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

SE9KUS



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
- Internet connection through Ethernet or Wireless
- Fixed voltage inverter for longer strings
- UL1741 SA certified, for CPUC Rule 21 grid compliance
- Built-in module-level monitoring
- Integrated arc fault protection and rapid shutdown for NEC 2014, 2017 and 2020, per article 690.11 and 690.12
- Integrated Safety Switch
- Supplied with RS485 Surge Protection, to better withstand lightning events
- Small, lightweight, and easy to install outdoors or indoors on provided bracket

/ Three Phase Inverters for the 120/208V Grid⁽¹⁾ for North America

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APPLICABLE TO INVERTERS WITH PART NUMBER		SEXXK-XXXXXBXX4	
MODEL NUMBER		SE9KUS	
OUTPUT			
Rated AC Power Output	9000		VA
Maximum AC Power Output	9000		VA
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 ⁽²⁾ (L-N)	105-120-132.5		Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-L)	183-208-229		Vac
AC Frequency Min-Nom-Max ⁽²⁾	59.3 - 60 - 60.5		Hz
Maximum Continuous Output Current (per Phase)	25		A
GFDI Threshold	1		A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes		
THD	≤ 3		%
INPUT			
Maximum DC Power (Module STC)	12150		W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC to Gnd	250		Vdc
Maximum Input Voltage DC+ to DC-	500		Vdc
Nominal Input Voltage DC to Gnd	200		Vdc
Nominal Input Voltage DC+ to DC-	400		Vdc
Maximum Input Current	26.5		Adc
Maximum Input Short Circuit Current	45		Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	1MΩ Sensitivity ⁽³⁾		
CEC Weighted Efficiency	96.5		%
Night-time Power Consumption	< 3		W
ADDITIONAL FEATURES			
Supported Communication Interfaces	RS485, Ethernet, Built-in Cellular (optional)		
Inverter Commissioning	With the SetApp mobile application using built-in access point for local connection		
Rapid Shutdown – NEC 2014, 2017 and 2020 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect		
RS485 Surge Protection Plug-in	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 ⁽⁴⁾	2 pairs		
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	93.6 / 42.5		lb / kg
Weight with Safety Switch	100.3 / 45.5		lb / kg
Cooling	Fans (user replaceable)		
Noise	< 55		dBA
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁵⁾		°F / °C
Protection Rating	NEMA 3R		

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

(2) For other regional settings please contact SolarEdge support

(3) Where permitted by local regulations

(4) 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

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