



SolarEdge Extended Power Three Phase Inverters

(Australia) SE10K - SE27.6K



INVERTERS

Specifically designed to work with power optimisers

- Superior efficiency (98%)
- Small, lightest in its class, and easy to install
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless (Wi-Fi, ZigBee Gateway, Cellular)
- IP65 – Outdoor and indoor installation
- Fixed voltage inverter for longer strings
- Smart Energy Management control
- Integrated DC Safety Unit - eliminates the need for external DC isolators



SolarEdge Extended Power Three Phase Inverters (Australia) SE10K - SE27.6K⁽¹⁾

| | SE10K ⁽²⁾ | SE12.5K | SE15K | SE16K | SE17K | SE25K | SE27.6K | |
|--|---|------------------------|-------|-------|-------|----------------------------------|---------|-----|
| OUTPUT | | | | | | | | |
| Rated AC Power Output | 10000 | 12500 | 15000 | 16000 | 17000 | 24950 | 27600 | VA |
| Maximum AC Power Output | 10000 | 12500 | 15000 | 16000 | 17000 | 24950 | 27600 | VA |
| AC Output Voltage - Line to Line / Line to Neutral (Nominal) | 400 / 230 | | | | | | | Vac |
| AC Output Voltage - Line to Neutral Range | 184 - 264.5 | | | | | | | Vac |
| AC Frequency | 50/60 ± 5 | | | | | | | Hz |
| Maximum Continuous Output Current (per Phase) | 16 | 20 | 23 | 25.5 | 26 | 38 | 40 | A |
| Grids Supported - Three Phase | 3 / N / PE (WYE with Neutral); 230 / 400 | | | | | | | V |
| Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds | Yes | | | | | | | |
| INPUT | | | | | | | | |
| Maximum DC Power (Module STC) | 13500 | 16850 | 20250 | 21600 | 22950 | 33750 | 37250 | W |
| Transformer-less, Ungrounded | Yes | | | | | | | |
| Nominal DC Input Voltage DC to Gnd | 375 | | | | | | | |
| Maximum Input Voltage DC to Gnd | 415 | | | | | | | |
| Nominal DC Input Voltage DC+ to DC- | 750 | | | | | | | Vdc |
| Maximum Input Voltage DC+ to DC- | 830 | | | | | | | Vdc |
| Maximum Input Current | 16.5 | 21 | 22 | 23 | 23 | 37 | 40 | Adc |
| Reverse-Polarity Protection | Yes | | | | | | | |
| Ground-Fault Isolation Detection | 700kΩ Sensitivity | | | | | 350kΩ Sensitivity ⁽³⁾ | | |
| Maximum Inverter Efficiency | 98 | | | | | 98.3 | | % |
| European Weighted Efficiency | 97.6 | 97.7 | 97.6 | 97.7 | 97.7 | 98 | 98 | % |
| Nighttime Power Consumption | < 2.5 | | | | | < 4 | | W |
| ADDITIONAL FEATURES | | | | | | | | |
| Supported Communication Interfaces ⁽⁴⁾ | RS485, Ethernet, ZigBee (optional), Wi-Fi (optional), Cellular (optional) | | | | | | | |
| DC SAFETY UNIT | | | | | | | | |
| 2-pole Disconnection | 1000V / 23A | | | | | 1000V / 40A | | |
| STANDARD COMPLIANCE | | | | | | | | |
| Safety | IEC62109, AS/NZS3100 | | | | | | | |
| Grid Connection Standards | AS/NZS4777:2015 | | | | | | | |
| Emissions | IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12 | | | | | | | |
| RoHS | Yes | | | | | | | |
| INSTALLATION SPECIFICATIONS | | | | | | | | |
| AC output conduit size / Wire cross section | 19mm minimum / 3-13 mm ² | | | | | | | |
| DC input conduit size / Wire cross section | 19mm minimum / 3-13 mm ² | | | | | | | |
| Dimensions with Safety Unit (HxWxD) | 775 x 315 x 191 | 775 x 315 x 260 | | | | | | mm |
| Weight | 24.9 | 36.2 | | | 48 | | | kg |
| Operating Temperature Range | -20 - +60 ⁽⁵⁾ | | | | | | | °C |
| Cooling | Internal Fan | Fan (user replaceable) | | | | | | |
| Noise | < 40 | < 50 | | | < 55 | | | dBA |
| Protection Rating | IP65 - Outdoor and Indoor | | | | | | | |
| Bracket Mounted (Bracket Provided) | | | | | | | | |

⁽¹⁾ These specifications apply only to inverters with part numbers SExxK-AU000NNU2

⁽²⁾ These specifications apply only to inverters with part number SE10K-AU002NNU2

⁽³⁾ Where permitted by local regulations

⁽⁴⁾ Refer to Datasheets -> Communications category in Downloads page for specifications of optional communication options: <http://www.solaredge.com/groups/support/downloads>

⁽⁵⁾ For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf>

