

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		SEXXX-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-datasheet.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>