

## Solis-(215-255)K-EHV-5G

### Solis Three Phase Grid-Tied Inverters

250K models are applicable only in Vietnam, Poland, Brazil and India

Certified by TÜV Rheinland with VDE-AR-N4130, supporting grid connections at Extra High Voltages  $\geq 150\text{kV}$  for enhanced grid adaptability.

#### Efficient

- 9/12/14 MPPTs, max. efficiency 99.0%
- > 150% DC/AC ratio
- High power tracking density 56MPPT/MW
- Compatible with 550W+ bifacial modules

#### Smart

- Night SVG function
- Intelligent string monitoring, smart I-V curve scan
- Remote firmware upgrade with simple operation

#### Safe

- IP66
- Built-in PID recovery for better module performance
- Fuse free design, safe and maintenance free
- Globally recognised branded componentry for longer life

#### Economic

- Power line communication (PLC) (optional)
- DC side supports "Y" connector

#### Models:

Solis-215K-EHV-5G-PLUS

Solis-250K-EHV-5G

Solis-250K-EHV-5G-PLUS

Solis-255K-EHV-5G

Solis-255K-EHV-5G-PLUS



360° View



# DATASHEET

## Solis-(215-255)K-EHV-5G

| Models                                  | 215K-PLUS                                                    | 250K                                       | 250K-PLUS | 255K                                       | 255K-PLUS |
|-----------------------------------------|--------------------------------------------------------------|--------------------------------------------|-----------|--------------------------------------------|-----------|
| Input DC                                |                                                              |                                            |           |                                            |           |
| Max. input voltage                      | 1500 V                                                       |                                            |           |                                            |           |
| Rated voltage                           | 1080 V                                                       |                                            |           |                                            |           |
| Start-up voltage                        | 500 V                                                        |                                            |           |                                            |           |
| MPPT voltage range                      | 480 - 1500 V                                                 |                                            |           |                                            |           |
| Max. input current                      | 9 × 30 A                                                     | 14 × 26 A                                  | 12 × 30 A | 14 × 26 A                                  | 12 × 30 A |
| Max. short circuit current              | 9 × 50 A                                                     | 14 × 40 A                                  | 12 × 50 A | 14 × 40 A                                  | 12 × 50 A |
| MPPT number / Max. input strings number | 9 / 18                                                       | 14 / 28                                    | 12 / 24   | 14 / 28                                    | 12 / 24   |
| Output AC                               |                                                              |                                            |           |                                            |           |
| Output power                            | 215 kVA@30°C / 205 kVA@40°C / 195 kVA@50°C                   | 250 kVA@30°C / 235 kVA@40°C / 220 kVA@50°C |           | 255 kVA@30°C / 235 kVA@40°C / 220 kVA@50°C |           |
| Rated grid voltage                      | 3/PE, 800 V                                                  |                                            |           |                                            |           |
| Grid voltage range                      | 640 - 920 V                                                  |                                            |           |                                            |           |
| Rated grid frequency                    | 50 Hz / 60 Hz                                                |                                            |           |                                            |           |
| Max. output current                     | 155.2 A                                                      | 180.4 A                                    |           | 184.0 A                                    |           |
| Power factor                            | > 0.99 (0.8 leading - 0.8 lagging)                           |                                            |           |                                            |           |
| THDi                                    | < 3%                                                         |                                            |           |                                            |           |
| Efficiency                              |                                                              |                                            |           |                                            |           |
| Max. efficiency                         | 99.0%                                                        |                                            |           |                                            |           |
| EU efficiency                           | 98.8%                                                        | 98.7%                                      | 98.8%     | 98.7%                                      | 98.8%     |
| Protection                              |                                                              |                                            |           |                                            |           |
| DC reverse-polarity protection          | Yes                                                          |                                            |           |                                            |           |
| Short circuit protection                | Yes                                                          |                                            |           |                                            |           |
| Output over current protection          | Yes                                                          |                                            |           |                                            |           |
| Surge protection                        | DC Type II / AC Type II                                      |                                            |           |                                            |           |
| Grid monitoring                         | Yes                                                          |                                            |           |                                            |           |
| Anti-islanding protection               | Yes                                                          |                                            |           |                                            |           |
| Temperature protection                  | Yes                                                          |                                            |           |                                            |           |
| Strings monitoring                      | Yes                                                          |                                            |           |                                            |           |
| I/V Curve scanning                      | Yes                                                          |                                            |           |                                            |           |
| Night time SVG function                 | Yes                                                          |                                            |           |                                            |           |
| Integrated PID recovery                 | Yes                                                          |                                            |           |                                            |           |
| Integrated DC switch                    | Yes                                                          |                                            |           |                                            |           |
| General Data                            |                                                              |                                            |           |                                            |           |
| Dimensions (W × H × D)                  | 1125 × 770 × 384 mm                                          |                                            |           |                                            |           |
| Weight                                  | 109 kg                                                       | 113 kg                                     |           |                                            |           |
| Topology                                | Transformerless                                              |                                            |           |                                            |           |
| Self-consumption (night)                | < 2 W                                                        |                                            |           |                                            |           |
| Operating ambient temperature range     | -30 ~ +60°C                                                  |                                            |           |                                            |           |
| Relative humidity                       | 0 - 100%                                                     |                                            |           |                                            |           |
| Ingress protection                      | IP66                                                         |                                            |           |                                            |           |
| Cooling concept                         | Intelligent fan-cooling                                      |                                            |           |                                            |           |
| Max. operation altitude                 | 4000 m                                                       |                                            |           |                                            |           |
| Grid connection standard                | EN50549, G99, AS4777.2, VDE0126, IEC61727, VDE4110, CEA 2019 |                                            |           |                                            |           |
| Safety / EMC standard                   | IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4                       |                                            |           |                                            |           |
| Features                                |                                                              |                                            |           |                                            |           |
| DC connection                           | MC4 connector                                                |                                            |           |                                            |           |
| AC connection                           | OT terminal (max. 300 mm²)                                   |                                            |           |                                            |           |
| Display                                 | LCD                                                          |                                            |           |                                            |           |
| Communication                           | RS485, Optional: PLC                                         |                                            |           |                                            |           |