Three Phase Inverter

For Europe

SE12.5K - SE20K

INVERTERS



Specifically designed to work with power optimizers

- Superior efficiency (98%)
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- 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
- Advanced safety features - integrated arc fault protection
- Optional RS485 surge protection

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Three Phase Inverter

For Europe

SE12.5K – SE20K

Applicable to inverters with part number	SEXXK-XXXXXBXX4			SEXXK-XXXXIBXX4	
	SE12.5K	SE16K	SE17K	SE20K	
OUTPUT					
Rated AC Active Output Power	12500	16000	17000	20001*	W
Maximum AC Apparent Output Power	12500	16000	17000	20001*	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
AC Output Line Connections	20	23.2	24.6	29	Aac
Grids Supported - Three Phase	3 / N / PE (WYE with Neutral)			3 / N / PE (WYE with Neutral), 3 / PE	
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes				
THD	< 3				%
INPUT					
Maximum DC Power (Module STC)	16850	21600	22950	30000	W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC+ to DC-	1000				Vdc
Nominal Input Voltage DC+ to DC-	750				Vdc
Maximum Input Current	21	23.2	24.6	29	Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	700kΩ Sensitivity(1)			167kΩ Sensitivity(1)	
Maximum Inverter Efficiency	98				%
European Weighted Efficiency	97.7				%
Nighttime Power Consumption	< 2.5			< 4	W
ADDITIONAL FEATURES					
Supported Communication Interfaces(2)	RS485, Ethernet, Wi-Fi (optional)(3) Cellular (optional)				
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection				
Smart Energy Management	Export Limitation				
Arc Fault Protection	Integrated, User Configurable (According to UL1699B)				
RS485 Surge Protection	Optional(4)				
DC Surge Protection	-			Type II, field replaceable, integrated	
AC Surge Protection	-			Type II, field replaceable, optional	
STANDARD COMPLIANCE					
Safety	IEC-62103 (EN50178), IEC-62109, AS3100				
Grid Connection Standards(5)	VDE-AR-N-4105, G99, AS-4777, EN50438, EN50549-1, CEI-021, VDE 0126-1-1, CEI-016, EN50549-1				
Emissions	IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, Class B			IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12, Class A	
RoHS	Yes				
INSTALLATION SPECIFICATIONS					
AC Output Gland Diameter / Wire Cross Section	15-21mm / Solid wire 2.5-16 mm^2			Cable diameter 19-28 mm / 4 - 16 mm^2	
DC Input	2 MC4 pairs			4 MC4 pairs	
Dimensions (H x W x D)	549 x 317 x 264			550 x 317 x 273	mm
Weight	30.7			32	kg
Operating Temperature Range	-40 to +60(6)				°C
Cooling	Fan (user replaceable)				
Noise	< 50			<62	dBA
Protection Rating	IP65 - outdoor and indoor				
Mounting	Brackets provided				

* 19900W for Italy

(1) Where permitted by local regulation

(2) Refer to Datasheets -> Communications category in Downloads page for specifications of optional communication options: https://www.solaredge.com/resource-library

(3) Wi-Fi connectivity requires connection of an additional Wi-Fi component, ordered separately. For more details ask your SolarEdge sales person or refer to: https://www.solaredge.com/products/communication

(4) An RS485 SPD plug-in can be purchased. Refer to: https://www.solaredge.com/sites/default/files/se_spd_plug_in_for_rs485_for_3ph_with_setapp_ds.pdf

(5) For all standards refer to Certifications category in Downloads page: https://www.solaredge.com/resource-library

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

(7) For SE15k and above, the minimum DC power should be 11KW

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CE RoHS

Three Phase Inverter
For Europe

SE25K / SE30K / SE33.3K

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
- Integrated type 2 DC surge protection, to better withstand surges caused by lightning or other events
- Optional RS485 and type 2 AC surge protection
- Built-in module-level monitoring with Ethernet, wireless or cellular communication for full system visibility
- Advanced safety features - integrated arc fault protection and optional rapid shutdown
- IP65 for outdoor and indoor installations
- Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- Future-proofed for SolarEdge energy storage solutions

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/ Three Phase Inverter
For Europe
SE25K / SE30K / SE33.3K

Applicable to inverters with part number	SEXXK-RWX0IXXXX			
	SE25K	SE30K	SE33.3K	
OUTPUT				
Rated AC Active Power Output	25000	29990	33300	W
Maximum AC Apparent Output Power	25000	29990	33300	VA
AC Output Voltage - Line to Line / Line to Neutral (Nominal)	380 / 220 ; 400 / 230			Vac
AC Output Voltage - Line to Line / Line to Neutral	304 - 437 / 176 - 253 ; 320 - 460 / 184 - 264.5			Vac
AC Frequency	50/60 ± 5%			Hz
Maximum Continuous Output Current (per Phase)	36,25	43,5	48,25	Aac
AC Output Line Connections	3W + PE, 4W + PE			
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)	37500	45000	49950	W
Transformer-less, Ungrounded	Yes			
Maximum Input Voltage DC+ to DC-	1000			Vdc
Operating Voltage Range	680-1000			Vdc
Maximum Input Current	36,25	43,5	48,25	Adc
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	167kΩ Sensitivity(2)			
Maximum Inverter Efficiency	98,3			%
European Weighted Efficiency	98			%
Nighttime Power Consumption	< 4			W
ADDITIONAL FEATURES				
Supported Communication Interfaces	2 x RS485, Ethernet, Wi-Fi (optional)(3), 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	Integrated, 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, integrated			
AC Surge Protection	Type II, field replaceable, optional			
DC SAFETY UNIT (OPTIONAL)				
2-pole Disconnection	1000V / 48,25A			
DC Fuses (Single Pole)	Optional, 25A			
Compliance	UTE-C15-712-1			
STANDARD COMPLIANCE				
Safety	IEC-62109, AS3100			
Grid Connection Standards(5)	VDE-AR-N-4105, AS-4777, EN50438, CEI-021, VDE 0126-1-1, CEI-016, EN50549-1, EN50549-2, VDE-AR-N-4110, TOR Erzeuger Typ A, G99, G99 (NI), VFR 2019			
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 (6)(7)	4 MC4 pairs			
	4 Strings: Gland: Cable outer diameter 5 - 10 mm / Wire cross section 2,5 - 16 mm^2			
Dimensions (H x W x D)	550 x 317 x 273			mm
Dimensions with Safety Unit (H x W x D)	836 x 317 x 300 (DC MC4); 819 x 317 x 300 (DC Gland)			mm
Weight	32			kg
Weight with Safety Unit	36,5			kg
Operating Temperature Range	-40 to +60(8)			°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) Wi-Fi connectivity requires connection of an additional Wi-Fi component, ordered separately. For more details ask your SolarEdge sales person or refer to: https://www.solaredge.com/products/communication
(4) Inverters with rapid shutdown part number: SExxK-xxRxxxxxx
(5) For all standards refer to Certifications category in Downloads page: http://www.solaredge.com/groups/support/downloads
(6) DC input is available with MC4 or Gland connectors under the inverter part number. For more information, contact SolarEdge
(7) Only MC4 connectors manufactured by Stäubli are approved for use
(8) For power de-rating information refer to: https://www.solaredge.com/sites/default/files/se-temperature-derating-note.pdf

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CE RoHS