



# SolarEdge Power Optimizer

Module Add-On for Commercial Installations

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 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)	
<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 Continuous Input Current (Isc)		10.1	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)		
RoHS	Yes		
Fire Safety	VDE-AR-E 2100-712:2013-05		
<b>INSTALLATION SPECIFICATIONS</b>			
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 <sup>(2)</sup>		
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 <sup>(3)</sup>	-40 - +85 / -40 - +185		°C / °F
Protection Rating	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 other connector types please contact SolarEdge.

<sup>(3)</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>(4)(5)</sup>		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 <sup>(6)</sup>		12750 <sup>(7)</sup>	W
Parallel Strings of Different Lengths or Orientations			Yes		

<sup>(4)</sup> 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

<sup>(5)</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>(6)</sup> 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.

<sup>(7)</sup> 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.

