



# SolarEdge Power Optimizer

Module Add-On

P300 / P350 / P405 / P500



POWER OPTIMIZER

## PV power optimization at the module-level

- 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 / P405 / P500

	P300 (for 60-cell modules)	P350 (for high-power 60-cell and for 72-cell modules)	P500 (for 96-cell modules)	P405 (for thin film modules)	
<b>INPUT</b>					
Rated Input DC Power <sup>(1)</sup>	300	350	500	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	60	80	125	Vdc
MPPT Operating Range	8 - 48	8 - 60	8 - 80	12.5 - 105	Vdc
Maximum Continuous Input Current (Isc)	Pxxx-2 series Pxxx-5 series	10	11	10	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		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)	Pxxx-2 series	141 x 212 x 40.5 / 5.55 x 8.34 x 1.59			mm / in
	Pxxx-5 series	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 48 / 5 x 5.97 x 1.89	mm / in
Weight (including cables)	Pxxx-2 series	950 / 2.1			gr / lb
	Pxxx-5 series	770 / 1.7		930 / 2.05	gr / lb
Input Connector			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	Pxxx-2 series	IP65 / NEMA4			
	Pxxx-5 series	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.

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER <sup>(3)</sup>		SINGLE PHASE	THREE PHASE
Minimum String Length (Power Optimizers)	P300,P350,P500 P405	8 6	16 13
Maximum String Length (Power Optimizers)		25	50
Maximum Power per String		5250	11250
Parallel Strings of Different Lengths or Orientations		Yes	

<sup>(3)</sup> It is not allowed to mix P405 with P300/P350/P500/P600/P700 in one string.

