

SolarEdge TerraMax™ Inverter

For North America

SE330KUS



Specially designed for ground mount community solar, agricultural, and floating installations, featuring a virtual central topology with single DC input architecture and module-level MPPTs

/ More Energy

- / 99% efficiency
- / 200% DC oversizing
- / 100% power at high temperature levels
- / Granular MPPT with DC optimization

/ Higher BoS Savings

- / Longer and fewer strings, with up to 80 modules per string
- / Enables virtual central topology
- / Up to 50% BoS savings

/ Lower O&M Costs

- / Fewer truck rolls with continuous and granular monitoring
- / 100% visibility into system issues
- / Reduced project schedule risks with pre-commissioning feature

/ Safe and Secure

- / Designed with cybersecurity features and multilayered protection from inverter to cloud
- / Built-in SafeDC™: designed to automatically reduce high DC voltage to touch-safe levels in the event of faults and maintenance activities

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	SE330KUS	Unit
OUTPUT		
Rated AC Active Output Power	330,000 @ 45°C / 113°F	W
Maximum Apparent AC Power Output	330,000 @ 45°C / 113°F	VA
AC Output Voltage - Line to Line (Nominal)	690	Vac
AC Output Voltage - Line to Line (Range)	587 – 759	Vac
AC Frequency	60 ± 5%	Hz
Maximum Continuous Output Current (per Phase) @Nominal Voltage	276.1	Aac
AC Output Line Connections	3PH 3W + PE	
Total Harmonic Distortion	≤3	%
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds	Yes	
Power Factor Range	0.2 – 1 / leading, lagging	
INPUT		
Maximum DC Power (Module STC)	660,000	W
Maximum Input Voltage DC+ to DC-	1500	Vdc
Nominal DC Input Voltage DC+ to DC-	1250	Vdc
Maximum Input Current	266.7	Adc
Module-Level Optimization	Yes	
EFFICIENCY		
Maximum Efficiency / CEC Efficiency	99.2 / 99.0	%
PROTECTION FEATURES		
DC Reverse Polarity Protection	Yes	
Ground Fault Isolation Detection	Yes	
AC Surge Protection	Type 2, monitored and field replaceable	
DC Surge Protection	Type 2, monitored and field replaceable	
CAN, RS485 Surge Protection	Yes	
DC Disconnect	Yes, integrated	
RCD Protection	Yes	
AC Overcurrent Protection	Yes	
ADDITIONAL FEATURES		
Supported Communication Interfaces	CAN bus; RS485; Ethernet; WiFi; Cellular (optional)	
PID Protection	PID Rectifier	
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection	
Pre-Commissioning	Inverter activation and validation powered by PV modules	
Central Commissioning	Automated easy commissioning for several inverters at once	
VAR at Night	Yes	
STANDARD COMPLIANCE		
Safety	UL 1741; UL 1998; CSA C22.2#107.1	
Grid Connection Standards	UL 1741 SA; UL 1741 SB; IEEE 1547 Rule 21, Rule 14	
Emissions	FCC Part 15, Class A	
Advanced Grid Support Capabilities	L/HFRT; L/HVRT; VOLT-VAR; VOLT-Watt; Frequency-Watt; Ramp Rate Control; Fixed Power Factor; Fixed Q; Cos (Phi) / Watt	
RoHS	Yes	
GENERAL DATA		
Dimensions (W x H x D)	1090 x 914 x 416 / 42.9 x 35.9 x 16.4	mm / in
Weight	175 / 386	kg / lb
Operating Temperature Range ⁽¹⁾	-40 to +60 / -40 to +140	°C / °F
Cooling	Fans (field replaceable)	
Noise Emission	< 72	dBA
Protection Rating	IP66	
Mounting	Bracket provided	
Topology	Transformerless, ungrounded	
AC Connection ⁽²⁾	Up to 2 x 2.5" conduit, terminal lugs, max. 600 kcmil per wire, Al or Cu	
DC Connection ⁽³⁾	Up to 2 x 3" conduit, terminal lugs, max. 600 kcmil per wire, Al or Cu	

(1) For ambient temperatures above +45°C / 113°F power derating is applied. Refer to the [Temperature Derating](#) technical note for details.

(2) Two AC terminals per line are available.

(3) Up to two DC terminals (+, -) are available.