

# Sigen PV Inverter

50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW



- Fully networked communication, enabling rapid commissioning
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 500m AFCI, top-tier safety across applications
- IP66 protection rating, ensuring worry-free outdoor deployment

# Sigen PV Inverter 50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW

Sigen PV	50M1	60M1	80M1	100M1	110M1	125M1	Units	
<b>DC Input</b>								
Max. PV input power	100,000	120,000	160,000	200,000	220,000	220,000	Wp	
Max. DC input voltage <sup>1</sup>							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							40	A
Max. short-circuit current per MPPT							60	A
<b>AC Output</b>								
Nominal output active power	50,000	60,000	80,000	100,000	110,000	125,000	W	
Max. output apparent power	55,000	66,000	88,000	110,000	121,000	137,500	VA	
Max. output active power (cosφ=1)	55,000	66,000	88,000	110,000	121,000	137,500	W	
Nominal output current @380 Vac	76.0	91.2	121.5	151.9	167.1	189.9	A	
Nominal output current @400 Vac	72.5	87.0	115.9	144.9	159.4	181.2	A	
Max. output current @380/400 Vac	83.6	100.3	133.7	167.1	183.8	208.9	A	
Nominal output voltage							380 / 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 < 3%	THDi < 2%	THDi < 2%	THDi < 2%	THDi < 2%		
<b>Efficiency</b>								
Max. efficiency							98.6%	
European efficiency	98.3%	98.3%	98.3%	98.4%	98.4%	98.3%		
<b>Protection</b>								
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							
<b>General Data</b>								
Dimensions (W / H / D)							918 / 640 / 340	mm
Weight	69	72	72	72	72	83	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							MC4 (Max. 6 mm <sup>2</sup> )	
AC connection type							OT / DT terminal (Max. 240 mm <sup>2</sup> )	
Cooling							Smart air cooling	
Ingress protection rating							IP66	
Communication							WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)	
<b>Standard Compliance</b>								
Standard <sup>2</sup>	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 Sigenenergy 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 Sigenenergy website.