

**INVERTERS**

# SUN-3.6-10K-SG05LP1-EU-SM2-P

Hybrid inverter · Single-phase · 3.6 – 10 kW · 7 models


**3.6 – 10** kW

RATED POWER

**Single-phase**

PHASE

**2**

MPPT TRACKERS

**97.6** %

MAX. EFFICIENCY

| Parameter                           | Unit | SUN-3.6K-SG05LP1-EU-SM2-P  | SUN-5K-SG05LP1-EU-SM2-P | SUN-6K-SG05LP1-EU-SM2-P | SUN-7K-SG05LP1-EU-SM2-P | SUN-7.6K-SG05LP1-EU-SM2-P | SUN-8K-SG05LP1-EU-SM2-P | SUN-10K-SG05LP1-EU-SM2-P |
|-------------------------------------|------|----------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|--------------------------|
| PV input                            |      |                            |                         |                         |                         |                           |                         |                          |
| Max. PV input power                 | W    | 7200                       | 10000                   | 12000                   | 14000                   | 15200                     | 16000                   | 20000                    |
| Max. usable PV input power          | W    | 5760                       | 8000                    | 9600                    | 11200                   | 12160                     | 12800                   | 16000                    |
| Max. PV input voltage               | V    | 500                        |                         |                         |                         |                           |                         |                          |
| Rated PV input voltage              | V    | 370                        |                         |                         |                         |                           |                         |                          |
| MPPT voltage range                  | V    | 150 – 425                  |                         |                         |                         |                           |                         |                          |
| Start-up voltage                    | V    | 125                        |                         |                         |                         |                           |                         |                          |
| Max. input current per MPPT         | A    | 18                         |                         |                         | 32                      |                           |                         |                          |
| Max. short-circuit current per MPPT | A    | 27                         |                         |                         | 48                      |                           |                         |                          |
| Number of MPPT trackers             |      | 2                          |                         |                         |                         |                           |                         |                          |
| PV strings per MPPT                 |      | 1                          |                         |                         | 2                       |                           |                         |                          |
| AC output                           |      |                            |                         |                         |                         |                           |                         |                          |
| Rated output power                  | W    | 3600                       | 5000                    | 6000                    | 7000                    | 7600                      | 8000                    | 10000                    |
| Max. apparent power                 | VA   | 3960                       | 5500                    | 6600                    | 7700                    | 8360                      | 8800                    | 11000                    |
| Rated AC voltage                    | V    | 230                        |                         |                         |                         |                           |                         |                          |
| Rated AC output current             | A    | 15.7                       | 21.8                    | 26.1                    | 30.5                    | 33.1                      | 34.8                    | 43.5                     |
| Phase                               |      | Single-phase               |                         |                         |                         |                           |                         |                          |
| Rated AC frequency                  | Hz   | 50/60                      |                         |                         |                         |                           |                         |                          |
| Max. AC output current              | A    | 17.3                       | 24                      | 28.7                    | 33.5                    | 36.4                      | 38.3                    | 47.9                     |
| Total harmonic distortion (THDi)    | %    | <3                         |                         |                         |                         |                           |                         |                          |
| Power factor                        |      | 0.8 leading to 0.8 lagging |                         |                         |                         |                           |                         |                          |
| Peak (surge) power                  | W    | 7200                       | 10000                   | 12000                   | 14000                   | 15200                     | 16000                   | 20000                    |
| Generator input                     |      | Yes                        |                         |                         |                         |                           |                         |                          |

| Parameter                                     | Unit  | SUN-3.6K-SG05LP1-EU-SM2-P                                                                                                                                                                                                                                                                                                             | SUN-5K-SG05LP1-EU-SM2-P | SUN-6K-SG05LP1-EU-SM2-P | SUN-7K-SG05LP1-EU-SM2-P | SUN-7.6K-SG05LP1-EU-SM2-P | SUN-8K-SG05LP1-EU-SM2-P | SUN-10K-SG05LP1-EU-SM2-P |
|-----------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|--------------------------|
| Max. parallel units                           |       | 16                                                                                                                                                                                                                                                                                                                                    |                         |                         |                         |                           |                         |                          |
| Max. continuous AC passthrough (grid to load) | A     | 35                                                                                                                                                                                                                                                                                                                                    |                         | 40                      | 50                      |                           |                         |                          |
| DC injection current                          |       | <0.5% In                                                                                                                                                                                                                                                                                                                              |                         |                         |                         |                           |                         |                          |
| Battery                                       |       |                                                                                                                                                                                                                                                                                                                                       |                         |                         |                         |                           |                         |                          |
| Battery type                                  |       | Lead-acid or lithium-ion                                                                                                                                                                                                                                                                                                              |                         |                         |                         |                           |                         |                          |
| Battery voltage range                         | V     | 40 – 60                                                                                                                                                                                                                                                                                                                               |                         |                         |                         |                           |                         |                          |
| Max. charge current                           | A     | 90                                                                                                                                                                                                                                                                                                                                    | 120                     | 135                     | 175                     | 190                       |                         | 210                      |
| Max. discharge current                        | A     | 90                                                                                                                                                                                                                                                                                                                                    | 120                     | 135                     | 175                     | 190                       |                         | 210                      |
| Charging strategy for Li-ion battery          |       | Self-adaption to BMS                                                                                                                                                                                                                                                                                                                  |                         |                         |                         |                           |                         |                          |
| Number of battery inputs                      |       | 1                                                                                                                                                                                                                                                                                                                                     |                         |                         |                         |                           |                         |                          |
| Efficiency                                    |       |                                                                                                                                                                                                                                                                                                                                       |                         |                         |                         |                           |                         |                          |
| Max. efficiency                               | %     | 97.6                                                                                                                                                                                                                                                                                                                                  |                         |                         |                         |                           |                         |                          |
| European efficiency                           | %     | 96.5                                                                                                                                                                                                                                                                                                                                  |                         |                         |                         |                           |                         |                          |
| MPPT efficiency                               | %     | >99                                                                                                                                                                                                                                                                                                                                   |                         |                         |                         |                           |                         |                          |
| Protection                                    |       |                                                                                                                                                                                                                                                                                                                                       |                         |                         |                         |                           |                         |                          |
| Protection functions                          |       | DC reverse polarity protection; AC output overcurrent protection; thermal protection; AC output overvoltage protection; AC output short-circuit protection; DC component monitoring; arc fault circuit interrupter (AFCI)(optional); anti-islanding protection; DC switch; insulation impedance detection; residual current detection |                         |                         |                         |                           |                         |                          |
| Surge protection level                        |       | Type II (DC), Type II (AC)                                                                                                                                                                                                                                                                                                            |                         |                         |                         |                           |                         |                          |
| General data                                  |       |                                                                                                                                                                                                                                                                                                                                       |                         |                         |                         |                           |                         |                          |
| Dimensions (W x H x D)                        | mm    | 366 × 589.5 × 237                                                                                                                                                                                                                                                                                                                     |                         |                         |                         |                           |                         |                          |
| Weight                                        | kg    | 26.8                                                                                                                                                                                                                                                                                                                                  |                         |                         |                         |                           |                         |                          |
| Ingress protection (IP rating)                |       | IP65                                                                                                                                                                                                                                                                                                                                  |                         |                         |                         |                           |                         |                          |
| Operating temperature range                   | °C    | –40 – 60                                                                                                                                                                                                                                                                                                                              |                         |                         |                         |                           |                         |                          |
| Relative humidity                             | %     | 0 – 100                                                                                                                                                                                                                                                                                                                               |                         |                         |                         |                           |                         |                          |
| Max. operating altitude                       | m     | 2000                                                                                                                                                                                                                                                                                                                                  |                         |                         |                         |                           |                         |                          |
| Cooling                                       |       | Intelligent air cooling                                                                                                                                                                                                                                                                                                               |                         |                         |                         |                           |                         |                          |
| Noise level                                   | dB    | <45                                                                                                                                                                                                                                                                                                                                   |                         |                         |                         |                           |                         |                          |
| Topology                                      |       | Non-isolated (solar), isolated (battery)                                                                                                                                                                                                                                                                                              |                         |                         |                         |                           |                         |                          |
| Warranty                                      | years | 5 – 10                                                                                                                                                                                                                                                                                                                                |                         |                         |                         |                           |                         |                          |
| Overvoltage category                          |       | OVC II (DC), OVC III (AC)                                                                                                                                                                                                                                                                                                             |                         |                         |                         |                           |                         |                          |
| Communication                                 |       |                                                                                                                                                                                                                                                                                                                                       |                         |                         |                         |                           |                         |                          |
| Display                                       |       | Colorful touch LCD                                                                                                                                                                                                                                                                                                                    |                         |                         |                         |                           |                         |                          |
| Communication interfaces                      |       | Wi-Fi; RS485; CAN                                                                                                                                                                                                                                                                                                                     |                         |                         |                         |                           |                         |                          |

| Parameter                    | Unit | SUN-3.6K-SG05LP1-EU-SM2-P                                                                                     | SUN-5K-SG05LP1-EU-SM2-P | SUN-6K-SG05LP1-EU-SM2-P | SUN-7K-SG05LP1-EU-SM2-P | SUN-7.6K-SG05LP1-EU-SM2-P | SUN-8K-SG05LP1-EU-SM2-P | SUN-10K-SG05LP1-EU-SM2-P |
|------------------------------|------|---------------------------------------------------------------------------------------------------------------|-------------------------|-------------------------|-------------------------|---------------------------|-------------------------|--------------------------|
| Certifications               |      |                                                                                                               |                         |                         |                         |                           |                         |                          |
| Certifications and standards |      | IEC/EN 61000-6-1/2/3/4; IEC/EN 62109-1; IEC/EN 62109-2                                                        |                         |                         |                         |                           |                         |                          |
| Grid codes                   |      | IEC 61727; IEC 62116; CEI 0-21; EN 50549; NRS 097; RD 140; UNE 217002; OVE-Richtlinie R25; G99; VDE-AR-N 4105 |                         |                         |                         |                           |                         |                          |

Specifications are subject to change without notice. Values are typical at 25 °C unless stated.  
XUSION is a brand of Hunan New Lithium Aviation Technology Co., Ltd.

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