



## 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

- 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
- 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)	
<b>INPUT</b>			
Rated Input DC Power <sup>(1)</sup>	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	
<b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)</b>			
Maximum Output Current		15	Adc
Maximum Output Voltage		85	Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)</b>			
Safety Output Voltage per Power Optimizer		1	Vdc
<b>STANDARD COMPLIANCE</b>			
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3		
Safety	IEC62109-1 (class II safety), UL1741		
RoHS	Yes		
<b>INSTALLATION SPECIFICATIONS</b>			
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 <sup>(2)</sup>	-40 - +85 / -40 - +185		°C / °F
Protection Rating	Pxxx-2 series	IP65 / NEMA4	
	Pxxx-5 series	IP68 / NEMA6P	
Relative Humidity	0 - 100		%

<sup>(1)</sup> Rated combined STC power of 2 modules connected in series. Module of up to +5% power tolerance allowed.

<sup>(2)</sup> 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 SOLAREEDGE INVERTER <sup>(3)(4)</sup>		THREE PHASE 208V	THREE PHASE 480V	
Compatible Power Optimizers		P600 & P700 <sup>(5)</sup>	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		

<sup>(3)</sup> P600 and P700 can be mixed in one string. It is not allowed to mix P600/P700 with P300/P400 in one string.

<sup>(4)</sup> 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.

<sup>(5)</sup> P700 design with three phase 208V inverters is limited. Use the SolarEdge Site Designer for verification.

