



Sigen PV Inverter

50.0 / 99.9 / 110.0 / 125.0 kW

- 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 PV Inverter 50.0 / 99.9 / 110.0 / 125.0 kW for Australia

Signen PV	50M1-AU	99.9M1-AU	110M1-AU	125M1-AU ¹	Units
DC Input					
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		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
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	72.5	144.8	159.4	181.2	A
Max. output current	72.5	144.8	159.4	181.2	A
Nominal output voltage			400, 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			98.6%		
European efficiency	98.3%	98.4%	98.4%	98.3%	
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	75				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 / Signen 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, AS/NZS 4777.2				

- Operates at specific temperatures. Please contact Sigenenergy for availability.
- For all standards refer to the certificates category on the Sigenenergy 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 Sigenenergy website.

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