

Three Phase Inverters for Residential Installations for Australia

SE5K-AU / SE7K-AU /
SE8K-AU



INVERTERS

Specifically designed to work with power optimisers

- // Noise level suitable for residential environment – No external fan
- // Superior efficiency (98%)
- // Small, lightest in its class, and easy to install
- // Built-in module-level monitoring
- // Integrated DC Safety Unit - Eliminates the need for external DC isolators
- // Internet connection through Ethernet or Wireless (via Wi-Fi, ZigBee, or Cellular plug-ins)
- // IP65 – Outdoor and indoor installation
- // Fixed voltage inverter for longer strings
- // Smart Energy Management control

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	SE5K-AU	SE7K-AU	SE8K-AU	
OUTPUT				
Rated AC Power Output	5000	7000	8000	VA
Maximum AC Power Output	5000	7000	8000	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)	8	11.5	13	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)	6750	9450	10800	W
Transformer-less, Ungrounded	Yes			
Maximum Input Voltage per Array	600			Vdc
Nominal DC Input Voltage per Array	400			Vdc
Maximum Input Current	8.5	12	13.5	Adc
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	700kΩ Sensitivity			
Maximum Inverter Efficiency	98			%
European Weighted Efficiency	97.3	97.4	97.6	%
Nighttime Power Consumption	< 2.5			W
ADDITIONAL FEATURES				
Supported Communication Interfaces ⁽²⁾	RS485, Ethernet, ZigBee (optional), Wi-Fi (optional), Cellular (optional)			
Smart Energy Management	Export Limitation, Smart Energy Management			
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, FCC part15 class B			
RoHS	Yes			
INSTALLATION SPECIFICATIONS				
AC output conduit size / Wire cross section	20mm minimum / 3-13mm ²			
DC input conduit size / Wire cross section	20mm minimum / 3-13mm ²			
DC Input	Terminal blocks for 2 arrays enclosed through 2 separate conduits ⁽³⁾			
Dimensions with Safety Switch (H x W x D)	775 x 315 x 191			mm
Weight	24.7			kg
Operating Temperature Range	-20 - +60 ⁽⁴⁾			°C
Cooling	Internal fan			
Noise	< 40			dBA
Protection Rating	IP65 - Outdoor and Indoor			
Mounting	Bracket Provided			

(1) These specifications apply to inverters with part number SExK-AU00Exxxx

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

(3) Two arrays must be connected to the inverter; refer to image below. For complete design guidelines refer to:

https://www.solaredge.com/sites/default/files/se_inverter_installation_guide_three_phasedesign_installation_addendum_aus.pdf

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

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