

Three Phase Inverter For Short PV Strings

SE3K-RWB / SE4K-RWB / SE5K-RWB



INVERTERS

The ideal solution for small-scale residential PV systems

- Greater design flexibility by enabling significantly shorter strings for low power three phase PV systems
- Optimized for installations with complex roofs (multi-facets and different orientations)
- Supports optional smart energy devices and expansion of system capabilities
- Single vendor solution for seamless operation of all system components, and one address for warranty and service issues
- Built-in module-level monitoring for greater visibility into system performance
- Excellent reliability with standard 12-year warranty (extendable to 20 or 25 years)
- Advanced safety features, including touch-safe DC voltage when the inverter is off or disconnected
- Quick inverter commissioning directly from the SetApp smartphone app
- Suitable for outdoor or indoor installations

/ Three Phase Inverter

SE3K-RWB / SE4K-RWB / SE5K-RWB

APPLICABLE TO INVERTERS WITH PART NUMBER	SE3K-RWBTEBEN4	SE4K-RWBTEBEN4	SE5K-RWBTEBEN4	UNITS
OUTPUT				
Rated AC Power Output	3000	4000	5000	VA
Maximum AC Power Output	3000	4000	5000	VA
AC Output Line Connections	3-phase, 4-wire / PE (L1-L2-L3-N), TN, TT			
AC Output Voltage - Line to Line / Line to Neutral (Nominal)	380/220; 400/230			Vac
AC Output Voltage - Line to Neutral Range	264.5			Vac
AC Frequency	50/60 ± 5 %			Hz
Maximum Continuous Output Current (per phase)	5	6.5	8	A
Grid Supported - Three Phase	3 / N / PE (WYE with Neutral)			
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes			
INPUT				
Maximum DC Power (Module STC)	4050	5400	6750	W
Transformer-less, Ungrounded	Yes			
Maximum Input Voltage	450			Vdc
Nominal DC Input Voltage	375			Vdc
Maximum Voltage to Earth	450			Vdc
Maximum Input Current	8.5	11.5	14	Adc
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	350 kΩ sensitivity			
Maximum Inverter Efficiency	97.8			%
European Weighted Efficiency	94.6	95.7	96.3	%
Night-time Power Consumption	<4			W
ADDITIONAL FEATURES				
Supported Communication Interfaces ⁽¹⁾	2 x RS485, Ethernet, Wi-Fi ⁽²⁾ , ZigBee for Smart Energy (optional), Cellular (optional)			
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi station for local connection			
Smart Energy Management	Export Limitation, Home Energy Management (Device Control)			
STANDARD COMPLIANCE				
Safety	IEC-62109-1/2			
Grid Connection Standards	EN 50549-1			
Electromagnetic Compatibility (EMC)	EN/IEC 61000-6-1, EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN/IEC 61000-6-4, EN 55011, FCC Part 15, EN/IEC 61000-3-2, EN/IEC 61000-3-3, EN/IEC 61000-3-11, EN/IEC 61000-3-12			
RoHS	Yes			
INSTALLATION SPECIFICATIONS				
AC Output	Cable gland diameter 15-21			mm
DC Input	2 x MC4 pair			
Dimensions (H x W x D)	540 x 315 x 260			mm
Weight	24.5			kg
Operating Temperature Range	-40 to +60 ⁽³⁾			°C
Cooling	Fan (user replaceable)			
Noise	< 50			dBA
Protection Rating	IP65 - outdoor and indoor			
Mounting	Brackets provided			
Number of Power Optimizers per String	8 ⁽⁴⁾ /9 to 20			
Maximum Power per String	5625			W

(1) Refer to Datasheets -> Communications category in Resources Library for specifications of optional communication options: <https://www.solaredge.com/downloads/>

(2) Wi-Fi connectivity requires an external antenna. For more information refer to: <https://www.solaredge.com/sites/default/files/se-wifi-zigbee-antenna-datasheet.pdf>

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

(4) When using P404/P485/P505 power optimizers only, minimum required per string is eight