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SolarEdge Power Optimizer

Module Add-On for Commercial Installations

for North America P600 / P700

POWER OPTIMIZER

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

- High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI
- 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
- 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 for North America 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 Short Circuit Current (Isc)		10		Adc
Maximum DC Input Current		12.5		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), UL1741		
RoHS		Yes		
INSTALLATION SPECIFICATIONS				
Compatible SolarEdge Inverters		Three phase inverters		Vdc
Maximum Allowed System Voltage		1000		
Dimensions (W x L x H)	Pxxx-2 series	143 x 210 x 45 / 5.63 x 8.26 x 1.75		mm / in
	Pxxx-5 series	128 x 152 x 43 / 5 x 5.97 x 1.69	128 x 152 x 48 / 5 x 5.97 x 1.89	mm / in
Weight (including cables)	Pxxx-2 series	1100 / 2.4		gr / lb
	Pxxx-5 series	930 / 2.05		gr / lb
Input Connector		MC4 Compatible		
Output Wire Type / Connector		Double Insulated; MC4 Compatible		
Output Wire Length		1.8 / 5.9	2.1 / 6.9	m / ft
Operating Temperature Range[2]		-40 - +85 / -40 - +185		˚C / ˚F
Protection Rating	Pxxx-2 series	IP65 / NEMA4		
	Pxxx-5 series	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 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		P600 & P700[5]	P600 & P700	
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	12750	W
Parallel Strings of Different Lengths or Orientations		Yes		

[3] P600 and P700 can be mixed in one string. It is not allowed to mix P600/P700 with P300/P400 in one string.
[4] 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.
[5] P700 design with three phase 208V inverters is limited. Use the SolarEdge Site Designer for verification.

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