



# Sigen PV Inverter

50.0 / 60.0 / 80.0 / 100.0 / 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                            | 50M1                                                                                                                                                                                                                              | 60M1    | 80M1    | 100M1   | 110M1   | 125M1                | Units |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|---------|---------|---------|----------------------|-------|
| DC Input                            |                                                                                                                                                                                                                                   |         |         |         |         |                      |       |
| 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         | 40                                                                                                                                                                                                                                |         |         |         |         |                      | A     |
| Max. short-circuit current per MPPT | 50                                                                                                                                                                                                                                |         |         |         |         |                      | A     |
| AC Output                           |                                                                                                                                                                                                                                   |         |         |         |         |                      |       |
| 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<br>3W+(N)+PE                                                                                                                                                                                                            |         |         |         |         | 400<br>3W+(N)+PE     | Vac   |
| Output voltage range                | 320 ~ 480                                                                                                                                                                                                                         |         |         |         |         |                      | Vac   |
| Nominal grid frequency              | 50 / 60                                                                                                                                                                                                                           |         |         |         |         |                      | Hz    |
| Grid frequency range                | 45 ~ 55 / 55 ~ 65                                                                                                                                                                                                                 |         |         |         |         |                      | Hz    |
| Power factor                        | 0.8 leading ~ 0.8 lagging                                                                                                                                                                                                         |         |         |         |         |                      |       |
| Total current harmonic distortion   | THDi < 2%                                                                                                                                                                                                                         |         |         |         |         |                      |       |
| Efficiency                          |                                                                                                                                                                                                                                   |         |         |         |         |                      |       |
| Max. efficiency                     | 98.6%                                                                                                                                                                                                                             |         |         |         |         |                      |       |
| European efficiency                 | 98.3%                                                                                                                                                                                                                             | 98.3%   | 98.3%   | 98.4%   | 98.4%   | 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                              | 68                                                                                                                                                                                                                                | 68      | 75      | 75      | 75      | 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     |
| DC connection type                  | MC4 (Max. 6 mm² )                                                                                                                                                                                                                 |         |         |         |         |                      |       |
| AC connection type                  | OT / DT terminal (Max. 240 mm²)                                                                                                                                                                                                   |         |         |         |         |                      |       |
| Cooling                             | Smart air cooling                                                                                                                                                                                                                 |         |         |         |         |                      |       |
| System ingress protection rating    | IP66                                                                                                                                                                                                                              |         |         |         |         |                      |       |
| Communication                       | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)                                                                                                                                                                           |         |         |         |         |                      |       |

1. Under specific ambient temperature and grid voltage 400Vac.