# Three Phase Inverter

SE3K - SE10K



# NVERTERS

### Specifically designed to work with power optimizers

- Noise level suitable for residential environments No external fan
- Superior efficiency (98%)
- Small, lightest in its class, and easy to install
- Built-in module-level monitoring
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Internet connection through Ethernet or Wireless (Wi-Fi, ZigBee Gateway, Cellular)
- Fixed voltage inverter for longer strings
- Smart Energy Management control



## / Three Phase Inverter

### SE3K-SE10K(1)

National Property   State of A Power Output   State of A Power Outpu		SE3K <sup>(2)</sup>	SE4K <sup>(2)</sup>	SE5K	SE6K <sup>(2)</sup>	SE7K	SE8K	SE9K	SE10K	UNITS
Rated AC Power Output	Applicable to inverters with part number									
Rated AC Power Output										
Maximum AC Power Output  AC Output Voltage - Line to Line / Line Output  Ac Output Voltage - Line to Line / Line Output  As Experiment DC Imput Voltage  As Face output Voltage - Line to Line / Line Output  As Experiment DC Imput Voltage  As Face output Voltage - Line to Neutral Range  AC Frequency  AS Face output Voltage - Line to Neutral Range  AC Frequency  AC Frequency  AC Subported - Three Phase  Utility Monitoring, Standing Protection  Continguisher Protes Facet  Country Configurable Three Shods  AS Face output Voltage  Assimum Input Current  AS Face output Voltage  AS Face output Voltage output Voltage  AS Face output Voltage  AS Face output Voltage output Voltage  AS Face output Voltag	Rated AC Power Output	3000	4000	5000	6000	7000	8000	9000	10000	VA
MacCouptint Voltage - Line to Dite / Line to Neutral Range		3000	4000	5000	6000	7000	8000	9000	10000	VA
AC Output Voltage - Line to Neutral Range	AC Output Voltage - Line to Line /									
Maximum frontinuous Output         5         6.5         8         10         11.5         13         14.5         16         A           Grids Supported - Three Phase         3 / N / PE (WYE with Neutral)           Utility Monitoring, Islanding Protection, Configurable Thresholds           IVEN           INPUT           Maximum DC Power (Module STC)         4050         \$400         6750         8100         9450         10800         12150         13500         W           Transformer-less, Ungrounded         Yes           Maximum Input Voltage         900         Volt         Vdc         Maximum Input Voltage         750         Vdc         Vdc         Vdc         Maximum Input Voltage         750         Vdc         Vdc         Add         Maximum Input Voltage         750         Vdc         Vdc         Maximum Input Voltage         750         Vdc         Vdc         Adc         Maximum Input Voltage         750         Vdc         Vdc         Maximum Input Voltage         750         Vdc         Maximum Input Voltage	AC Output Voltage - Line to Neutral Range	184 - 264.5								Vac
Current (par Phase)   5   6.3   8   10   11.5   13   14.5   16   A	AC Frequency									Hz
Utility Monitoring, Islanding Potection, Configurable Power Factors Countly Confligurable Thresholds  INPUT    Maximum DC Power (Module STC)	Maximum Continuous Output Current (per Phase)	5	6.5	8	10	11.5	13	14.5	16	А
Configurable Power Factor, Country Configurable Thresholds	Grids Supported - Three Phase	3 / N / PE (WYE with Neutral)								
Maximum DC Power (Module STC)	Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes								
Transformer-less, Ungrounded   Yes   Yes   Vida   Maximum Input Voltage   900   Vida   Vi	INPUT									
Maximum Input Voltage	Maximum DC Power (Module STC)	4050	5400	6750	8100	9450	10800	12150	13500	W
Nominal DC Input Voltage   750   78.5   10   12   13.5   15   16.5   Adc	Transformer-less, Ungrounded	Yes								
Maximum Input Current         5         7         8.5         10         12         13.5         15         16.5         Add           Reverse-Polarity Protection               96.7         97.3         97.3         97.3         97.4         97.6         97.5         97.6         %            96.7         97.3         97.3         97.3         97.4         97.6         97.5         97.6         %            96.7         97.3         97.3         97.3         97.4         97.6         97.5         97.6         %            96.7         97.3         97.3         97.3         97.4         97.6         97.5         97.6         %            96.7         97.3         97.3         97.3         97.4         97.6         97.5         97.6         %            96.7         82.5         Emissions         Electroconstanting to With the SetApp mobile application using built-in Wi-Fi access point for loca	Maximum Input Voltage	900								Vdc
Reverse-Polarity Protection   Yes   Found-Fault Isolation Detection   T00kΩ Sensitivity   T00kΩ Sensitivity   Seuropean Weighted Efficiency   96.7   97.3   97.3   97.3   97.4   97.6   97.5   97.6   %   Nighttine Power Consumption   < 2.5   W   W   ADDITIONAL FEATURES   Supported Communication Interfaces   RS485, Ethernet, ZigBee (optional), Wi-Fi (requires antenna) <sup>1/4</sup> , Cellular (optional)   Smart Energy Management   Device Control)   Smart Energy Management   Device Control)   STANDARD COMPLIANCE   Safety   IEC-62103 (EN50178), IEC-62109   Sensitions   IEC-62103 (EN50178), IEC-62109   Sensitions   IEC-62103 (EN50178), IEC-62109   Sensitions   IEC-6100-6-2, IEC61000-6-3, IEC61000-3-12, FCC part15 class B   ROHS   Yes   SENSTALLATION SPECIFICATIONS   Sensitions   Sensiti	Nominal DC Input Voltage	750								Vdc
Ground-Fault Isolation Detection  TO λ Sensitivity  Maximum Inverter Efficiency  Beuropean Weighted Efficiency  96.7 97.3 97.3 97.3 97.3 97.4 97.6 97.5 97.6 %  Nighttime Power Consumption  ADDITIONAL FEATURES  Supported Communication Interfaces <sup>(5)</sup> RS485, Ethernet, ZigBee (optional), Wi-Fi (requires antenna) <sup>(6)</sup> , 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  STANDARD COMPLIANCE  Safety  IEC-62103 (EN50178), IEC-62109  Grid Connection Standards <sup>(6)</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  INSTALLATION SPECIFICATIONS  AC Output  Cable Gland - diameter 15-21 mm  DC Input  2 MC4 pairs  Dimensions (HxWxD)  S40 x 315 x 191  mm  Weight  Operating Temperature Range  -40 to +60 <sup>(6)</sup> Cooling  Internal Fan  Noise  40  dBA  Protection Rating	Maximum Input Current	5	7	8.5	10	12	13.5	15	16.5	Adc
Maximum Inverter Efficiency	Reverse-Polarity Protection	Yes								
European Weighted Efficiency 96.7 97.3 97.3 97.3 97.3 97.4 97.6 97.5 97.6 % Nighttime Power Consumption <	Ground-Fault Isolation Detection	700kΩ Sensitivity								
Nighttime Power Consumption < 2.5 W  ADDITIONAL FEATURES  Supported Communication Interfaces® RS485, Ethernet, ZigBee (optional), Wi-Fi (requires antenna)®, 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  STANDARD COMPLIANCE  Safety IEC-62103 (EN50178), IEC-62109  Grid Connection Standards® 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  INSTALLATION SPECIFICATIONS  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® °C  Cooling Internal Fan  Noise -40 dBA  Protection Rating IP65 - Outdoor and Indoor	Maximum Inverter Efficiency	98								%
ADDITIONAL FEATURES  Supported Communication Interfaces® RS485, Ethernet, ZigBee (optional), Wi-Fi (requires antenna)®, 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  STANDARD COMPLIANCE  Safety IEC-62103 (EN50178), IEC-62109  Grid Connection Standards® 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  INSTALLATION SPECIFICATIONS  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® °C  Cooling Internal Fan  Noise <40 dBA  Protection Rating IP65 - Outdoor and Indoor	European Weighted Efficiency	96.7	97.3	97.3	97.3	97.4	97.6	97.5	97.6	%
Supported Communication Interfaces <sup>(5)</sup> RS485, Ethernet, ZigBee (optional), Wi-Fi (requires antenna) <sup>(6)</sup> , 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  STANDARD COMPLIANCE  Safety IEC-62103 (EN50178), IEC-62109  Grid Connection Standards <sup>(6)</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  INSTALLATION SPECIFICATIONS  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 440 dBA  Protection Rating IP65 - Outdoor and Indoor	Nighttime Power Consumption	< 2.5								W
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  STANDARD COMPLIANCE  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  INSTALLATION SPECIFICATIONS  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 (5) 1 terral Fan  Noise 4 40 dBA Protection Rating IP65 - Outdoor and Indoor	ADDITIONAL FEATURES									
Inverter Commissioning With the SetApp mobile application using built-in Wi-Fi access point for local connection  STANDARD COMPLIANCE  Safety IEC-62103 (EN50178), IEC-62109  Grid Connection Standards® 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  INSTALLATION SPECIFICATIONS  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® c C  Cooling Internal Fan  Noise -40 dBA  Protection Rating IP65 - Outdoor and Indoor	Supported Communication Interfaces <sup>(3)</sup>	RS485, Ethernet, ZigBee (optional), Wi-Fi (requires antenna) <sup>(4)</sup> , Cellular (optional)								
STANDARD COMPLIANCE           Safety         IEC-62103 (EN50178), IEC-62109           Grid Connection Standards <sup>(S)</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           INSTALLATION SPECIFICATIONS           AC Output         Cable Gland - diameter 15-21         mm           DC Input         2 MC4 pairs         mm           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         dBA           Protection Rating         IP65 - Outdoor and Indoor	Smart Energy Management	Export Limitation, Home Energy Management (Device Control)								
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, IEC61000-3-11, IEC61000-3-12, FCC part15 class B           ROHS         Yes           INSTALLATION SPECIFICATIONS           AC Output         Cable Gland - diameter 15-21         mm           DC Input         2 MC4 pairs         mm           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	Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection								
Grid Connection Standards <sup>(5)</sup> VDE 0126-1-1, VDE-AR-N-4105, AS-4777, G83 / G59           Emissions         IEC61000-6-2, IEC61000-3-11, IEC61000-3-12, FCC part15 class B           ROHS         Yes           INSTALLATION SPECIFICATIONS           AC Output         Cable Gland - diameter 15-21         mm           DC Input         2 MC4 pairs         mm           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	STANDARD COMPLIANCE									
Emissions IEC61000-6-2, IEC61000-6-3 , IEC61000-3-11, IEC61000-3-12, FCC part15 class B  ROHS Yes  INSTALLATION SPECIFICATIONS  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 1 PROSE TO A STATE OF THE CAST OF THE	Safety	IEC-62103 (EN50178), IEC-62109								
ROHS  INSTALLATION SPECIFICATIONS  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	Grid Connection Standards <sup>(5)</sup>	VDE 0126-1-1, VDE-AR-N-4105, AS-4777, G83 / G59								
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	Emissions	IEC61000-6-2, IEC61000-6-3 , IEC61000-3-11, IEC61000-3-12, FCC part15 class 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	RoHS	Yes								
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	INSTALLATION SPECIFICATIONS	5								
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	AC Output	Cable Gland - diameter 15-21								mm
Weight 16.4 kg Operating Temperature Range -40 to +60 <sup>(6)</sup> °C Cooling Internal Fan Noise < 40 dBA Protection Rating	DC Input	2 MC4 pairs								
Operating Temperature Range -40 to +60 <sup>(6)</sup> °C  Cooling Internal Fan  Noise < 40 dBA  Protection Rating IP65 - Outdoor and Indoor	Dimensions (HxWxD)	540 x 315 x 191								mm
Cooling Internal Fan  Noise < 40 dBA  Protection Rating IP65 - Outdoor and Indoor	Weight		16.4							
Noise < 40 dBA Protection Rating IP65 - Outdoor and Indoor	Operating Temperature Range				-40 to	+60(6)				°C
Protection Rating IP65 - Outdoor and Indoor	Cooling				Interr	nal Fan				
	Noise				<	40				dBA
Mounting Bracket Provided	Protection Rating				IP65 - Outdo	or and Indoor				
	Mounting	Bracket Provided								

<sup>(1)</sup> 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-wifi-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