

Power Optimizer

For North America

H1300



POWER OPTIMIZER

SolarEdge's next generation, cost-effective Power Optimizer for optimized ground mount installations

Greater Energy Yields

- High efficiency (99.5%) with module-level MPPT, for maximized system energy production and revenue, and faster projected ROI
- Supports up to 650W high power and 15A high current modules
- Compatible with SolarEdge TerraMax™ inverters

Maximum Protection with Built-In Safety

- Designed to automatically reduce high DC voltage to touch-safe levels upon grid/inverter shutdown with SafeDC™

Lower BoS Costs with Flexible Design

- More power with up to 25kW per string and an oversizing option up to 33kW
- Enables up to 2x longer strings with fewer strings required, reducing cables, fuses, and combiner boxes by 50%
- Compact size, compatible with standard rails for simple cost-effective installations in challenging spaces

Simpler O&M

- Module-level system monitoring enabling pinpointed fault detection
- Remote, time-saving troubleshooting for fewer truck rolls and less time on site

Power Optimizer

For North America

H1300

	H1300 (FOR CONNECTION TO TWO PV MODULES)	Units
INPUT		
Rated Input DC Power ⁽¹⁾	1300	W
Connection Method	Single input for series connected modules	
Absolute Maximum Input Voltage (Voc at lowest temperature)	125	Vdc
MPPT Operating Range	12.5 – 105	Vdc
Maximum Short Circuit Current per Input (Isc)	15	Adc
Maximum Adjusted Short Circuit Current (with safety factor) ⁽²⁾	18.75	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	20	Adc
Maximum Output Voltage	75	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM OPERATING SOLAREEDGE INVERTER)		
Safety Output Voltage per Power Optimizer	1 ± 0.1	Vdc
STANDARD COMPLIANCE		
EMC	FCC Part 15 Class A	
Safety	UL 1741; CSA C22.2#107.1; CSA C22.2#330	
Material	UL 94 V-0, UV resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters	SE330KUS; SE250KUS; SE285KUS	
Maximum Allowed System Voltage	1500	Vdc
Dimensions (W x L x H)	129 x 155 x 59 / 5.08 x 6.10 x 2.32	mm / in
Weight (including cables)	1170 / 2.6	g / lb
Input / Output Connector ⁽³⁾	MC4	
Input Wire Length	1.6, 1.6 / 5.25, 5.25	m / ft
Output Wire Length	0.1, 5.3 / 0.32, 17.39	m / ft
Operating Temperature Range ⁽⁴⁾	-40 to 65 / -40 to 149	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 – 100	%

(1) The rated power of the module at STC will not exceed the power optimizer's Rated Input DC Power. Modules with up to +5% power tolerance are allowed.

(2) Adjusted for ambient temperature, irradiance, bifacial gain, safety factor, and so on, in accordance with NEC and CSA.

(3) For other connector types please contact SolarEdge.

(4) For ambient temperatures above +65°C / 149°F power derating is applied. Refer to the [Temperature Derating](#) technical note for details.

PV System Design Using a SolarEdge Inverter		SE330KUS / SE250KUS / SE285KUS	
	Module Power		
Minimum String Length ⁽⁵⁾ (Power Optimizers/Modules)	400 – 450W	27 / 54	
	455 – 550W	24 / 48	
	555 – 650W	22 / 44	
Maximum String Length (Power Optimizers/Modules)		40 / 80	
Maximum Continuous Power per String		25,000	W
Maximum Allowed Connected Power per String ⁽⁶⁾		33,000	W
Maximum Allowed Difference between the shortest and longest string connected to the same inverter		5 Power Optimizers	

(5) Design your project using SolarEdge Designer use a lower minimum string length and/or connect more STC power per string.

(6) For the SE250KUS, a minimum of 10 strings must be connected. For 9 strings or less, the Maximum Allowed Connected Power per String is 29,000W.

For the SE285KUS, a minimum of 12 strings must be connected. For 11 strings or less, the Maximum Allowed Connected Power per String is 29,000W.

For the SE330KUS, a minimum of 14 strings must be connected. For 13 strings or less, the Maximum Allowed Connected Power per String is 29,000W.