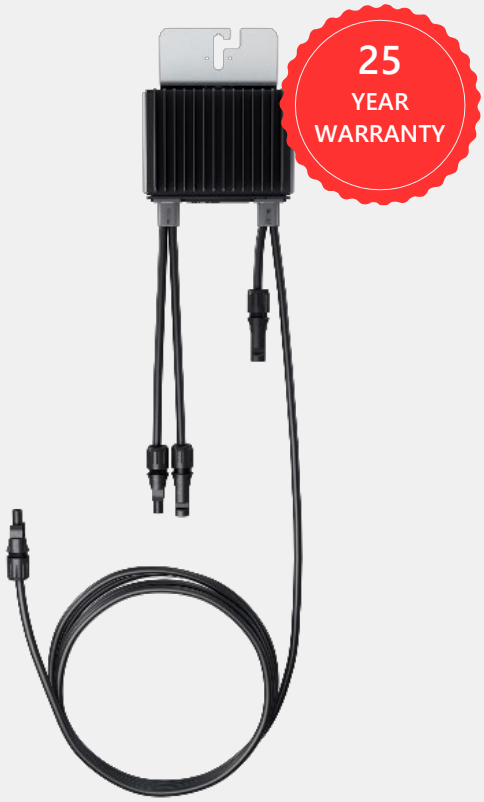
Power Optimizer

For North America

H1500



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 energy production and revenue, and faster projected ROI
  - Supports up to 750W high power and 20A high current modules, including bifacial and G12 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 30kW per string and an oversizing option of up to 40kW
  - 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

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	H1500	Units
INPUT		
Rated Input DC Power[1]	1500	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)	20	Adc
Maximum Adjusted Short Circuit Current (with safety factor)[2]	25	Adc
Maximum Efficiency	99.5 or higher	%
Weighted Efficiency	98.8 or higher	%
Overvoltage Category	II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)		
Maximum Output Current	24	Adc
Maximum Output Voltage	80	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM OPERATING SOLAREDGE INVERTER)		
Safety Output Voltage per Power Optimizer	1 ± 0.1	Vdc
STANDARD COMPLIANCE[3]		
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[4]	MC4	
Input Wire Length	1.8, 1.8 / 5.9, 5.9	m / ft
Output Wire Length	0.1, 5.7 / 0.32, 18.7	m / ft
Operating Temperature Range[5]	-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) Certification pending.
(4) For other connector types please contact SolarEdge.
(5) 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	
Minimum String Length (Power Optimizers/Modules)		21 / 42	
Maximum String Length (Power Optimizers/Modules)	Module Power		
	580 – 600W	33 / 66	
	605 – 650W	31 / 62	
	655 – 700W	29 / 58	
	705 – 750W	27 / 54	
Maximum Continuous Power per String		30,000	W
Maximum Allowed Connected Power per String[6]		40,000	W
Maximum Allowed Difference between the shortest and longest string connected to the same inverter		5 Power Optimizers	

(6) For the SE250KUS, a minimum of 9 strings must be connected. For 8 strings or less, the Maximum Allowed Connected Power per String is 35,000W.
For the SE285KUS, a minimum of 10 strings must be connected. For 9 strings or less, the Maximum Allowed Connected Power per String is 35,000W.
For the SE330KUS, a minimum of 11 strings must be connected. For 10 strings or less, the Maximum Allowed Connected Power per String is 35,000W.

CE RoHS