

Three Phase Inverters

For the 277/480V Grid for North America

SE10KUS / SE20KUS / SE30KUS / SE33.3KUS



The best choice for SolarEdge enabled systems

- / Specifically designed to work with power optimizers
- / Superior efficiency (98.5%)
- / 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 Device, to better withstand lightning events

/ Three Phase Inverters

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	SE10KUS	SE20KUS	SE30KUS	SE33.3KUS	
OUTPUT					
Rated AC Power Output	10000	20000	30000	33300	VA
Maximum AC Power Output	10000	20000	30000	33300	VA
AC Output Line Connections	4-wire WYE (L1-L2-L3-N) plus PE				
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-N)	244-277-305				Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽²⁾ (L-L)	422.5-480-529				Vac
AC Frequency Min-Nom-Max ⁽²⁾	59.3 - 60 - 60.5				Hz
Max. Continuous Output Current (per Phase)	12	24	36.5	40	A
GFDI Threshold	1				A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes				
INPUT					
Maximum DC Power (Module STC)	13500	27000	40500	45000	W
Transformer-less, Ungrounded	Yes				
Maximum Input Voltage DC to Gnd	490				Vdc
Maximum Input Voltage DC+ to DC-	980				Vdc
Nominal Input Voltage DC to Gnd	420				Vdc
Nominal Input Voltage DC+ to DC-	840				Vdc
Maximum Input Current	13.5	26.5	39	40	Adc
Maximum Input Short Circuit Current	45				Adc
Reverse-Polarity Protection	Yes				
Ground-Fault Isolation Detection	1MΩ Sensitivity		350kΩ Sensitivity ⁽³⁾		
CEC Weighted Efficiency	98		98.5		%
Night-time Power Consumption	< 3		< 4		W
ADDITIONAL FEATURES					
Supported Communication Interfaces	RS485, Ethernet, ZigBee (optional)				
Rapid Shutdown – NEC 2014 and 2017 690.12	Automatic Rapid Shutdown upon AC Grid Disconnect				
RS485 Surge Protection	Supplied with the inverter				
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 / 12-6 AWG		3/4" minimum / 8-4 AWG		
DC input conduit size / AWG range	3/4" minimum / 12-6 AWG				
Number of DC inputs	2 pairs		3 pairs ⁽⁴⁾		
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	73.2 / 33.2		99.5 / 45		lb / kg
Weight with Safety Switch	79.7 / 36.2		106 / 48		lb / kg
Cooling	Fans (user replaceable)				
Noise	< 50		< 55		dBA
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁵⁾				°F / °C
Protection Rating	NEMA 3R				

⁽¹⁾ For 208V inverters refer to: <http://www.solaredge.com/files/pdfs/products/inverters/se-three-phase-us-inverter-208V-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>