

YOUR  
SMART  
ENERGY



up to  
>12%

Additional  
energy use



up to  
>20%

Longer  
service life



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

HOME SERIES

## POWER

4 / 5 / 6 / 8 / 10 kW

## CAPACITY

3.65 kWh modular  
expandable up to 43.8 kWh

3.8 kWh modular  
expandable up to 22.8 kWh

4.56 kWh modular  
expandable up to 27.36 kWh

9.3 kWh modular  
expandable up to 111.6 kWh



Munich RE



reddot design award 2022



GOOD DESIGN AWARD



## HYBRID BATTERY

Optimal capacity utilization through pack balancing

100% charge/discharge power at 1C

High reliability through Multi-BMS system

Safe lithium iron phosphate (LFP) cells

Performance warranty up to 25 years

5-year all-risk insurance (optional)

## HYBRID INVERTER

UPS capability

Price signaling capability

Wall or floor mounting

Anti-shading function

3x MPPTs optimal for flexible roof orientation

Smart Home Ready

\*Net Promoter Score (Recommendation Rate); Source: EUPD Research 2024



Levering & installatie: AM Elektrotechnik

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Officieel productblad AlphaESS

AlphaESS SMILE G3 T4-T10 (3-fase) · inhoud ongewijzigd · blad 1/2

# 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            |
| Usable Capacity Range              | 3.65 - 43.8 kWh / 3.8 - 22.8 kWh / 4.56 - 27.36 kWh / 9.3 - 111.6 kWh      |                      |                      |                    |                  |
| 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               | 1,000 V                                                                    |                      |                      |                    |                  |
| MPPT Number / Strings per MPPT     | 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            |
| Nominal Frequency                  | 50 / 60 Hz                                                                 |                      |                      |                    |                  |
| Nominal Voltage                    | 220 V / 380 V, 230 V / 400 V                                               |                      |                      |                    |                  |
| Phase                              | Three Phase                                                                |                      |                      |                    |                  |
| Nominal Output Power (Grid Port)   | 4 kW                                                                       | 5 kW                 | 6 kW                 | 8 kW               | 10kW             |
| Nominal Output Power (Backup Port) | 4 kW                                                                       | 5 kW                 | 6 kW                 | 8 kW               | 10 kW            |
| Nominal 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(WxDxH)                  | 610 × 212.5 × 416 mm                                                       |                      |                      |                    |                  |
| Weight                             | 26.7 kg                                                                    |                      |                      |                    |                  |
| Ingress Protection                 | IP65                                                                       |                      |                      |                    |                  |
| Safety                             | IEC 62109-1/-2                                                             |                      |                      |                    |                  |
| EMC                                | IEC 61000-6-1/-2/-3/-4, IEC 61000-3-11, EN 61000-3-12                      |                      |                      |                    |                  |
| Grid Regulation                    | VDE 4105, EN 50549-1, VDE 0126-1-1, NC RFG, Tor Erzeuger, CEI 0-21, C10/11 |                      |                      |                    |                  |
| Overvoltage Category               | DC Type II according to EN / IEC 61643                                     |                      |                      |                    |                  |
| Cooling                            | Controlled Ventilator                                                      |                      |                      |                    |                  |
| Noise                              | ≤ 39 dB                                                                    |                      |                      |                    |                  |
| Maximum/European Efficiency        | 97.6 % / 96.8 %                                                            |                      |                      |                    |                  |
| Battery Technical Specifications   |                                                                            |                      |                      |                    |                  |
| Model                              | SMILE-G3-BAT-3.8S                                                          | SMILE-G3-BAT-4.0S    | SMILE-G3-BAT-4.5S    | SMILE-G3-BAT-9.3S  |                  |
| Nominal Capacity                   | 3.8 kWh                                                                    | 4.0 kWh              | 4.56 kWh             | 9.3 kWh            |                  |
| Usable Capacity                    | 3.65 kWh                                                                   | 3.8 kWh              | 4.56 kWh             | 9.3 kWh            |                  |
| Depth of Discharge (DoD)           | 95 % *                                                                     | 95 % *               | 100 % *              | 100 % *            |                  |
| Nominal Voltage                    | 96 V                                                                       | 96 V                 | 96 V                 | 96 V               |                  |
| Max. Charging/Discharging Current  | 40 A                                                                       | 42 A                 | 50 A                 | 52.5 A             |                  |
| Operating Temperature Range        | -10°C ~ 50 °C **                                                           | -10°C ~ 60 °C **     | -20 °C ~ 50 °C **    | -20 °C ~ 50 °C **  |                  |
| Cycle Life                         | 10,000 ***                                                                 | 10,000 ***           | 10,000 ***           | 10,000 ***         |                  |
| Modular Connection                 | 1 ~ 6,8,10,12 ****                                                         | 1 ~ 6                | 1 ~ 6                | 1 ~ 6,8,10,12 **** |                  |
| IP Protection                      | IP21                                                                       | IP65                 | IP65                 | IP65               |                  |
| Dimensions (W x D x H)             | 610 × 212.5 × 435 mm                                                       | 610 × 212.5 × 435 mm | 610 × 212.5 × 435 mm | 610 × 210 × 634 mm |                  |
| Weight                             | 39.2 kg                                                                    | 42.5 kg              | 53 kg                | 81 kg              |                  |
| Noise                              | ≤ 35 dB                                                                    | ≤ 25 dB              | ≤ 35 dB              | ≤ 35 dB            |                  |
| Fire-Fighting                      | Aerosol                                                                    | N/A                  | Aerosol              | Aerosol            |                  |

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

\*\* Performance reduction may occur depending on the state of charge and temperature. Optimal operating temperature 15°C ~ 30°C.

\*\*\* Under specific test conditions.

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



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