



SolarEdge Three Phase Inverters

For North America

SE9KUS (208V) / SE10KUS (480V) / SE20KUS (480V)

INVERTERS



The best choice for SolarEdge enabled systems

- Integrated arc fault protection (Type 1) for NEC 2011 690.11 compliance
- Superior efficiency (98%)
- Small, lightweight and easy to install on provided bracket
- Built-in module-level monitoring
- Internet connection through Ethernet or Wireless
- Outdoor and Indoor installation
- Fixed voltage inverter, DC/AC conversion only
- Integrated Safety Switch



Three Phase Inverters for North America

SE9KUS (208V) / SE10KUS (480V) / SE20KUS (480V)

	SE9KUS	SE10KUS	SE20KUS	
OUTPUT				
Rated AC Power Output	9000	10000	20000	VA
Maximum AC Power Output	9000	10000	20000	VA
AC Output Line Connections	4-wire WYE (L1-L2-L3-N) plus PE			
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-N)	105-120-132.5	244-277-305		Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-L)	183-208-229	422.5-480-529		Vac
AC Frequency Min-Nom-Max	59.3 - 60 - 60.5 (with HI country setting 57 - 60 - 60.5)			Hz
Max. Continuous Output Current (per Phase)	25	12	24	A
GFDI Threshold		1		A
Utility Monitoring, Islanding Protection, Country Configurable Set Points	Yes			
INPUT				
Maximum DC Power (Module STC)	12150	13500	27000	W
Transformer-less, Ungrounded	Yes			
Maximum Input Voltage DC to Gnd	250	490		Vdc
Maximum Input Voltage DC+ to DC-	500	980		Vdc
Nominal Input Voltage DC to Gnd	200	425		Vdc
Nominal Input Voltage DC+ to DC-	400	850		Vdc
Maximum Input Current	26.5	13.5	26.5	Adc
Reverse-Polarity Protection	Yes			
Ground-Fault Isolation Detection	1MΩ Sensitivity			
Maximum Inverter Efficiency	97.1	98.2	98.1	%
CEC Weighted Efficiency	96.5	98	98	%
Night-time Power Consumption	< 3			W
ADDITIONAL FEATURES				
Supported Communication Interfaces	RS485, RS232, Ethernet, ZigBee (optional)			
Rapid Shutdown – NEC 2014 690.12	Functionality enabled when SolarEdge rapid shutdown kit is installed ⁽²⁾			
STANDARD COMPLIANCE				
Safety	UL1741, UL1699B, UL1998, CSA 22.2			
Grid Connection Standards	IEEE1547			
Emissions	FCC part15 class B			
INSTALLATION SPECIFICATIONS				
AC output conduit size / AWG range	3/4" minimum / 12-6 AWG			
DC input conduit size / # of strings / AWG range	3/4" minimum / 1-2 strings / 12-6 AWG			
Dimensions (HxWxD)	21 x 12.5 x 10.5 / 540 x 315 x 260			in/mm
Dimensions with Safety Switch (HxWxD)	30.5 x 12.5 x 10.5 / 775 x 315 x 260			in/mm
Weight	73.2 / 33.2			lb/kg
Weight with Safety Switch	79.7 / 36.2			lb/kg
Cooling	Fans (user replaceable)			
Noise	< 50			dBA
Operating Temperature Range	-13 to +140 / -25 to +60 (-40 to +60 version available) ⁽³⁾			°F/°C
Protection Rating	NEMA3R			

⁽¹⁾ For other regional settings please contact SolarEdge support.

⁽²⁾ Rapid shutdown kit P/N: SE1000-RSD-S2 for SE9KUS, SE1000-RSD-S3 for SE10KUS and SE20KUS.

⁽³⁾ -40 version P/Ns: SE9K-US028NNU4 and SE9K-US048NNU4.



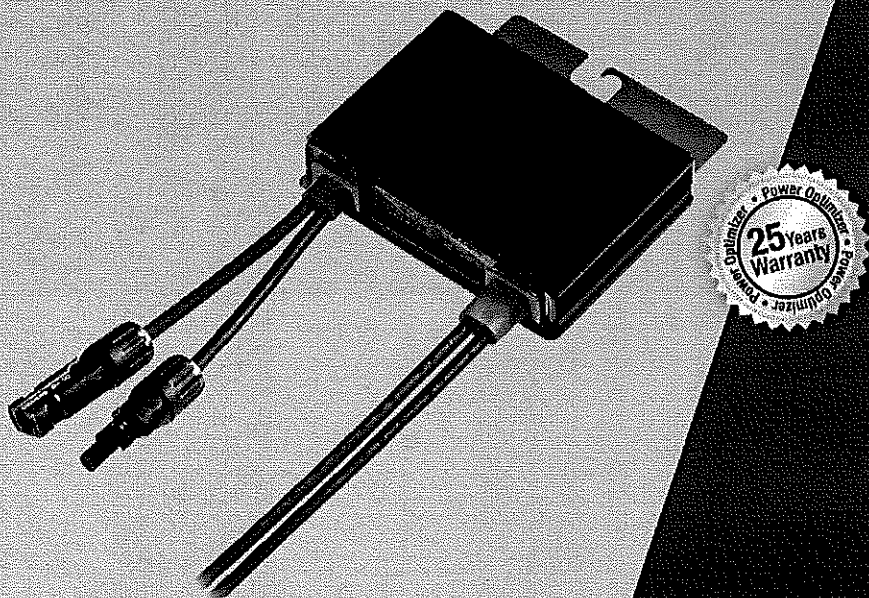
RoHS

solaredge

SolarEdge Power Optimizer

Module Add-On For North America

P300 / P320 / P400 / P405



POWER OPTIMIZER

PV power optimization at the module-level

- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module-level monitoring
- Module-level voltage shutdown for installer and firefighter safety



SolarEdge Power Optimizer

Module Add-On for North America

P300 / P320 / P400 / P405

	P300 (for 60-cell modules)	P320 (for high-power 60-cell modules)	P400 (for 72 & 96-cell modules)	P405 (for thin film modules)	
INPUT					
Rated Input DC Power ⁽¹⁾	300	320	400	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48		80	125	Vdc
MPPT Operating Range	8 - 48		8 - 80	12.5 - 105	Vdc
Maximum Short Circuit Current (Isc)	10	11	10.1		Adc
Maximum DC Input Current	12.5	13.75		12.63	Adc
Maximum Efficiency				99.5	%
Weighted Efficiency				98.8	%
Overvoltage Category				II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)					
Maximum Output Current				15	Adc
Maximum Output Voltage	60			85	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)					
Safety Output Voltage per Power Optimizer				1	Vdc
STANDARD COMPLIANCE					
EMC				FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3	
Safety				IEC62109-1 (class II safety), UL1741	
RoHS				Yes	
INSTALLATION SPECIFICATIONS					
Maximum Allowed System Voltage				1000	Vdc
Compatible inverters				All SolarEdge Single Phase and Three Phase inverters	
Dimensions (W x L x H)	128 x 152 x 27.5 / 5 x 5.97 x 1.08		128 x 152 x 35 / 5 x 5.97 x 1.37	128 x 152 x 50 / 5 x 5.97 x 1.96	mm / in
Weight (including cables)	760 / 1.7		830 / 1.8	1064 / 2.3	gr / lb
Input Connector				MC4 Compatible	
Output Wire Type / Connector				Double Insulated; MC4 Compatible	
Output Wire Length	0.95 / 3.0			1.2 / 3.9	m / ft
Operating Temperature Range				-40 - +85 / -40 - +185	
Protection Rating				IP68 / NEMA6P	
Relative Humidity				0 - 100	
				%	

⁽¹⁾ Rated STC power of the module. Module of up to +5% power tolerance allowed.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽²⁾	SINGLE PHASE	THREE PHASE 208V	THREE PHASE 480V	
Minimum String Length (Power Optimizers)	8	10	18	
Maximum String Length (Power Optimizers)	25	25	50	
Maximum Power per String	5250	6000	12750	W
Parallel Strings of Different Lengths or Orientations	Yes			

⁽²⁾ It is not allowed to mix P405 with P300/P400/P600/P700 in one string.

