

Three Phase Inverter with Synergy Technology

for the 277/480V Grid for North America

SE66.6KUS / SE100KUS



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		4-wire WYE (L1-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							
Supported Communication Interfaces		RS485, Ethernet, Cellular GSM (optional)					
Rapid Shutdown		NEC2014 and NEC2017 compliant/certified, upon AC Grid Disconnect					
RS485 Surge Protection		Built-in					
DC SAFETY SWITCH							
DC Disconnect		1000V / 2 x 40A		1000V / 3 x 40A			
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 / mm	
Weight		Primary Unit: 105.8 / 48; Secondary Unit 99.2 / 45				lb / kg	
Operating Temperature Range		-40 to +140 / -40 to +60 ⁽³⁾				°F / °C	
Cooling		Fan (user replaceable)					
Noise		< 60				dBA	
Protection Rating		NEMA 3R					
Mounting		Bracket provided					

⁽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