

# Three Phase Inverter

SE12.5K - SE27.6K



# INVERTERS

## Specifically designed to work with power optimizers

- // Superior efficiency (98.3%)
- // 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
- // Optional integrated DC Safety Unit - eliminates the need for external DC isolators
- // Advanced safety features - integrated arc fault protection and optional rapid shutdown
- // Optional DC surge protection and DC fuses

# / Three Phase Inverter

## SE12.5K - SE27.6K

	SE12.5K	SE15K	SE16K	SE17K	SE25K	SE27.6K	
<b>Applicable to inverters with part number</b>	<b>SEXK-XXXXXBXX4</b>						
<b>OUTPUT</b>							
Rated AC Power Output	12500	15000	16000	17000	25000	27600	VA
Maximum AC Power Output	12500	15000	16000	17000	25000	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)						
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes						
THD	≤ 3						
<b>INPUT</b>							
Maximum DC Power (Module STC)	16850	20250	21600	22950	33750	37250	W
Transformer-less, Ungrounded	Yes						
Maximum Input Voltage	1000						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 <sup>(1)</sup>		
Maximum Inverter Efficiency	98				98.3		%
European Weighted Efficiency	97.7	97.6	97.7	97.7	98		%
Nighttime Power Consumption	< 2.5				< 4		W
<b>ADDITIONAL FEATURES</b>							
Supported Communication Interfaces <sup>(2)</sup>	RS485, Ethernet, Wi-Fi (requires antenna) <sup>(3)</sup> , ZigBee (optional), Cellular (optional)						
Inverter Comissioning	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)						
Rapid Shutdown	Optional <sup>(4)</sup> (Automatic upon AC Grid Disconnect)						
<b>DC SAFETY UNIT (OPTIONAL)</b>							
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		
<b>STANDARD COMPLIANCE</b>							
Safety	IEC-62103 (EN50178), IEC-62109, AS3100						
Grid Connection Standards <sup>(5)</sup>	VDE-AR-N-4105, G59/3, AS-4777, EN 50438 , CEI-021, VDE 0126-1-1, CEI-016, BDEW						
Emissions	IEC61000-6-2, IEC61000-6-3 , IEC61000-3-11, IEC61000-3-12						
RoHS	Yes						
<b>INSTALLATION SPECIFICATIONS</b>							
AC Output Gland Diameter / Wire Cross Section	15-21mm / Solid wire 2.5-16 mm <sup>2</sup>				18-25mm / Solid wire 2.5-16 mm <sup>2</sup> , Stranded wire 2.5-10 mm <sup>2</sup>		
DC Input	2 MC4 pairs				3 MC4 pairs		
DC Input with Safety Unit	N/A				Gland diameter 5 - 10		mm
	N/A				Wire cross section 0.5 - 13.5		mm <sup>2</sup>
Dimensions (HxWxD)	540 x 315 x 260						mm
Dimensions with Safety Unit (HxWxD)	N/A				775 x 315 x 260		mm
Weight	33.2						kg
Weight with Safety Unit	N/A						48
Operating Temperature Range	-40 - +60 <sup>(6)</sup>						°C
Cooling	Fan (user replaceable)						
Noise	< 50				< 55		dBA
Protection Rating	IP65 - Outdoor and Indoor						
Mounting	Bracket Provided						

<sup>(1)</sup> Where permitted by local regulations

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

<sup>(3)</sup> 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>

<sup>(4)</sup> Inverter with rapid shutdown part number: SExxK-RWRxxxxx; available for SE25K and SE27.6K

<sup>(5)</sup> For all standards refer to Certifications category in Downloads page: <http://www.solaredge.com/groups/support/downloads>

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

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# Three Phase Inverter

SE3K - SE10K

INVERTERS



## Specifically designed to work with power optimizers

- // Noise level suitable for residential environments – No external fan
- // 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
- // Superior efficiency (98%)
- // Internet connection through Ethernet or Wireless (Wi-Fi, ZigBee Gateway, Cellular)
- // IP65 – Outdoor and indoor installation
- // Fixed voltage inverter for longer strings
- // Smart Energy Management control

# / Three Phase Inverter

SE3K-SE10K<sup>(1)</sup>

	SE3K <sup>(2)</sup>	SE4K <sup>(2)</sup>	SE5K	SE6K <sup>(2)</sup>	SE7K	SE8K	SE9K	SE10K	UNITS
<b>APPLICABLE TO INVERTERS WITH PART NUMBER</b>									
<b>SEXK-XXXTXBXX4</b>									
<b>OUTPUT</b>									
Rated AC Power Output	3000	4000	5000	6000	7000	8000	9000	1000	VA
Maximum AC Power Output	3000	4000	5000	6000	7000	8000	9000	1000	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)	5	6.5	8	10	11.5	13	14.5	16	A
Grids Supported - Three Phase	3 / N / PE (WYE with Neutral)								V
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes								
<b>INPUT</b>									
Maximum DC Power (Module STC)	4050	5400	6750	8100	9450	10800	12150	13500	W
Transformer-less, Ungrounded	Yes								
Maximum Input Voltage	900								Vdc
Nominal DC Input Voltage	750								Vdc
Maximum Input Current	5	7	8.5	10	12	13.5	15	16.5	Adc
Reverse-Polarity Protection	Yes								
Ground-Fault Isolation Detection	700kΩ Sensitivity								
Maximum Inverter Efficiency	98								%
European Weighted Efficiency	96.7	97.3	97.3	97.3	97.4	97.6	97.5	97.6	%
Nighttime Power Consumption	< 2.5								W
<b>ADDITIONAL FEATURES</b>									
Supported Communication Interfaces <sup>(3)</sup>	RS485, Ethernet, Wi-Fi (requires antenna <sup>(4)</sup> ), ZigBee (optional), Cellular (optional)								
Smart Energy Management	Export Limitation, Home Energy Management (Device Control)								
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection								
<b>STANDARD COMPLIANCE</b>									
Safety	IEC-62103 (EN50178), IEC-62109								
Grid Connection Standards <sup>(5)</sup>	VDE 0126-1-1, VDE-AR-N-4105, AS-4777, G83 / G59								
Emissions	IEC61000-6-2, IEC61000-6-3 , IEC61000-3-11, IEC61000-3-12, FCC part15 class B								
RoHS	Yes								
<b>INSTALLATION SPECIFICATIONS</b>									
AC Output	Cable Gland - diameter 15-21								mm
DC Input	2 MC4 pairs								
Dimensions (HxWxD)	540 x 315 x 191								mm
Weight	16.4								kg
Operating Temperature Range	-40 to +60 <sup>(6)</sup>								°C
Cooling	Internal Fan								
Noise	< 40								dBA
Protection Rating	IP65 - Outdoor and Indoor								
Mounting	Bracket Provided								

(1) For higher power models refer to: <https://www.solaredge.com/sites/default/files/se-three-phase-inverter-extended-power-datasheet.pdf>

(2) Available in some countries; refer to Certifications category in Downloads page: <http://www.solaredge.com/groups/support/downloads>

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

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

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

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