

Three Phase Inverter

SE30K / SE33.3K



INVERTERS

Specifically designed to work with power optimizers

- Fixed voltage inverter for superior efficiency (98.3%) and longer strings
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Small, lightest in its class, and easy to install
- Integrated type 2 DC Surge Protection, to better withstand lightning events
- Optional RS485 and type 2 AC Surge Protection
- Built-in module-level monitoring with Ethernet, wireless or cellular communication for full system visibility
- Advanced safety features - integrated arc fault protection and optional rapid shutdown
- IP65 Outdoor and indoor installation
- Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- Future-ready for SolarEdge energy storage solution

/ Three Phase Inverter

SE30K / SE33.3K

| | SE30K | SE33.3K | |
|--|--|---------|-----|
| Applicable to inverters with part number | SEXK-XXX01XXXX | | |
| OUTPUT | | | |
| Rated AC Power Output | 29990 | 33300 | W |
| Maximum apparent AC Output Power | 29990 | 33300 | VA |
| AC Output Voltage - Line to Line / Line to Neutral (Nominal) | 380 / 220 ; 400 / 230 | | Vac |
| AC Output Voltage - Line to Line / Line to Neutral | 304 - 437 / 176 - 253 ; 320 - 460 / 184 - 264.5 | | Vac |
| AC Frequency | 50/60 ± 5% | | Hz |
| Maximum Continuous Output Current (per Phase) | 43.5 | 48.25 | Aac |
| AC Output Line Connections | 3W + PE, 4W + PE | | |
| Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds | Yes | | |
| Total Harmonic Distortion | ≤ 3 | | % |
| Power Factor Range | +/-0.8 to 1 | | |
| INPUT | | | |
| Maximum DC Power (Module STC) | 45000 | 50000 | W |
| Transformer-less, Ungrounded | Yes | | |
| Maximum Input Voltage DC+ to DC- | 1000 | | Vdc |
| Nominal Input Voltage DC+ to DC- | 750 | | Vdc |
| Maximum Input Current | 43.5 | 48.25 | Adc |
| Reverse-Polarity Protection | Yes | | |
| Ground-Fault Isolation Detection | 150kΩ Sensitivity ⁽¹⁾ | | |
| Maximum Inverter Efficiency | 98.3 | | % |
| European Weighted Efficiency | 98 | | % |
| Nighttime Power Consumption | < 4 | | W |
| ADDITIONAL FEATURES | | | |
| Supported Communication Interfaces | 2 x RS485, Ethernet, Wi-Fi (requires an antenna), Cellular (optional) | | |
| Smart Energy Management | Export Limitation | | |
| Inverter Commissioning | With the SetApp mobile application using built-in Wi-Fi access point for local connection | | |
| Arc Fault Protection | Integrated, User Configurable (According to UL1699B) | | |
| Rapid Shutdown | Optional ⁽²⁾ (Automatic upon AC Grid Disconnect) | | |
| RS485 Surge Protection | Optional | | |
| DC Surge Protection | Type II, field replaceable, Integrated | | |
| AC Surge Protection | Type II, field replaceable, Optional | | |
| DC SAFETY UNIT (OPTIONAL) | | | |
| 2-pole Disconnection | 1000V / 48.25A | | |
| DC Fuses (Single Pole) | Optional, 25A | | |
| Compliance | UTE-C15-712-1 | | |
| STANDARD COMPLIANCE | | | |
| Safety | IEC-62103 (EN50178), IEC-62109, AS3100 | | |
| Grid Connection Standards ⁽³⁾ | VDE-AR-N-4105, G59/3, AS-4777, EN 50438, CEI-021, VDE 0126-1-1, CEI-016, BDEW | | |
| Emissions | IEC61000-6-2, IEC61000-6-3 Class A, IEC61000-3-11, IEC61000-3-12 | | |
| RoHS | Yes | | |
| INSTALLATION SPECIFICATIONS | | | |
| AC Output Gland Diameter / Line cross section / PE cross section | Cable diameter 19-28 mm / 4 - 16 mm ² / 4 - 16 mm ² | | |
| DC Input ⁽⁴⁾⁽⁵⁾ | 4 MC4 pairs | | |
| DC Input with Safety Unit ⁽⁴⁾⁽⁵⁾ | 4 MC4 pairs | | |
| | 4 Strings: Gland: Cable outer diameter 5 - 10 mm / Wire cross section 2.5 - 16mm ² Single pair: Gland: Cable outer diameter 9 - 16 mm / Wire cross section 6 - 35mm ² | | |
| Dimensions (HxWxD) | 550 x 317 x 273 | | mm |
| Dimensions with Safety Unit (HxWxD) | 836 x 317 x 300 (DC MC4); 819 x 317 x 300 (DC Gland) | | mm |
| Weight | 32 | | kg |
| Weight with Safety Unit | 36.5 | | kg |
| Operating Temperature Range | -40 to +60 ⁽⁶⁾ | | °C |
| Cooling | Fan (user replaceable) | | |
| Noise | < 62 | | dBa |
| Protection Rating | IP65 - Outdoor and Indoor | | |
| Mounting | Bracket Provided | | |

(1) Where permitted by local regulations

(2) Inverter with rapid shutdown part number: SExxK-xxRxxxxxx

(3) For all standards refer to Certifications category in Downloads page: <http://www.solaredge.com/groups/support/downloads>

(4) DC input is available with MC4 or Gland connectors under the inverter part number. For more information, contact SolarEdge

(5) Only MC4 connectors manufactured by Stäubli are approved for use

(6) For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>