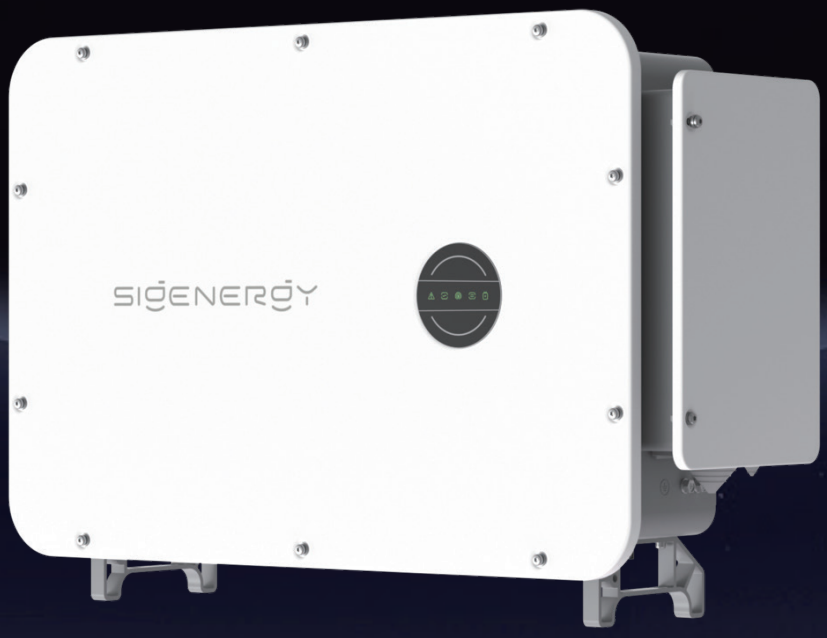
Sigen PV Inverter

50.0 / 100.0 kW for the 277/480V Grid



- Fully networked communication, enabling rapid commissioning
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 600m AFCI, top-tier safety across applications
- IP66 protection rating, ensuring worry-free outdoor deployment

Enjoy Green Energy

Sigen PV Inverter 50.0 / 100.0 kW for the 277/480V Grid

Sigen PV	50M1	100M1	Units
DC Input			
Max. PV input power	100,000	200,000	Wp
Max. DC input voltage [1]	1,100		V
Nominal DC input voltage	720		V
Start-up voltage	180		V
MPPT voltage range	160 ~ 1,000		V
Number of MPP. trackers	4	8	
Number of PV strings per MPPT	2		
Max. input current per MPPT	40		A
Max. short-circuit current per MPPT	60		A
AC Output			
Nominal output active power	50,000	100,000	W
Max. output apparent power	55,000	110,000	VA
Max. output active power (cosΦ=1)	55,000	110,000	W
Nominal output current	60.2	120.3	A
Max. output current	66.2	132.4	A
Nominal output voltage	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%	
Efficiency			
Max. efficiency	98.6%		
European efficiency	98.3%	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		mm
Weight	69	72	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 4,000 m)		m
PV connection type	H4 Pro (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		

1. The inverter will initiate protection if the input voltage exceeds the MPPT operating voltage range.
2. For all standards refer to the certificates category on the Sigenergy website.
3. 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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