POWER OPTIMIZER

SolarEdge Power Optimizer

Module Add-On for Commercial Installations

P600 / P700

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 series

SolarEdge Power Optimizer Module Add-On for Commercial Installations P600 / P700

	P600 (for 2 x 60-cell PV modules)	P700 (for 2 x 72-cell PV modules)	
INPUT			
Rated Input DC Power[1]	600	700	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	96	125	Vdc
MPPT Operating Range	12.5 - 80	12.5 - 105	Vdc
Maximum Continuous Input Current (Isc)	10.1		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		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		Vdc
STANDARD COMPLIANCE			
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3		
Safety	IEC62109-1 (class II safety)		
RoHS	Yes		
Fire Safety	VDE-AR-E 2100-712:2013-05		
INSTALLATION SPECIFICATIONS			
Compatible SolarEdge Inverters	Three phase inverters SE15K & larger	Three phase inverters SE16K & larger	
Maximum Allowed System Voltage	1000		Vdc
Dimensions (W x L x H)	128 x 152 x 43 / 5 x 5.97 x 1.69	128 x 152 x 50 / 5 x 5.97 x 1.96	mm / in
Weight (including cables)	994 / 2.1	1064 / 2.3	gr / lb
Input Connector	MC4[2]		
Output Connector	MC4		
Output Wire Length	1.2 / 3.9 (portrait orientation) or 1.8 / 5.9 (landscape orientation)	1.2 / 3.9 (portrait orientation) or 2.1 / 6.9 (landscape orientation)	m / ft
Operating Temperature Range[3]	-40 - +85 / -40 - +185		˚C / ˚F
Protection Rating	IP68 / NEMA6P		
Relative Humidity	0 - 100		%

[1] Rated combined STC power of 2 modules connected in series. Module of up to +5% power tolerance allowed.
[2] For other connector types please contact SolarEdge.
[3] 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[4][5]		THREE PHASE SE15K AND LARGER	THREE PHASE SE16K AND LARGER	THREE PHASE SE33.3K	
Compatible Power Optimizers		P600	P600 & P700		
Minimum String Length	Power Optimizers	13			
	PV Modules	26			
Maximum String Length	Power Optimizers	30			
	PV Modules	60			
Maximum Power per String		11250[6]		12750[7]	W
Parallel Strings of Different Lengths or Orientations		Yes			

[4] P600 and P700 can be mixed in one string. It is not allowed to mix P600/P700 with P300/P350/P404/P405/P500 in one string
[5] In a case of odd number of PV Modules in one string it is allowed to install one P600/P700 power optimizer connected to one PV Module.
[6] For SE27.6K: It is allowed to install up to 13,500W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 2,000W; inverter max DC power: 37,250W.
[7] For SE33.3K: It is allowed to install up to 15,000W per string when 3 strings are connected to the inverter and when the maximum power difference between the strings is up to 2,000W; inverter max DC power: 45,000W.

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