	144.8	159.4	181.2	A
Max. output current @480Vac	60.2	120.2	132.4	150.4	A
Nominal output voltage	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 < 2%	THDi < 2%	THDi < 2%	
Efficiency					
Max. efficiency @400 Vac	98.6%				
European efficiency @400 Vac	98.3%	98.4%	98.4%	98.3%	
Max. efficiency @480 Vac	98.8%				
European efficiency @480 Vac	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)				

- Operates at specific temperatures. Please contact Sigenenergy for availability.
- 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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