



## SolarEdge Inverter Installation Guide, Update

This update is a supplement to the *SolarEdge Inverter Installation Guide, Versions 3.3 and 4.0* (P/N MAN-01-00002-3.3 and MAN-01-00002-4.0). This document describes the specifications of the new three phase inverters in North America: SE14.4KUS (for 208V grid) and SE33.3KUS (for 277/480V grid).

	SE14.4KUS	SE33.3KUS	Units
<b>OUTPUT</b>			
Rated AC power output	14400	33300	VA
Maximum AC power output	14400	33300	VA
AC Output Line Connections	4-wire WYE (L1-L2-L3-N) plus PE or 3 wire Delta	4-wire WYE (L1-L2-L3-N) plus PE	
AC output voltage minimum-nominal-maximum <sup>1</sup> (L-N)	105-120-132.5	244-277-305	Vac
AC output voltage minimum-nominal-maximum <sup>1</sup> (L-L)	183-208-229	422.5-480-529	Vac
AC frequency min-nom-max <sup>1</sup>	59.3 - 60 - 60.5		Hz
Max. continuous output current (per Phase)	40		A
Max. output fault current and duration	48/20		A / mS
Max. back-feed current	0		A
Power factor	1 (adjustable from -0.8 to +0.8)		
GFDI threshold	1		A
Total harmonic distortion	<3%		
Utility monitoring, islanding protection, country configurable set points	Yes		

<sup>1</sup>For other regional settings please contact SolarEdge Support.

	SE14.4KUS	SE33.3KUS	Units
<b>INPUT</b>			
Maximum DC power	19400	45000	W
Transformer-less, ungrounded	Yes		
Maximum input voltage DC to Gnd	300	490	Vdc
Maximum input voltage DC+ to DC-	600	980	Vdc
Nominal input voltage DC to Gnd	200	420	Vdc
Nominal input voltage DC+ to DC-	400	840	Vdc
Maximum input current <sup>1</sup>	38	40	Adc
Maximum short circuit current	45		Adc
Reverse-polarity protection	Yes		
Ground-fault isolation detection	1MΩ Sensitivity		
Maximum inverter efficiency	97	98.5	%
CEC weighted efficiency	97	98.5	%
Night-time power consumption	<4		W
<b>ADDITIONAL FEATURES</b>			
Supported communication interfaces	RS485, Ethernet, ZigBee (optional)		
Rapid Shutdown – NEC 2014 690.12	With SolarEdge rapid shutdown kit installed <sup>2</sup>		
<b>STANDARD COMPLIANCE</b>			
Safety	UL1741, UL1699B, UL1998, CSA 22.2, NEC2014 (sec. 690.12)		

<sup>1</sup>A higher current source may be used; the inverter will limit its input current to the values stated.

<sup>2</sup>Rapid shutdown kit P/N: Contact SolarEdge Support.

	SE14.4KUS	SE33.3KUS	Units
Grid connection standards	IEEE1547		
Emissions	FCC part15 class B		
RoHS	Yes		
<b>INSTALLATION SPECIFICATIONS</b>			
AC output conduit size / AWG range	3/4" minimum / 12-6 AWG		
DC input conduit size / # of inputs/ AWG range	3/4" minimum / 3 pairs (with fuses on plus & minus <sup>1</sup> ) / 12-6 AWG		
Dimensions (HxWxD)	21 x 12.5 x 10.5 / 540 x 315 x 260		in/mm
Dimensions with Switch (HxWxD)	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 (typical)	< 55		dBA
Operating temperature range	-40 to +140 / -40 to +60		°F/°C
Protection rating	NEMA3R		

Circuit breaker/fuse size to use at the connection point of the SolarEdge inverter to the grid:

Inverter	Maximum Output Current (A)	Fuse Rating (A)
SE14.4kUS	40	60
SE33.3kUS	40	60

You cannot use a fuse size larger than 60A.

<sup>1</sup>Field replacement kit for 1 pair of inputs P/N: DCD-3PH-1TBK.