

# Three Phase Commercial Inverter

## USA Domestic Content Eligible\*

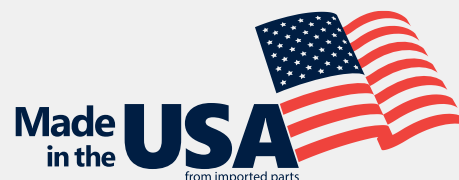
Preliminary Datasheet for North America

SE10KUS / SE17.3KUS / SE30KUS / SE40KUS

# INVERTER



12-20  
YEAR  
WARRANTY



## SolarEdge's USA-manufactured offering for C&I rooftops and carports

- Eligible for domestic content\*: SolarEdge's USA-manufactured inverters, when paired with certain SolarEdge USA-manufactured power optimizers, are intended to be eligible for the enhanced federal income tax credit for domestic content
- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp
- Fixed DC voltage inverter for superior efficiency and longer strings
- Small, lightest in its class, and easy to install outdoors or indoors on provided bracket
- Built-in type 2 DC and AC Surge Protection, to better withstand lightning events
- Integrated arc fault protection and rapid shutdown for NEC 2014 – 2023, per articles 690.11 and 690.12
- Built-in module level monitoring with ethernet, wireless, or cellular communication for full system visibility
- Integrated safety switch
- UL 1741 SA and SB certified, for CPUC Rule 21 grid compliance

\* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Content Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

# / Three Phase Commercial Inverter

## USA Domestic Content Eligible for North America

SE10KUS / SE17.3KUS / SE30KUS / SE40KUS

### Preliminary Specifications<sup>(1)</sup>

| Applicable to inverters with part number<br>Model Number                     | USE-SIN-USxxlxxxx   |           |                   |         | UNITS   |
|--|---|-----------|-------------------|---------|---------|
|  | SE10KUS   | SE17.3KUS | SE30KUS           | SE40KUS |         |
| <b>OUTPUT</b>  |   |           |                   |         |         |
| Maximum AC Output Capacity   | 40,000  |           |                   |         | W       |
| Rated AC Power Output  | 10,000  | 17,300    | 30,000            | 40,000  | W       |
| Maximum Apparent AC Output Power   | 10,000  | 17,300    | 30,000            | 40,000  | VA      |
| AC Output Line Connections   | 3W + PE, 4W + PE  |           |                   |         |         |
| AC Output Voltage Minimum-Nominal-Maximum <sup>(2)</sup> (L-N)               | 105 – 120 – 132.5   |           | 244 – 277 – 305   |         | Vac     |
| AC Output Voltage Minimum-Nominal-Maximum <sup>(2)</sup> (L-L)               | 183 – 208 – 229   |           | 422.5 – 480 – 529 |         | Vac     |
| AC Frequency Min-Nom-Max <sup>(2)</sup>                                      | 59.3 – 60 – 60.5  |           | 59.3 – 60 – 60.5  |         | Hz      |
| Maximum Continuous Output Current (per Phase)                                | 27.8  | 48.25     | 36.25             | 48.25   | Aac     |
| GFDI Threshold   | 1   |           |                   |         | A       |
| Utility Monitoring, Islanding Protection,<br>Country Configurable Set Points | Yes   |           |                   |         |         |
| Total Harmonic Distortion  | ≤ 3   |           |                   |         | %       |
| Power Factor Range   | +/- 0.85 to 1   |           |                   |         |         |
| <b>INPUT<sup>(3)</sup></b>   |   |           |                   |         |         |
| Maximum DC Power (Module STC)  | 17,500  | 30,275    | 52,500            | 70,000  | W       |
| Transformer-less, Ungrounded   | Yes   |           |                   |         |         |
| Maximum Input Voltage DC+ to DC-   | 600   |           | 1000              |         | Vdc     |
| Operating Voltage Range  | 370 – 600   |           | 840 – 1000        |         | Vdc     |
| Maximum Input Current  | 27.8  | 48.25     | 36.25             | 48.25   | Adc     |
| Maximum Input Short Circuit Current  | 55  |           |                   |         | Adc     |
| Reverse-Polarity Protection  | Yes   |           |                   |         |         |
| Ground-Fault Isolation Detection   | 167kΩ Sensitivity <sup>(4)</sup>  |           |                   |         |         |
| CEC Weighted Efficiency  | 97  | 97.5      | 98.5              |         | %       |
| Night-time Power Consumption   | <4  |           |                   |         | W       |
| <b>ADDITIONAL FEATURES</b>   |   |           |                   |         |         |
| Supported Communication Interfaces   | 2 x RS485, Ethernet, Cellular (optional)  |           |                   |         |         |
| Inverter Commissioning   | With the SetApp mobile application using built-in access point for local connection                   |           |                   |         |         |
| Arc Fault Protection   | Integrated, User Configurable (According to UL 1699B)   |           |                   |         |         |
| Photovoltaic Rapid Shutdown System   | NEC 2014 – 2023, built-in, if paired with C651U   |           |                   |         |         |
| RS485 Surge Protection Plug-in   | Supplied with the inverter, built-in  |           |                   |         |         |
| DC Surge Protection  | Type II, field replaceable, built-in  |           |                   |         |         |
| AC Surge Protection  | Type II, field replaceable, built-in  |           |                   |         |         |
| Smart Energy Management  | Export Limitation   |           |                   |         |         |
| <b>DC SAFETY SWITCH</b>  |   |           |                   |         |         |
| DC Disconnect  | Integrated  |           |                   |         |         |
| <b>STANDARD COMPLIANCE</b>   |   |           |                   |         |         |
| Safety   | UL 1741; UL 1741 SA; UL 1741 SB; UL 1699B; CSA C22.2#107.1;<br>Canadian AFCL according to T.I.L. M-07 |           |                   |         |         |
| Grid Connection Standards  | IEEE 1547-2018, Rule 21, Rule 14 (HI)   |           |                   |         |         |
| Emissions  | FCC Part 15 Class A   |           |                   |         |         |
| <b>INSTALLATION SPECIFICATIONS</b>   |   |           |                   |         |         |
| AC Output Conduit Size / AWG Range   | ¾" or 1" / 6 – 10 AWG   |           |                   |         |         |
| DC Input Conduit Size / AWG Range  | ¾" or 1" / 6 – 12 AWG   |           |                   |         |         |
| Number of DC Input Pairs (Fuseless)  | 3   |           |                   |         |         |
| Dimensions with Safety Switch (H x W x D)                                    | 31.8 x 12.5 x 11.8 / 808 x 317 x 300  |           |                   |         | in / mm |
| Weight with Safety Switch  | 78.2 / 35.5   |           |                   |         | lb / kg |
| Cooling  | Fans (user replaceable)   |           |                   |         |         |
| Noise  | < 62  |           |                   |         | dBA     |
| Operating Temperature Range  | -40 to +140 / -40 to +60 <sup>(5)</sup>   |           |                   |         | °F / °C |
| Protection Rating  | NEMA 3R   |           |                   |         |         |
| Mounting   | Bracket provided  |           |                   |         |         |

(1) Specifications and information presented in this preliminary datasheet are subject to extended validation and change. This preliminary datasheet specifies features but cannot promise to deliver any specific characteristics. No warranty, implied or explicit, is given regarding delivery, accuracy, fitness or performance. SolarEdge reserves the right to modify its technical information and product specifications at any time without notice.

(2) For other regional settings please contact SolarEdge support.

(3) For compatibility of inverters and power optimizers, see this [technical note](#).

(4) Where permitted by local regulations.

(5) For power derating information, see the [Temperature Derating](#) technical note.