

# Three Phase Commercial Inverter

For Europe

SE20K / SE25K / SE30K / SE33.3K



## Specifically designed to work with SolarEdge power optimizers

- / Fixed voltage inverter for superior efficiency 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 surges caused by lightning or other 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 for outdoor and indoor installations
- / Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- / Future-proofed for SolarEdge energy storage solutions

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| Applicable to inverters with part number                                                             | SEXXX-RWX01XXXX                                                                                                                                                       |                       |                     |                       | Units |
|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|-----------------------|-------|
|                                                                                                      | SE20K <sup>(1)</sup>                                                                                                                                                  | SE25K                 | SE30K               | SE33.3K               |       |
| OUTPUT                                                                                               |                                                                                                                                                                       |                       |                     |                       |       |
| Rated AC Active Power Output                                                                         | 20,001 <sup>(2)</sup>                                                                                                                                                 | 25,000                | 29,990              | 33,300 <sup>(3)</sup> | W     |
| Maximum AC Apparent Output Power                                                                     | 20,001                                                                                                                                                                | 25,000                | 29,990              | 33,300                | 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)                                                        | 29                                                                                                                                                                    | 36.25 <sup>(4)</sup>  | 43.5 <sup>(5)</sup> | 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                                                                                   | ±0.2 to 1                                                                                                                                                             |                       |                     |                       |       |
| Maximum Residual Current Injection <sup>(6)</sup>                                                    | 100                                                                                                                                                                   |                       |                     |                       | mA    |
| INPUT                                                                                                |                                                                                                                                                                       |                       |                     |                       |       |
| Maximum DC Power (Module STC)                                                                        | 35,000                                                                                                                                                                | 43,750                | 52,500              | 58,275                | W     |
| Transformer-less, Ungrounded                                                                         | Yes                                                                                                                                                                   |                       |                     |                       |       |
| Maximum Input Voltage DC+ to DC-                                                                     | 1000                                                                                                                                                                  |                       |                     |                       | Vdc   |
| Operating Voltage Range                                                                              | 680 – 1000                                                                                                                                                            |                       |                     |                       | Vdc   |
| Maximum Input Current                                                                                | 29                                                                                                                                                                    | 36.25                 | 43.5                | 48.25                 | Adc   |
| Reverse-Polarity Protection                                                                          | Yes                                                                                                                                                                   |                       |                     |                       |       |
| Ground-Fault Isolation Detection                                                                     | 167 kΩ Sensitivity <sup>(7)</sup>                                                                                                                                     |                       |                     |                       |       |
| Maximum Inverter Efficiency                                                                          | 98                                                                                                                                                                    | 98.3                  |                     |                       | %     |
| European Weighted Efficiency                                                                         | 97.7                                                                                                                                                                  | 98                    |                     |                       | %     |
| Nighttime Power Consumption                                                                          | < 4                                                                                                                                                                   |                       |                     |                       | W     |
| ADDITIONAL FEATURES                                                                                  |                                                                                                                                                                       |                       |                     |                       |       |
| Supported Communication Interfaces                                                                   | 2 x RS485, Ethernet, Wi-Fi (optional) <sup>(8)</sup> , 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 UL 1699B)                                                                                                                 |                       |                     |                       |       |
| Rapid Shutdown                                                                                       | Optional <sup>(9)</sup> (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                                                                                 | N/A                                                                                                                                                                   | 1000 V / 48.25 A      |                     |                       |       |
| DC Fuses (Single Pole)                                                                               | N/A                                                                                                                                                                   | Optional, 25 A / 30 A |                     |                       |       |
| Compliance                                                                                           | N/A                                                                                                                                                                   | UTE-C15-712-1         |                     |                       |       |
| STANDARD COMPLIANCE                                                                                  |                                                                                                                                                                       |                       |                     |                       |       |
| Safety                                                                                               | IEC-62109, AS 3100                                                                                                                                                    |                       |                     |                       |       |
| Grid Connection Standards <sup>(10)</sup>                                                            | VDE-AR-N-4105, VDE-AR-N-4110 <sup>(11)</sup> , AS-4777, EN 50438, CEI-021, VDE 0126-1-1, CEI-016, EN 50549-1, EN 50549-2, TOR Erzeuger Typ A, G99, G99 (NI), VFR 2019 |                       |                     |                       |       |
| Emissions                                                                                            | IEC 61000-6-2, IEC 61000-6-3 Class A, IEC 61000-3-11, IEC 61000-3-12                                                                                                  |                       |                     |                       |       |
| RoHS                                                                                                 | Yes                                                                                                                                                                   |                       |                     |                       |       |

- (1) Not available in all countries. For details about the inverters approved for installation in your country, see [here](#).
- (2) In Italy and Hungary, the Rated AC Active Power Output is 19,900 W.
- (3) For sites under VDE-AR-N-4110, consider this as a 30 kW (at 90% Unom) inverter for site capacity calculations.
- (4) For sites under VDE-AR-N-4110, the Maximum Continuous Output Current per Phase is 40 A.
- (5) For sites under VDE-AR-N-4110, the Maximum Continuous Output Current per Phase is 48.25 A.
- (6) If an external RCD is required, its trip value must be ≥ 100 mA.
- (7) Where permitted by local regulations.
- (8) Wi-Fi connectivity requires connection of an additional Wi-Fi component, ordered separately. For more details ask your SolarEdge salesperson or refer to the [Communication product page](#).
- (9) Inverters with rapid shutdown part number: SExxK-xxRxxxxx.
- (10) For all standards refer to the Certificates category in the [Knowledge Center](#).
- (11) Not applicable for SE20K.



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| Applicable to inverters with part number                         | SEXK-RWX0IXXX                                                                                     |       |       |         |       |
|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------|-------|---------|-------|
|                                                                  | SE20K                                                                                             | SE25K | SE30K | SE33.3K |       |
| INSTALLATION SPECIFICATIONS                                      |                                                                                                   |       |       |         |       |
| AC Output Gland Diameter / Line cross section / PE cross section | Cable diameter 19 – 28 mm / 4 – 16 mm² / 4 – 16 mm²                                               |       |       |         |       |
| DC Input <sup>(12)</sup>                                         | 4 MC4 pairs                                                                                       |       |       |         |       |
| DC Input with Safety Unit <sup>(12)(13)</sup>                    | 4 MC4 pairs<br>4 Strings: Gland: Cable outer diameter 5 – 10 mm / Wire cross section 2.5 – 16 mm² |       |       |         |       |
| Dimensions (H x W x D)                                           | 550 x 317 x 273                                                                                   |       |       |         | mm    |
| Dimensions with Safety Unit (H x W x D)                          | 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 <sup>(14)</sup>                                                                        |       |       |         | °C    |
| Cooling                                                          | Fan (user replaceable)                                                                            |       |       |         |       |
| Noise                                                            | < 62                                                                                              |       |       |         | dB(A) |
| Protection Rating                                                | IP65 – outdoor and indoor                                                                         |       |       |         |       |
| Mounting                                                         | Brackets provided                                                                                 |       |       |         |       |

(12) DC input is available with MC4 or Gland connectors under the inverter part number. For more information, contact SolarEdge.  
 (13) Only MC4 connectors manufactured by Stäubli are approved for use.  
 (14) For power derating information refer to the [Power Derating](#) technical note.