



SolarEdge Extended Power Three Phase Inverters

SE12.5K - SE27.6K



INVERTERS

Specifically designed to work with power optimizers

- Superior efficiency (98%)
- Small, lightest in its class, and easy to install
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- IP65 – Outdoor and indoor installation
- Fixed voltage inverter for longer strings
- Smart Energy Management control
- Optional integrated DC Safety Unit - eliminates the need for external DC isolators (SE25K and SE27.6K only)
- Optional DC surge protection and DC fuses (SE25K and SE27.6K only)



SolarEdge Extended Power Three Phase Inverters SE12.5K - SE27.6K

| | SE12.5K | SE15K | SE16K | SE17K | SE25K | SE27.6K | | |
|--|---|-------|-------|-------|--|---------|----------------------------|----|
| OUTPUT | | | | | | | | |
| Rated AC Power Output | 12500 | 15000 | 16000 | 17000 | 25000 ⁽¹⁾ | 27600 | VA | |
| Maximum AC Power Output | 12500 | 15000 | 16000 | 17000 | 25000 ⁽¹⁾ | 27600 | VA | |
| AC Output Voltage - Line to Line / Line to Neutral (Nominal) | 380 / 220 ; 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) | 20 | 23 | 25.5 | 26 | 38 | 40 | A | |
| Grids Supported - Three Phase | 3 / N / PE (WYE with Neutral) | | | | | | V | |
| Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds | Yes | | | | | | | |
| INPUT | | | | | | | | |
| Maximum DC Power (Module STC) | 16850 | 20250 | 21600 | 22950 | 33750 | 37250 | W | |
| Transformer-less, Ungrounded | Yes | | | | | | | |
| Maximum Input Voltage | 900 | | | | | | Vdc | |
| Nominal DC Input Voltage | 750 | | | | | | Vdc | |
| Maximum Input Current | 21 | 22 | 23 | 23 | 37 | 40 | Adc | |
| Reverse-Polarity Protection | Yes | | | | | | | |
| Ground-Fault Isolation Detection | 700kΩ Sensitivity | | | | 350kΩ Sensitivity ⁽²⁾ | | | |
| Maximum Inverter Efficiency | 98 | | | | | | 98.3 | % |
| European Weighted Efficiency | 97.7 | 97.6 | 97.7 | 97.7 | 98 | 98 | % | |
| Nighttime Power Consumption | < 2.5 | | | | | | < 4 | W |
| ADDITIONAL FEATURES | | | | | | | | |
| Supported Communication Interfaces ⁽³⁾ | RS485, Ethernet, Zigbee (optional), Wi-Fi (optional), Built-in GSM (optional) | | | | | | | |
| Smart Energy Management | Export Limitation, Home Energy Management | | | | | | | |
| DC SAFETY UNIT (OPTIONAL) | | | | | | | | |
| 2-pole Disconnection | N/A | | | | | | 1000V / 40A | |
| DC Surge Protection | N/A | | | | | | Type II, field replaceable | |
| DC Fuses on Plus & Minus | N/A | | | | | | Optional, 20A | |
| Compliance | N/A | | | | | | UTE-C15-712-1 | |
| STANDARD COMPLIANCE | | | | | | | | |
| Safety | IEC-62103 (EN50178), IEC-62109, AS3100 | | | | | | | |
| Grid Connection Standards ⁽⁴⁾ | VDE-AR-N-4105, G59/3, AS-4777, EN 50438, CEI-021, VDE 0126-1-1, CEI-016 ⁽⁵⁾ , BDEW | | | | | | | |
| Emissions | IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12 | | | | | | | |
| RoHS | Yes | | | | | | | |
| INSTALLATION SPECIFICATIONS | | | | | | | | |
| AC Output Gland Diameter / Wire Cross Section | 15-21mm / Solid wire 2.5-16 mm ² , Stranded wire 2.5-10 mm ² | | | | 18-25mm / Solid wire 2.5-16 mm ² , Stranded wire 2.5-10 mm ² | | | |
| DC Input | 2 MC4 pairs | | | | 3 MC4 pairs | | | |
| DC Input with Safety Unit | N/A | | | | Gland diameter 5 - 10 | | mm | |
| | | | | | Wire cross section 0.5 - 13.5 | | mm ² | |
| Dimensions (HxWxD) | 540 x 315 x 260 | | | | | | mm | |
| Dimensions with Safety Unit (HxWxD) | N/A | | | | | | 775 x 315 x 260 | mm |
| Weight | 33.2 | | | | | | 45 | kg |
| Weight with Safety Unit | N/A | | | | | | 48 | kg |
| Operating Temperature Range | -20 - +60 ⁽⁶⁾ (M40 version -40 - +60) | | | | | | °C | |
| Cooling | Fan (user replaceable) | | | | | | | |
| Noise | < 50 | | | | < 55 | | dBA | |
| Protection Rating | IP65 - Outdoor and Indoor | | | | | | | |
| Bracket Mounted (Bracket Provided) | | | | | | | | |

⁽¹⁾ 24.99kVA in the UK

⁽²⁾ Where permitted by local regulations

⁽³⁾ Refer to Datasheets -> Communications category in Downloads page for specifications of optional communication options: <http://www.solaredge.com/groups/support/downloads>

⁽⁴⁾ For all standards refer to Certifications category in Downloads page: <http://www.solaredge.com/groups/support/downloads>

⁽⁵⁾ Models SE25K and SE27.6K only

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

