



SG 40KTL

Flexible

- Easy to handle and installation, without lifting machinery assistance.
- Integrated combiner box functionality and type II surge arrester
- IP65 outdoor design, easy to choose installation location.

Efficient

- Max. Efficiency at 98.3%
- Wide MPP voltage range, reduce the influence by varied climate to generation
- 480V AC voltage output, heighten system conversion and transmission efficiency

Grid-friendly

- LVRT function
- Remote active power control (0-100%)
- A variety of reactive power control modes, power factor adjustable between 0.8overexcited ~0.8 underexcited

Qualified

- TÜV, BDEW

Input Side Data

| | |
|-------------------------------------|------------------------|
| Max. PV input power | 40500W (20250W/20250W) |
| Max. PV input voltage | 1000V |
| Startup voltage | 300V |
| Nominal input voltage | 710V |
| MPP voltage range | 280~950V |
| MPP voltage range for nominal power | 560~800V |
| Number of MPPTs | 2 |
| Max. number of PV strings per MPPT | 4 |
| Max. PV input current | 66A (33A/33A) |
| Max. current for input connector | 10A |
| Short-circuit current of PV input | 80A (40A/40A) |

Output Side Data

| | |
|-------------------------------|--|
| Nominal AC output power | 36000W |
| Max. AC output power | 39800W |
| Max. AC output apparent power | 39800VA |
| Max. AC output current | 48A |
| Nominal AC voltage | 3/N/PE, 3/PE, 277/480Vac |
| AC voltage range | 422~528Vac |
| Nominal grid frequency | 50/60Hz |
| Grid frequency range | 47~53Hz/57~63Hz |
| THD | <3% (nominal power) |
| DC current injection | <0.5%In |
| Power factor | >0.99@default value at nominal power, (adj. 0.8 overexcited ~0.8 underexcited) |

Protection

| | |
|----------------------------------|---------------------------------|
| Anti-islanding protection | Yes |
| LVRT | Yes |
| DC reverse connection protection | Yes |
| AC short circuit protection | Yes |
| Leakage current protection | Yes |
| DC switch | Integrated |
| DC fuse | Integrated |
| Overvoltage protection | Type II DIN rail surge arrester |

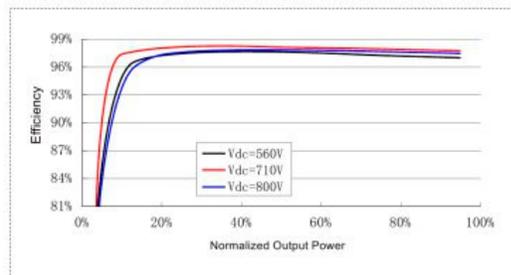
System Data

| | |
|-------------------------------------|---|
| Max. efficiency | 98.3% |
| Max. European efficiency | 98.0% |
| Isolation method | Transformerless |
| Ingress protection rating | IP65 (fan IP55) |
| Night power consumption | <1W |
| Operating ambient temperature range | -25~60°C (>45°C derating) |
| Allowable relative humidity range | 0~95% non-condensation |
| Cooling method | Smart forced air cooling |
| Max. operating altitude | 4000m (>2000m derating) |
| Display | Graphic LCD |
| Communication interface | RS485 (RJ45 connector) |
| DC connection type | MC4 |
| AC connection type | Clamping yoke connector |
| Certification | VDE0126-1-1, EN62109-1, EN62109-2, BDEW |

Mechanical Data

| | |
|------------------------|-------------------|
| Dimensions (W x H x D) | 634 x 820 x 257mm |
| Mounting method | Wall bracket |
| Weight | 65kg |

Efficiency Curve



Circuit Diagram

