

• YOUR  
• SMART  
• ENERGY



# SMILE-G3-T4/T5/T6/T8/T10

RESIDENTIAL SERIES

## POWER

4 / 5 / 6 / 8 / 10 kW

## CAPACITY

3.65 ~ 43.8 kWh with  
3.65 kWh Battery Module

4.0 ~ 24.0 kWh with  
4.0 kWh Battery Module



reddot design award 2022



GOOD DESIGN AWARD



3 MPPT for Higher PV Input

Bypass Function for Series Battery

Safer with Aerosols Inside the Battery

Capable of 150% Unbalancing per Phase

Compatible with EV Charger and Heat Pump

# SMILE-G3-T4/T5/T6/T8/T10



| Model                             | SMILE-G3-T4                                                      | SMILE-G3-T5     | SMILE-G3-T6     | SMILE-G3-T8     | SMILE-G3-T10     |
|-----------------------------------|------------------------------------------------------------------|-----------------|-----------------|-----------------|------------------|
| System Specifications             |                                                                  |                 |                 |                 |                  |
| Nominal Output Power              | 4 kW                                                             | 5 kW            | 6 kW            | 8 kW            | 10 kW            |
| Capacity Range                    | 3.65 - 43.8 / 4.0 ~ 24.0 kWh (95% DoD)                           |                 |                 |                 |                  |
| Battery Chemistry                 | LFP (LiFePO4)                                                    |                 |                 |                 |                  |
| Warranty                          | 10 Years Product Warranty, 10 Years Battery Performance Warranty |                 |                 |                 |                  |
| Inverter Technical Specifications |                                                                  |                 |                 |                 |                  |
| Model                             | SMILE-G3-T4-INV                                                  | SMILE-G3-T5-INV | SMILE-G3-T6-INV | SMILE-G3-T8-INV | SMILE-G3-T10-INV |
| Coupling                          | Hybrid                                                           | Hybrid          | Hybrid          | Hybrid          | Hybrid           |
| Max. PV Input Power               | 8 kW                                                             | 10 kW           | 12 kW           | 16 kW           | 20 kW            |
| Max. PV Input Current             | 16 A / 16 A / 16 A                                               |                 |                 |                 |                  |
| Max. PV Input Voltage             | 1000 V                                                           |                 |                 |                 |                  |
| MPPT Number / Max. Input Strings  | 3 / 1                                                            |                 |                 |                 |                  |
| MPPT Voltage Range                | 140 ~ 950 V                                                      |                 |                 |                 |                  |
| Max. PV Short-Circuit Current     | 24 A / 24 A / 24 A                                               |                 |                 |                 |                  |
| Max. Charging/Discharging Current | 40 A                                                             |                 |                 |                 |                  |
| Max. Charging/Discharging Power   | 4 kW                                                             | 5 kW            | 6 kW            | 8 kW            | 10 kW            |
| Rated Frequency                   | 50 / 60 Hz                                                       |                 |                 |                 |                  |
| Rated Voltage                     | 220 V / 380 V, 230 V / 400 V                                     |                 |                 |                 |                  |
| Phase                             | Three Phase                                                      |                 |                 |                 |                  |
| Rated Output Power (Grid Port)    | 4 kW                                                             | 5 kW            | 6 kW            | 8 kW            | 10 kW            |
| Rated Output Current (Grid Port)  | 5.8 A                                                            | 7.3 A           | 8.7 A           | 11.6 A          | 14.5 A           |
| Rated Output Power (Backup Port)  | 4 kW                                                             | 5 kW            | 6 kW            | 8 kW            | 10 kW            |
| Rated Input Power (on-grid)       | 8 kW                                                             | 10 kW           | 12 kW           | 16 kW           | 20 kW            |
| Backup                            | UPS                                                              |                 |                 |                 |                  |
| Communication                     | Ethernet / WiFi / Modbus / API                                   |                 |                 |                 |                  |
| Relative Humidity                 | 0 ~ 90% (No Condensation)                                        |                 |                 |                 |                  |
| Dimensions (W x D x H)            | 610 x 212.5 x 416 mm                                             |                 |                 |                 |                  |
| Weight                            | 26.7 kg                                                          |                 |                 |                 |                  |
| IP Protection                     | IP65                                                             |                 |                 |                 |                  |
| Safety                            | IEC 62109-1/-2                                                   |                 |                 |                 |                  |
| EMC                               | IEC 61000-6-1/-3                                                 |                 |                 |                 |                  |
| Overvoltage Category              | DC II                                                            |                 |                 |                 |                  |
| Noise                             | ≤ 30 dB                                                          |                 |                 |                 |                  |
| Grid Regulation                   | VDE 4105, EN 50549-1, VDE0126-01-01, NC RFG                      |                 |                 |                 |                  |
| Maximum / European Efficiency     | 97.6 % / 96.8 %                                                  |                 |                 |                 |                  |

## Battery Technical Specifications

|                                   |                      |                      |
|-----------------------------------|----------------------|----------------------|
| Module Model                      | SMILE-G3-BAT-3.8S    | SMILE-G3-BAT-4.0S    |
| Module Capacity                   | 3.8 kWh              | 4.0 kWh              |
| Usable Capacity                   | 3.65 kWh             | 3.8 kWh              |
| Depth of Discharge (DoD)          | 95 % *               | 95 % *               |
| Nominal Voltage                   | 96 V                 | 96 V                 |
| Max. Charging/Discharging Current | 40 A **              | 42 A                 |
| Operating Temperature Range       | -10°C ~ 50 °C ***    | -10°C ~ 60 °C ***    |
| Cycle Life                        | 10000 ****           | 10000 ****           |
| Battery Modules Quantity          | 1 ~ 12 *****         | 1 ~ 6                |
| IP Protection                     | IP21                 | IP65                 |
| Dimensions (W x D x H)            | 610 x 212.5 x 435 mm | 610 x 212.5 x 435 mm |
| Weight                            | 39.2 kg              | 42.5 kg              |
| Noise                             | ≤ 35 dB              | ≤ 25 dB              |
| Fire-Fighting                     | Aerosol              | N/A                  |

\* Test condition: Max. 0.5C charge/discharge at 25±2°C.

\*\* 50A discharging current sustainable for 30 minutes in off-grid operation.

\*\*\* Max. charge/discharge current derating may occur with changes in temperature and SoC.

\*\*\*\* Under specific test conditions.

\*\*\*\*\* Maximum 6 Batteries for each cluster in series, up to 2 clusters in parallel.

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