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Power Optimizer
for North America
P730 / P800p / P850

25 Years Warranty

PV power optimization at the module-level
The most cost effective solution for commercial and large field installations

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System cost reduction; 50% less cables, fuses and combiner boxes, over 2x longer string lengths possible
- Fast installation with a single bolt
- Advanced maintenance with module-level monitoring
- Module-level shutdown for installer and firefighter safety
- Compliant with arc fault protection and rapid shutdown NEC requirements (when installed as part of the SolarEdge system)
- Use with two PV modules connected in series or in parallel

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Optimizer model (typical module compatibility)	P730 (for 2 x high power 72-cell PV modules)	P800p (for parallel connection of 2x 96-cell 5" PV modules)	P850* (for 2x high power or bi-facial modules)	
INPUT				
Rated Input DC Power[1]	730	800	850	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	125	83	120	Vdc
MPPT Operating Range	12.5 - 105	12.5 - 83	12.5 - 105	Vdc
Maximum Short Circuit Current (Isc)	11	14	12.5	Adc
Maximum DC Input Current	13.75	17.5	15.63	Adc
Maximum Efficiency		99.5		%
Weighted Efficiency		98.6		%
Overvoltage Category		II		
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREDGE INVERTER)				
Maximum Output Current	15		18	Adc
Maximum Output Voltage		85		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREDGE INVERTER OR SOLAREDGE INVERTER OFF)				
Safety Output Voltage per Power Optimizer		1 ± 0.1		Vdc
STANDARD COMPLIANCE				
EMC		FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3		
Safety		IEC62109-1 (class II safety), UL1741		
Material		UL-94 (5-VA), UV Resistant		
RoHS		Yes		
INSTALLATION SPECIFICATIONS				
Compatible SolarEdge Inverters		Three phase inverters		
Maximum Allowed System Voltage		1000		Vdc
Dimensions (W x L x H)	128 x 152 x 50 / 5 x 5.97 x 1.96	128 x 158 x 59 / 5 x 6.22 x 2.32	128 x 152 x 59 / 5 x 5.97 x 2.32	mm / in
Weight (including cables)	1064 / 2.34	1090 / 2.4	1064 / 2.34	gr / lb
Input Connector		MC4 Compatible		
Output Wire Type / Connector		Double Insulated; MC4 Compatible		
Output Wire Length	2.1 / 6.9	1.8 / 5.9	2.1 / 6.9	m / ft
Operating Temperature Range[2]		-40 - +85 / -40 - +185		°C / °F
Protection Rating		IP68 / NEMA6P		
Relative Humidity		0 - 100		%

[1] Rated STC power of the module. Module of up to +5% power tolerance allowed.
[2] For ambient temperature above +70˚C / +158˚F power de-rating is applied. Refer to Power Optimizers Temperature De-Rating Application Note for more details.

PV SYSTEM DESIGN USING A SOLAREDGE INVERTER[3][4]		THREE PHASE 208V		THREE PHASE 480V		
Compatible Power Optimizers		P730[5]	P800p, P850[5]	P730	P800p, P850	
Minimum String Length	Power Optimizers	8		13		
	PV Modules	16		26		
Maximum String Length	Power Optimizers	30		30		
	PV Modules	60		60		
Maximum Power per String		6000[6]	7200	12750[7]	15300	W
Parallel Strings of Different Lengths or Orientations				Yes		

[3] P800p and P850 can be mixed in one string. It is not allowed to mix P730 with P800p/P850 in one string or to mix P730/P800p/P850 with P300/P320/P400/P405 in one string.
[4] In a case of odd number of PV modules in one string it is allowed to install one P730/P800p/P850 power optimizer connected to one PV module. When connecting a single module to the P800p seal the unused input connectors with the supplied pair of seals.
[5] P730/ P800p/ P850 design with three phase 208V inverters is limited. Use the SolarEdge Site Designer for verification.
[6] For SE14.4KUS/SE43.2KUS: It is allowed to install up to 6,500W per string when 3 strings are connected to the inverter (3 strings per unit for SE43.2KUS) and when the maximum power difference between the strings is up to 1,000W.
[7] For SE30KUS/SE33.3KUS/SE66.6KUS/SE100KUS: It is allowed to install up to 15,000W per string when 3 strings are connected to the inverter (3 strings per unit for SE66.6KUS/SE100KUS) and when the maximum power difference between the strings is up to 2,000W.
* P850 replaced the P800s; they can be used interchangeably and can be connected in the same string.

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