Three Phase Inverter with Synergy Technology

for the 277/480V Grid for North America

SE66.6KUS / SE100KUS



INVERTERS

Specifically designed to work with power optimizers

- Easy two-person installation each unit mounted separately, equipped with cables for simple connection between units
- Balance of System and labor reduction compared to using multiple smaller string inverters
- Independent operation of each unit enables higher uptime and easy serviceability
- No wasted ground area: wall/rail mounted, or horizontally mounted under the modules (10° inclination)

- Integrated arc fault protection and rapid shutdown for NEC 2014 and 2017, per article 690.11 and 690.12
- Built-in module-level monitoring with Ethernet or cellular GSM
- Fixed voltage inverter for superior efficiency (98.5%) and longer strings
- Integrated DC Safety Switch and optional surge protection
- Built-in RS485 Surge Protection, to better withstand lightning events



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	SE66.6KUS	SE100KUS	
OUTPUT			
Rated AC Power Output	66600	100000	VA
Maximum AC Power Output	66600	100000	VA
AC Output Line Connections		-L2-L3-N) plus 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 ⁽¹⁾	59.3 - 60 - 60.5		Hz
Maximum Continuous Output Current (per Phase) @277V	80	120	A
GFDI Threshold		1	A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes		
INPUT			
Maximum DC Power (Module STC) / Unit	90000 / 45000	135000 / 45000	W
Transformer-less, Ungrounded	Yes		
Maximum Input Voltage DC to Gnd	500		Vdc
Maximum Input Voltage DC+ to DC-	1000		Vdc
Nominal Input Voltage DC to Gnd	425		Vdc
Nominal Input Voltage DC+ to DC-	850		Vdc
Maximum Input Current	80	120	Adc
Maximum Input Short Circuit Current		120	Adc
Reverse-Polarity Protection	Yes		
Ground-Fault Isolation Detection	350kΩ Sensitivity per Unit		
CEC Weighted Efficiency	98.5		%
Nighttime Power Consumption	< 12		W
ADDITIONAL FEATURES			
	DC 40F Fth arm at C	allular CCM (antional)	
Supported Communication Interfaces	RS485, Ethernet, Cellular GSM (optional)		
Rapid Shutdown	NEC2014 and NEC2017 compliant/certified, upon AC Grid Disconnect Built-in		
RS485 Surge Protection	DU	711(-11)	
DC SAFETY SWITCH			
DC Disconnect	1000V / 2 x 40A	1000V / 3 x 40A	
DC Surge Protection	Optional, Type	II, field replaceable	
STANDARD COMPLIANCE			
Safety	UL1741, UL1741 SA, UL1699B, UL1998, CSA 2.22		
Grid Connection Standards	IEEE 1547, Rule 21, Rule 14 (HI)		
Emissions	FCC part15 class A		
INSTALLATION SPECIFICATIONS			
Number of units	2	3	
AC Output Conduit Size / Max AWG / Max PE AWG	1.5" / 2/0 / 6	2" / 4/0 / 4	
DC Output Conduit Size / Terminal Block AWG Range / Number of Strings ⁽²⁾	2 x 1.25" / 6-14 / 6 strings	2 x 1.25" / 6-14 / 9 strings	
Dimensions (H x W x D)	Primary Unit: 37 x 12.5 x 10.5 / 940 x 315 x 260; Secondary Unit: 21 x 12.5 x 10.5 / 540 x 315 x 260		in / m
Weight	Primary Unit: 105.8 / 48; Secondary Unit 99.2 / 45		lb/k
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽³⁾		°F / °(
Cooling	Fan (user replaceable)		
Noise	< 60		dBA
	NEMA 3R		

⁽¹⁾ For other regional settings please contact SolarEdge support

⁽²⁾ Single input option per unit (up to 3AWG) available (3) De-rating from 50°C