

Skype



# POWER OPTIMIZER

The SolarEdge module add-on power optimizer is connected by installers to the solar modules. Ease of installation is completed by simply clipping the power optimizer to the module frame or by attaching it to the rail with a single screw.



SolarEdge Optimizator



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## P-Series Module Add-On Power Optimizers

Connected by installers to the PV module and compatible with a wide range of modules

Power Optimizer Model	Module Power	Module Voc
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P300	1-300	40 V
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P300	≤ 300 W	< 48 V	
P350	≤ 350 W	< 60 V	
P500	≤ 500 W	< 80 V	
P404	≤ 405 W	< 80 V	* Also available with frames mounted in advance for quicker installation.
P405	≤ 405 W	< 125 V	

### P-Series Commercial Power Optimizer

Commercial solution connecting two modules per power optimizer

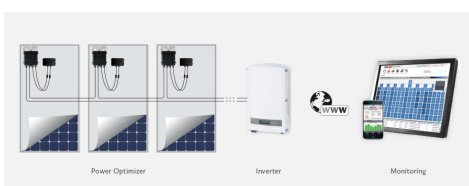
Power Optimizer Model	Module Power	Module Voc
P600	≤600W*	< 96 V
P700	≤700W*	< 125 V

\* Rated combined STC power of 2 modules connected in series. Module of up to +5% power tolerance allowed.

\* Also available with frames mounted in advance for quicker installation.

### Feature highlights:

- Per-module Maximum Power Point Tracking (MPPT)
- Superior efficiency (99.5% peak efficiency, 98.8% weighted efficiency)
- Mitigates all types of modules mismatch-loss, from manufacturing tolerance to partial shading
- Designed for extreme environmental conditions
- 25 year reliability and warranty
- Advanced, real-time performance measurement
- Automatic module DC voltage shut-down for installer and firefighter safety
- Independent optimization technology (IndOP™) - allows operation with any inverter and requires no additional interface hardware
- Available with frames mounted in advance for quicker installation



## SPEIFICATIONS

		P300	P350	P500	P404	P405	P600	P700
		60 cell	60/72 cell	96 cell	60/72 cell	Thin Film	2 x 60 cell	2 x 72 cell

### INPUT

Rated Input DC Power (1)	W	300	350	500	405	405	600	700
Absolute Maximum Input Voltage (Voc at lowest temperature)	Vdc	48	60	80	80	125	96	125
MPPT Operating Range	Vdc	8 - 48	8 - 60	8 - 80	12,5 - 80	12,5 - 105	12,5 - 80	12,5 - 105
Maximum Continuous Input Current (Isc)	Adc	10	11			10,1		
Maximum Efficiency	%				99,5			
Weighted Efficiency	%				98,8			
Overtoltage Category					II			

### OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)

Maximum Output Current	Adc				15			
Maximum Output Voltage	Vdc		60			85		

### OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)

Safety Output Voltage per Power Optimizer	Vdc				1			
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### STANDARD COMPLIANCE

EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3							
Safety	IEC62109-1 (class II safety), UL1741							
RoHS	Yes							
Fire Safety	VDE-AR-E 2100-712:2013-05							

### INSTALLATION SPECIFICATIONS

Compatible SolarEdge Inverters		Single Phase			3 phases			
Maximum Allowed System Voltage	Vdc				1000			

Dimensions (W x L x H)	mm	128 x 152 x 27,5	128 x 152 x 35	128 x 152 x 43	128 x 152 x 50	139 x 165 x 56	139 x 165 x63
Weight (including cables)	gr	760	830	994	1064	1065	1185
Input Connector		MC4 (2)					
Output Connector		MC4					
Output Wire Length	m	0,95	1,2		1,8	2,1	
Operating Temperature Range	° C	-40 +85					
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 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 DESIGN (4)(5)**    **Single Phase**    **Three phases SE15K & larger**    **Three phases SE16K & larger**    **Three phases SE33.3K**

Minimum String Length (Power Optimizers)	P300, P350, P500	8	16	16	16
	P404, P405	6	13	13	13
	P600	-	13 (26 modules)	13 (26 modules)	13 (26 modules)
	P700	-	-	13 (26 modules)	13 (26 modules)
Maximum String Length (Power Optimizers)	P300, P350, P500, P404, P500	25	50	50	50
	P600, P700	-	30 (60 modules)	30 (60 modules)	30 (60 modules)
	Maximum Power per String	5.250 W	11.250 W	11.250 W (6)	12.750 W (7)
Parallel Strings of Different Lengths or Orientations		Sí	Sí	Sí	Sí

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

It is not allowed to mix P600/P700 with P300/P350/P404/P405/P500 in one string

P600 and P700 can be mixed 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.