

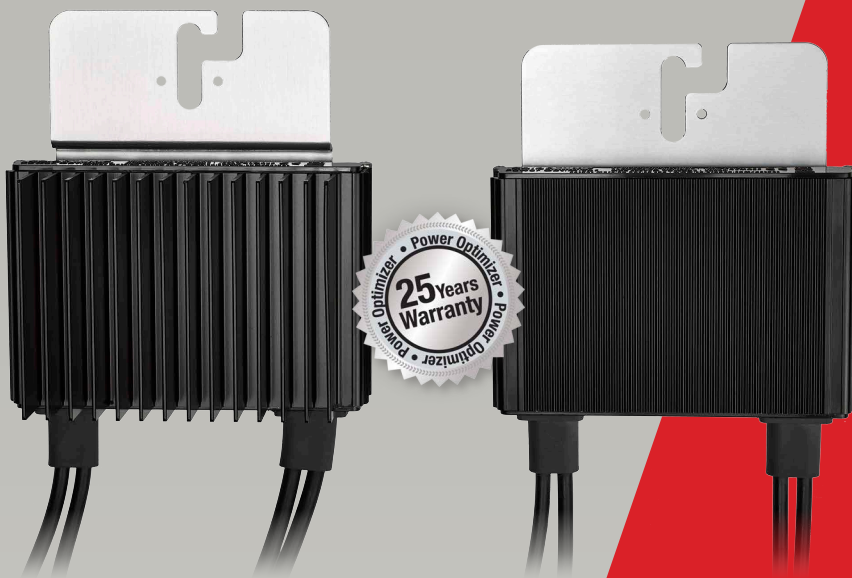


# SolarEdge Power Optimizer

Module Add-On

P300 / P370 / P404 / P405 / P500 / P505

POWER OPTIMIZER



## PV power optimization at the module-level

- Specifically designed to work with SolarEdge inverters
- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of modules mismatch-loss, from manufacturing tolerance to partial shading
- Flexible system design for maximum space utilization
- Fast installation with a single bolt
- Next generation maintenance with module level monitoring
- Module-level voltage shutdown for installer and firefighter safety



# SolarEdge Power Optimizer Module Add-On

P300 / P370 / P404 / P405 / P500 / P505

Optimizer model (typical module compatibility)	P300 (for 60-cell modules)	P370 (for high power 60 and 72-cell modules)	P500 (for 96-cell modules)	P404 (for 60-cell and 72-cell, short strings)	P405 (for thin film modules)	P505 (for higher current modules)	
<b>INPUT</b>							
Rated Input DC Power <sup>(1)</sup>	300	370	500	405	405	505	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60	80	80	125	83	Vdc
MPPT Operating Range	8 - 48	8 - 60	8 - 80	12.5 - 80	12.5 - 105	12.5-83	Vdc
Maximum Short Circuit Current (Isc)	11		10.1		14		Adc
Maximum Efficiency				99.5			%
Weighted Efficiency				98.8			%
Overvoltage Category				II			
<b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)</b>							
Maximum Output Current				15			Adc
Maximum Output Voltage	60			85			Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)</b>							
Safety Output Voltage per Power Optimizer				1 ± 0.1			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			
Fire Safety				VDE-AR-E 2100-712:2013-05			
<b>INSTALLATION SPECIFICATIONS</b>							
Maximum Allowed System Voltage				1000			Vdc
Dimensions (W x L x H)	128 x 152 x 28 / 5 x 5.97 x 1.1	128 x 152 x 36 / 5 x 5.97 x 1.42		128 x 152 x 50 / 5 x 5.97 x 1.96	128 x 152 x 59 / 5 x 5.97 x 2.32		mm / in
Weight (including cables)	630 / 1.4	655 / 1.5	750 / 1.7	775 / 1.7	845 / 1.9	1064 / 2.3	gr / lb
Input Connector	MC4 <sup>(2)</sup>			Single or Dual MC4 <sup>(3)</sup>		MC4 <sup>(2)</sup>	
Output Connector				MC4			
Output Wire Length	0.95 / 3.0				1.2 / 3.9		m / ft
Operating Temperature Range				-40 - +85 / -40 - +185			°C / °F
Protection Rating				IP68 / NEMA6P			
Relative Humidity				0 - 100			%

<sup>(1)</sup> Rated STC power of the module. Module of up to +5% power tolerance allowed.

<sup>(2)</sup> For other connector types please contact SolarEdge.

<sup>(3)</sup> Dual version for parallel connection of 2 thin film modules; P/N: P405-5RMDMRM. In a case of odd number of PV modules in one string it is allowed to install one P405 dual version power optimizer connected to one PV module. When connecting a single module seal the unused input connectors with the supplied pair of seals.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER <sup>(4)</sup>	P300,P350,P370,P500 <sup>(5)</sup> P404,P405,P505	SINGLE PHASE HD-WAVE		SINGLE PHASE	THREE PHASE	THREE PHASE FOR MV GRID
Minimum String Length (Power Optimizers)		8		16	18	
Maximum String Length (Power Optimizers)		6		13 (12 with SE3K)	14	
Maximum Power per String		25		50	50	
Parallel Strings of Different Lengths or Orientations		5700	5250	11250	12750	W
		Yes				

<sup>(4)</sup> It is not allowed to mix P404/P405/P505 with P300/P370/P500/P600/P700/P800 in one string.

<sup>(5)</sup> The P300/P370/P500/P505 cannot be used with the SE3K three phase inverter (available in some countries; refer to E-Series inverter datasheet).

