

# 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 |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------|-------------|-----------|-----------|-------|
| 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 |                                                                                                                                                                                                                                   |           |                           | 60          |           |           | A     |
| AC Output                           |                                                                                                                                                                                                                                   |           |                           |             |           |           |       |
| 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 @380Vac      | 76.0                                                                                                                                                                                                                              | 91.2      | 121.5                     | 151.9       | 167.1     | 189.9     | A     |
| Nominal output current @400Vac      | 72.5                                                                                                                                                                                                                              | 87.0      | 115.9                     | 144.9       | 159.4     | 181.2     | A     |
| Max. output current @380/400Vac     | 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% |       |
| Efficiency                          |                                                                                                                                                                                                                                   |           |                           |             |           |           |       |
| Max. efficiency                     |                                                                                                                                                                                                                                   |           | 98.6%                     |             |           |           |       |
| European efficiency                 | 98.3%                                                                                                                                                                                                                             | 98.3%     | 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                              | 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 4,000m)                                                                                                                                                                                                        |           |                           |             |           |           | 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)                                                                                                                                                                           |           |                           |             |           |           |       |
| Standard Compliance                 |                                                                                                                                                                                                                                   |           |                           |             |           |           |       |
| Standard <sup>1</sup>               | IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2                                                                                                                                                        |           |                           |             |           |           |       |

- 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.