

Three Phase Inverter

SE25K / SE33.3K / SE40K

INVERTERS



Specifically designed to work with power optimizers

- Fixed voltage inverter for superior efficiency (98.3%) and longer strings
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Small, lightest in its class, and easy to install
- Optional RS485 and type 2 DC and AC Surge Protection, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet, wireless or cellular communication (optional) for full system visibility
- IP65 Outdoor and indoor installation
- Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- Future-ready for SolarEdge energy storage solution

/ Three Phase Inverter

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Applicable to inverters with part number	SEXK-RWXXIXXXX			
	SE25K	SE33.3K	SE40K	
OUTPUT				
Rated AC Active Power Output	25000	33300	40000	W
Maximum AC Apparent Output Power	25000	33300	40000	VA
AC Output Voltage - Line to Line / Line to Neutral (Nominal)	380 / 220 ; 400 / 230		480 / 277	Vac
AC Output Voltage - Line to Line / Line to Neutral	304 - 437 / 176 - 253 ; 320 - 478 / 184 - 264.5		422.5 - 529 / 244 - 305	Vac
AC Frequency	50/60 ± 5%			Hz
Maximum Continuous Output Current (per Phase)	36.25	48.25		Aac
AC Output Line Connections	3W + PE, 4W + PE			
Supported Grids	WYE: TN-C, TN-S, TN-C-S, TT, IT; Delta: IT			
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes			
Total Harmonic Distortion	≤ 3			%
Power Factor Range	+/-0.2 to 1			
Maximum Residual Current Injection ⁽¹⁾	100			mA
INPUT				
Maximum DC Power (Module STC)	43750	58275	70000	W
Transformer-less, Ungrounded	Yes			
Maximum Input Voltage DC+ to DC-	1000			Vdc
Operating Voltage Range	680 - 1000			Vdc
Maximum Input Current	36.25	48.25		Aac
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	167kΩ Sensitivity ⁽²⁾			
Maximum Inverter Efficiency	98.3		98.1	%
European Weighted Efficiency	98			%
Nighttime Power Consumption	< 4			W
ADDITIONAL FEATURES				
Supported Communication Interfaces ⁽³⁾	2 x RS485, Wi-Fi (optional), Cellular (optional)			
Smart Energy Management	Export Limitation			
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection			
Arc Fault Protection	Built-in, User Configurable (According to UL1699B)			
Rapid Shutdown	Optional ⁽⁴⁾ (Automatic upon AC Grid Disconnect)			
RS485 Surge Protection	Optional			
DC Surge Protection	Type II, field replaceable, optional			
AC Surge Protection	Type II, field replaceable, optional			
DC SAFETY UNIT (OPTIONAL)				
DC Disconnect	Integrated in the DC safety unit			
DC Fuses (Single Pole)	Optional, 25A			
STANDARD COMPLIANCE				
Safety	IEC-62109-1, IEC-62109-2			
Grid Connection Standards ⁽⁵⁾	VDE-AR-N-4105, VDE-AR-N-4110, AS-4777, EN 50549-1, EN 50549-2, CEI-021, VDE 0126-1-1, CEI-016			
Emissions	IEC61000-6-2, IEC61000-6-3 Class A, IEC61000-3-11, IEC61000-3-12			
RoHS	Yes			
INSTALLATION SPECIFICATIONS				
AC Output Gland Diameter / Line cross section / PE cross section	Cable diameter 19 - 28 mm / 4 - 16 mm ² / 4 - 16 mm ²			
DC Input ⁽⁶⁾	4 MC4 pairs			
DC Input with Safety Unit	4 Strings: Gland: Cable outer diameter 5 - 10 mm / Wire cross section 2.5 - 16mm ²			
Dimensions (H x W x D)	558 x 328 x 273			mm
Dimensions with Safety Unit (H x W x D)	839 x 328 x 300			mm
Weight	32			kg
Weight with Safety Unit	36.5			kg
Operating Temperature Range	-40 to +60 ⁽⁷⁾			°C
Cooling	Fan (user replaceable)			
Noise	< 62			dBA
Protection Rating	IP65 - outdoor and indoor			
Mounting	Brackets provided			

(1) If an external RCD is required, its trip value must be ≥ 100mA

(2) Where permitted by local regulations

(3) Refer to Datasheets -> Communications category on Downloads page for specifications of optional communication options: <https://www.solaredge.com/products/communication>

(4) Inverters with rapid shutdown part number: SExxK-xxRxxxxx

(5) For all standards refer to Certifications category in Downloads page: <https://www.solaredge.com/downloads/#/>

(6) Only MC4 connectors manufactured by Stäubli are approved for use

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