



# SolarEdge Power Optimizer

Module Add-On For North America

P300 / P400 / P405



POWER OPTIMIZER

## PV power optimization at the module-level

- Up to 25% more energy
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, 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



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Module Add-On for North America

P300 / P400 / P405

	P300 (for 60-cell modules)	P400 (for 72 & 96-cell modules)	P405 (for thin film modules)	
<b>INPUT</b>				
Rated Input DC Power <sup>(1)</sup>	300	400	405	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	80	125	Vdc
MPPT Operating Range	8 - 48	8 - 80	12.5 - 105	Vdc
Maximum Short Circuit Current (Isc)		10		Adc
Maximum DC Input Current		12.5		Adc
Maximum Efficiency		99.5		%
Weighted Efficiency		98.8		%
Overvoltage Category		II		
<b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)</b>				
Maximum Output Current		15		Adc
Maximum Output Voltage		60	85	Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR 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			
<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
Weight (including cables)	Pxxx-2 series	950 / 2.1		gr / lb
	Pxxx-5 series	770 / 1.7	930 / 2.05	930 / 2.05
Input Connector	MC4 Compatible			
Output Wire Type / Connector	Double Insulated; Amphenol			
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		gr / lb
	Pxxx-5 series	IP68 / NEMA6P		gr / lb
Relative Humidity	0 - 100			%

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

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER <sup>(2)</sup>	SINGLE PHASE	THREE PHASE 208V	THREE PHASE 480V	
Minimum String Length (Power Optimizers)	8	10	18	
Maximum String Length (Power Optimizers)	25	25	50	
Maximum Power per String	5250	6000	12750	W
Parallel Strings of Different Lengths or Orientations		Yes		

<sup>(2)</sup> It is not allowed to mix P405 with P300/P350/P400/P600/P700 in one string.

