

Three Phase Inverter for the 277/480V Grid For North America

SE33.3KUS



The best choice for SolarEdge enabled systems

- Specifically designed to work with power optimizers
- Quick and easy inverter commissioning directly from a smartphone using SolarEdge SetApp
- Fixed voltage inverter for superior efficiency (98.5%) and longer strings
- Built-in type 2 DC and AC Surge Protection, to better withstand lightning events
- Small, lightest in its class, and easy to install outdoors or indoors on provided bracket
- Integrated arc fault protection and rapid shutdown for NEC 2014 – 2023, per articles 690.11 and 690.12
- Built-in module level monitoring with Ethernet, wireless, or cellular communication for full system visibility
- Integrated safety switch
- UL1741 SA and SB certified, for CPUC Rule 21 grid compliance

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MODEL NUMBER	SE33.3KUS	UNITS
APPLICABLE TO INVERTERS WITH PART NUMBER	SEX XK-USX8IXXXX	
OUTPUT		
Rated AC Power Output	33300	W
Maximum Apparent AC Output Power	33300	VA
AC Output Line Connections	3W + PE, 4W + PE	
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-N)	244 – 277 – 305	Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-L)	422.5 – 480 – 529	Vac
AC Frequency Min-Nom-Max ⁽²⁾	59.3 – 60 – 60.5	Hz
Maximum Continuous Output Current (per Phase)	40	Aac
GFDI Threshold	1	A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes	
Total Harmonic Distortion	≤ 3	%
Power Factor Range	+/- 0.85 to 1	
INPUT		
Maximum DC Power (Module STC)	58275	W
Transformer-less, Ungrounded	Yes	
Maximum Input Voltage DC+ to DC-	1000	Vdc
Operating Voltage Range	840 – 1000	Vdc
Maximum Input Current	40	Adc
Maximum Input Short Circuit Current	55	Adc
Reverse-Polarity Protection	Yes	
Ground-Fault Isolation Detection	167kΩ Sensitivity ⁽²⁾	
CEC Weighted Efficiency	98.5	%
Night-time Power Consumption	<4	W
ADDITIONAL FEATURES		
Supported Communication Interfaces	2 x RS485, Ethernet, Cellular (optional)	
Inverter Commissioning	With the SetApp mobile application using built-in access point for local connection	
Arc Fault Protection	Integrated, User Configurable (According to UL1699B)	
Rapid Shutdown	NEC 2014 – 2023, built-in	
RS485 Surge Protection Plug-in	Supplied with the inverter, built-in	
DC Surge Protection	Type II, field replaceable, built-in	
AC Surge Protection	Type II, field replaceable, built-in	
DC Fuses (Single Pole)	25A, built-in	
Smart Energy Management	Export Limitation	
VAR at Night ⁽³⁾	Yes	
DC SAFETY SWITCH		
DC Disconnect	Integrated	
STANDARD COMPLIANCE		
Safety	UL 1741, UL 1741 SA, UL 1741 SB, UL 1699B, CSA C22.2, Canadian AFCI according to T.I.L. M-07	
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (HI)	
Emissions	FCC Part 15 Class A	
INSTALLATION SPECIFICATIONS		
AC Output Conduit Size / AWG Range	¾" or 1" / 6 – 10 AWG	
DC Input Conduit Size / AWG Range	¾" or 1" / 6 – 12 AWG	
Number of DC Inputs Pairs	4	
Dimensions with Safety Switch (H x W x D)	31.8 x 12.5 x 11.8 / 808 x 317 x 300	in / mm
Weight with Safety Switch	78.2 / 35.5	lb / kg
Cooling	Fans (user replaceable)	
Noise	< 62	dBA
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁵⁾	°F / °C
Protection Rating	NEMA 3R	
Mounting	Bracket provided	

(1) For other regional settings please contact SolarEdge support.

(2) Where permitted by local regulations.

(3) For details, see [Set Volt-Ampere at Night – Application Note](#).

(4) For power derating information refer to the Temperature Derating technical note for North America.