



## Three Phase Inverters for the 120/208V Grid for North America

SE9KUS / SE14.4KUS



INVERTERS

### The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using the SolarEdge SetApp
- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- Small, lightweight, and easy to install outdoors or indoors on provided bracket
- Fixed voltage inverter for longer strings
- Integrated Safety Switch
- Supplied with RS485 Surge Protection, to better withstand lightning events



## Three Phase Inverters for the 120/208V Grid<sup>(1)</sup> for North America

### SE9KUS / SE14.4KUS

	SE9KUS	SE14.4KUS	
APPLICABLE TO INVERTERS WITH PART NUMBER	SEXXX-XXXXXBXX4		
OUTPUT			
Rated AC Power Output	9000	14400	VA
Maximum AC Power Output	9000	14400	VA
AC Output Line Connections	3 phase, 3-wire / PE (L1-L2-L3), TN, TT 3 phase, 4-wire / PE (L1-L2-L3-N), TN, TT		
AC Output Voltage Minimum-Nominal-Maximum <sup>(2)</sup> (L-N)	105-120-132.5		Vac
AC Output Voltage Minimum-Nominal-Maximum <sup>(2)</sup> (L-L)	183-208-229		Vac
AC Frequency Min-Nom-Max <sup>(2)</sup>	59.3 - 60 - 60.5		Hz
Max. Continuous Output Current (per Phase)	25	40	A
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Country	Yes		
Configurable Set Points			
THD	≤ 3		%
INPUT			
Maximum DC Power (Module STC)	12150	19400	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC to Gnd	250	300	Vdc
Maximum Input Voltage DC+ to DC-	500	600	Vdc
Nominal Input Voltage DC to Gnd	200		Vdc
Nominal Input Voltage DC+ to DC-	400		Vdc
Maximum Input Current	26.5	38	Adc
Maximum Input Short Circuit Current	45		Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	1MΩ Sensitivity	350kΩ Sensitivity <sup>(3)</sup>	
CEC Weighted Efficiency	96.5	97	%
Night-time Power Consumption	< 3	< 4	W
ADDITIONAL FEATURES			
Supported Communication Interfaces	2 x RS485, Ethernet, Built-in GSM (Optional)		
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi station for local connection		
Rapid Shutdown – NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect		
RS485 Surge Protection	Supplied with the inverter		
Smart Energy Management	Export Limitation		
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07		
Grid Connection Standards	IEEE1547, Rule 21, Rule 14 (HI)		
Emissions	FCC part15 class B		
INSTALLATION SPECIFICATIONS			
AC output conduit size / AWG range	3/4” minimum / 8-4 AWG		
DC input conduit size / AWG range	3/4” minimum / 12-6 AWG		
Number of DC inputs	3 pairs <sup>(4)</sup>		
Dimensions (H x W x D)	21 x 12.5 x 10.5 / 540 x 315 x 260		in / mm
Dimensions with Safety Switch (H x W x D)	30.5 x 12.5 x 10.5 / 775 x 315 x 260		in / mm
Weight	99.5 / 45		lb / kg
Weight with Safety Switch	106 / 48		lb / kg
Cooling	Fans (user replaceable)		
Noise	< 55		dBA
Operating Temperature Range	-40 to +140 / -40 to +60 <sup>(5)</sup>		°F / °C
Protection Rating	NEMA 3R		

<sup>(1)</sup> For 277/480V inverters refer to: <https://www.solaredge.com/sites/default/files/se-three-phase-us-inverter-datasheet.pdf>

<sup>(2)</sup> For other regional settings please contact SolarEdge support

<sup>(3)</sup> Where permitted by local regulations

<sup>(4)</sup> Field replacement kit for 1 pair of inputs P/N: DCD-3PH-1TBK; Field replacement kit for 3 pairs of fuses and holders P/N: DCD-3PH-6FHK-S1

<sup>(5)</sup> For power de-rating information refer to: <https://www.solaredge.com/sites/default/files/se-temperature-derating-note-na.pdf>

