

Solis-(25-40)K-5G, Solis-(40-50)K-HV-5G

Solis 5G Three Phase Inverters



360 degree

Features:

- ▶ Over 98.8% Max. efficiency
- ▶ Wide voltage range and low startup voltage
- ▶ 3/4 MPPT design with precise MPPT algorithm
- ▶ THDi<3%, low harmonic distortion against grid
- ▶ Anti-resonance, supporting over 6MW paralleled in one transformer
- ▶ Perfect commercial site monitoring solution
- ▶ 130% DC overload ratio, 13A input for each PV string
- ▶ Strings intelligent monitoring, Smart I-V Curve Diagnosis supported
- ▶ Fuse free design to avoid fire hazard
- ▶ Type II surge arrester for both DC and AC
- ▶ Natural convection, Fan-less design, longer lifespan
- ▶ Leakage current repression technology
- ▶ Volt-watt work mode integrated
- ▶ DC input reverse alarm
- ▶ Intergrated Export Power Manager (EPM)



Model:

- | | |
|-----------------------|-----------------|
| 400V: Solis-25K-5G | Solis-30K-5G |
| Solis-33K-5G | Solis-36K-5G |
| Solis-40K-5G | |
| 480V: Solis-40K-HV-5G | Solis-50K-HV-5G |

Datasheet

| Model Name | Solis-25K-5G | Solis-30K-5G | Solis-33K-5G | Solis-36K-5G | Solis-40K-5G | Solis-40K-HV-5G | Solis-50K-HV-5G |
|------------|--------------|--------------|--------------|--------------|--------------|-----------------|-----------------|
|------------|--------------|--------------|--------------|--------------|--------------|-----------------|-----------------|

Input DC

| | | | | | | | |
|---------------------------------------|-------------|------|------|-------|------|------|------|
| Recommended max. PV power | 33kW | 39kW | 43kW | 47kW | 52kW | 52kW | 65kW |
| Max. input voltage | 1100V | | | | | | |
| Rated voltage | 600V | | | | | | |
| Start-up voltage | 180V | | | | | | |
| MPPT voltage range | 200-1000V | | | | | | |
| Max. input current | 26A/26A/26A | | | 4*26A | | | |
| Max. short circuit current | 40A/40A/40A | | | 4*40A | | | |
| MPPT number/Max. input strings number | 3/6 | | | 4/8 | | | |

Output AC

| | | | | | | | |
|----------------------------|-----------------------------------|-------------|-------------|-------------|-------------|------------|-------|
| Rated output power | 25kW | 30kW | 33kW | 36kW | 40kW | 40kW | 50kW |
| Max. apparent output power | 27.5kVA | 33kVA | 36.3kVA | 39.6kVA | 44kVA | 44kVA | 55kVA |
| Max. output power | 27.5kW | 33kW | 36.3kW | 39.6kW | 44kW | 44kW | 55kW |
| Rated grid voltage | 3/N/PE, 220/380V, 230/400V | | | | | 3/PE, 480V | |
| Rated grid frequency | 50/60Hz | | | | | | |
| Rated grid output current | 38.0A/36.1A | 45.6A/43.3A | 50.1A/47.6A | 57.7A/52.0A | 60.8A/57.7A | 48.1A | 60.1A |
| Max. output current | 41.8A | 50.2A | 55.1A | 60.2A | 66.9A | 53.0A | 66.2A |
| Power Factor | >0.99 (0.8 leading - 0.8 lagging) | | | | | | |
| THDi | <3% | | | | | | |

Efficiency

| | | | | | | | |
|-----------------|-------|--|--|--|--|--|--|
| Max. efficiency | 98.8% | | | | | | |
| EU efficiency | 98.3% | | | | | | |

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 | | | | | | |
| Anti-PID function | Optional | | | | | | |
| Integrated DC switch | Optional | | | | | | |

General Data

| | | | | | | | |
|-------------------------------------|---|--|--|--|--|--|--|
| Dimensions (W*H*D) | 647*629*252 mm | | | | | | |
| Weight | 45kg | | | | | | |
| Topology | Transformerless | | | | | | |
| Self consumption | <1W (night) | | | | | | |
| Operating ambient temperature range | -25 ~ +60°C | | | | | | |
| Relative humidity | 0-100% | | | | | | |
| Ingress protection | IP65 | | | | | | |
| Cooling concept | Natural convection | | | | | | |
| Max. operation altitude | 4000m | | | | | | |
| Grid connection standard | EN50549, G99, AS4777.2-2015, VDE0126-1-1, IEC 62727, VDE4105-2018, NB/T 32004 | | | | | | |
| Safety/EMC standard | IEC62109-1/-2, EN61000-6-2, EN61000-6-3 | | | | | | |

Features

| | | | | | | | |
|---------------|------------------------------|--|--|--|--|--|--|
| DC connection | MC4 connector | | | | | | |
| AC connection | OT terminal | | | | | | |
| Display | LCD, 2×20 Z | | | | | | |
| Communication | RS485, Optional: Wi-Fi, GPRS | | | | | | |