



SolarEdge Power Optimizer

Module Add-On for Commercial Installations

P800p (preliminary)



POWER OPTIMIZER

PV power optimization at the module-level

The most cost effective solution for commercial and large field installations

- Up to 25% more energy
- Superior efficiency (99.5%)
- Balance of System costs reduction; 50% less cables, fuses and combiner boxes
- Fast installation with a single bolt
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety
- Use with two PV modules connected in parallel



SolarEdge Power Optimizer Module Add-On for Commercial Installations P800p (preliminary)

	P800p (for 2x 96-cell 5" PV Modules)	
INPUT		
Rated Input DC Power ⁽¹⁾	800	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	83	Vdc
MPPT Operating Range	12.5 - 83	Vdc
Maximum Short Circuit Current (Isc) of connected PV Modules	14	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.6	%
Overvoltage Category	II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)		
Maximum Output Current	18	Adc
Maximum Output Voltage	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	
Material	UL-94 (5-VA), UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters	Three phase inverters SE16K and larger	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 152 x 49 / 5 x 5.97 x 1.93	mm / in
Weight (including cables)	930 / 2.05	gr / lb
Input Connector	2 * MC4 (Dual input)	
Output Connector	MC4	
Output Wire Length	1.2 / 3.9 (portrait orientation) or 1.8 / 5.9 (landscape orientation)	m / ft
Operating Temperature Range ⁽²⁾	-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.

⁽²⁾ For ambient temperature above +70°C power de-rating is applied. Refer to "Power Optimizers Temperature De-Rating Application Note" for more details.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽⁴⁾⁽⁵⁾		THREE PHASE SE16K AND LARGER	THREE PHASE SE33.3K	
Compatible Power Optimizer		P800		
Minimum String Length	Power Optimizers	12	13	
	PV Modules	24	26	
Maximum String Length	Power Optimizers	30		
	PV Modules	60		
Maximum Power per String		13500	15300	W
Parallel Strings of Different Lengths or Orientations		Yes		

⁽⁴⁾ It is not allowed to mix P800 with P300/P350/P404/P405/P500/P600/P700 in one string.

⁽⁵⁾ In a case of odd number of PV Modules in one string it is allowed to install one P800 power optimizer connected to one PV Module.

