



# SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P370 / P404 / P405 / P500



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 / P350 / P370 / P404 / P405 / P500

	P300 (for 60-cell modules)	P350 (for high-power 60-cell and for 72-cell modules)	P370 (for higher- 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)	
<b>INPUT</b>							
Rated Input DC Power <sup>(1)</sup>	300	350	370	500	405	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60		80	80	125	Vdc
MPPT Operating Range	8 - 48	8 - 60		8 - 80	12.5 - 80	12.5 - 105	Vdc
Maximum Continuous Input Current (Isc)	10	11		10.1			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 Opti- mizer				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 27.5 / 5 x 5.97 x 1.08			128 x 152 x 35 / 5 x 5.97 x 1.37	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)	630 / 1.4	655 / 1.5		750 / 1.7	775 / 1.7	845 / 1.9	gr / lb
Input Connector	MC4 <sup>(2)</sup>						Single or Dual MC4 <sup>(3)</sup>
Output Connector	MC4						
Output Wire Length	0.95 / 3.0	1.2 / 3.9	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.

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

<sup>(4)</sup> It is not allowed to mix P404/P405 with P300/P350/P370/P500/P600/P700 in one string.

<sup>(5)</sup> The P300/P350/P370/P500 cannot be used with the SE3K three phase inverter (available in some countries; refer to E-Series inverter datasheet).

