



# Sigen Hybrid Inverter

**3.0 – 12.0 kW** Single Phase

- Battery ready, future proof
- DC/AC ratio up to 2
- Up to 4 MPP. trackers
- IP66 protection rating

# Sigen Hybrid Inverter 3.0–12.0 kW Single Phase <sup>1</sup>

| Sigen Hybrid                        | 3.0 SP  | 3.6 SP | 4.0 SP | 4.6 SP | 5.0 SP | 6.0 SP | 8.0 SP            | 10.0 SP | 12.0 SP | Units |     |
|-------------------------------------|---|--------|--------|--------|--------|--------|-------------------|---------|---------|-------|-----|
| <b>DC Input</b>                     |   |        |        |        |        |        |                   |         |         |       |     |
| Max. PV power                       | 6000  | 7360   | 8000   | 9200   | 10000  | 12000  | 16000             | 20000   | 24000   | W     |     |
| Max. DC input voltage               | 600   |        |        |        |        |        |                   |         |         |       | V   |
| Nominal DC input voltage            | 350   |        |        |        |        |        |                   |         |         |       | V   |
| Start-up voltage                    | 100   |        |        |        |        |        |                   |         |         |       | V   |
| MPPT voltage range                  | 50 ~ 550  |        |        |        |        |        |                   |         |         |       | V   |
| Number of MPP. trackers             | 2   |        |        |        |        |        | 3                 | 4       | 4       |       |     |
| Number of PV strings per MPPT       | 1   |        |        |        |        |        |                   |         |         |       |     |
| Max. input current per MPPT         | 16  |        |        |        |        |        |                   |         |         |       | A   |
| Max. short-circuit current per MPPT | 20  |        |        |        |        |        |                   |         |         |       | A   |
| <b>AC Output (on-grid)</b>          |   |        |        |        |        |        |                   |         |         |       |     |
| Nominal output power                | 3000  | 3680   | 4000   | 4600   | 5000   | 6000   | 8000              | 10000   | 12000   | W     |     |
| Max. output apparent power          | 3300  | 3680   | 4400   | 5000   | 5500   | 6600   | 8800              | 11000   | 12000   | VA    |     |
| Nominal output current              | 13.6  | 16.0   | 18.2   | 20.9   | 22.7   | 27.3   | 36.4              | 45.5    | 54.6    | A     |     |
| Max. output current                 | 15.0  | 16.0   | 20.0   | 22.7   | 25.0   | 30.0   | 40.0              | 50.0    | 54.6    | A     |     |
| Nominal output voltage              | 220 / 230 / 240   |        |        |        |        |        | 220 / 230         |         |         | V     |     |
| Nominal grid frequency              | 50 / 60   |        |        |        |        |        |                   |         |         |       | Hz  |
| Power factor                        | 0.8 leading ~ 0.8 lagging   |        |        |        |        |        |                   |         |         |       |     |
| Total current harmonic distortion   | THDi < 2%   |        |        |        |        |        |                   |         |         |       |     |
| <b>Efficiency</b>                   |   |        |        |        |        |        |                   |         |         |       |     |
| Max. efficiency                     | 98.0%   | 98.0%  | 98.0%  | 98.0%  | 98.0%  | 98.0%  | 97.6%             | 97.6%   | 97.6%   |       |     |
| European efficiency                 | 97.0%   | 97.1%  | 97.2%  | 97.3%  | 97.4%  | 97.4%  | 97.0%             | 97.0%   | 97.0%   |       |     |
| <b>Additional Features</b>          |   |        |        |        |        |        |                   |         |         |       |     |
| Compatible battery module           | SigenStor BAT 5.0 / 8.0   |        |        |        |        |        |                   |         |         |       |     |
| Number of modules per controller    | 1 ~ 6   |        |        |        |        |        |                   |         |         |       | pcs |
| Battery module voltage range        | 300 ~ 600   |        |        |        |        |        |                   |         |         |       | V   |
| Peak output power (10 seconds)      | 4500  | 5520   | 6000   | 6900   | 7500   | 9000   | 12000             | 15000   | 15000   | W     |     |
| Nominal output voltage              | 220 / 230 / 240   |        |        |        |        |        | 220 / 230         |         |         | V     |     |
| <b>Protection</b>                   |   |        |        |        |        |        |                   |         |         |       |     |
| Safety protection feature           | DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter <sup>2</sup> , AC overcurrent/overvoltage/short-circuit protection. Type II DC/AC surge protection, Anti-islanding protection |        |        |        |        |        |                   |         |         |       |     |
| <b>General Data</b>                 |   |        |        |        |        |        |                   |         |         |       |     |
| Dimensions (W / H / D)              | 700 / 300 / 268   |        |        |        |        |        | 700 / 300 / 283   |         |         | mm    |     |
| Weight                              | 18  |        |        |        |        |        | 36                |         |         | kg    |     |
| Storage temperature range           | -40 ~ 70  |        |        |        |        |        |                   |         |         |       | °C  |
| Operating temperature range         | -30 ~ 60  |        |        |        |        |        |                   |         |         |       | °C  |
| Relative humidity range             | 0% ~ 95%  |        |        |        |        |        |                   |         |         |       |     |
| Max. operating altitude             | 4000  |        |        |        |        |        |                   |         |         |       | m   |
| Cooling                             | Natural convection  |        |        |        |        |        | Smart air cooling |         |         |       |     |
| Ingress protection rating           | IP66  |        |        |        |        |        |                   |         |         |       |     |
| Installation method                 | Wall-mounted  |        |        |        |        |        |                   |         |         |       |     |
| Communication                       | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G)   |        |        |        |        |        |                   |         |         |       |     |
| <b>Standard Compliance</b>          |   |        |        |        |        |        |                   |         |         |       |     |
| Standard <sup>3</sup>               | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2  |        |        |        |        |        |                   |         |         |       |     |

1. Sigen Hybrid Inverter 8.0–12.0 kW Single Phase is only available in specific regions. Please contact Sigenenergy or local distributors for details.
2. This is an optional feature only supported in certain models, please contact Sigenenergy for more information.
3. For all standards refer to the certificates category on the Sigenenergy website.

Disclaimer: The information in this file is provided on an "as is" basis. To the fullest extent permitted by law, Sigenenergy Technology Co., Ltd. excludes all representations and warranties relating to this file and its contents or which is or may be provided by any affiliates or any other third party, including in relation to any inaccuracies or omissions in this file.