



# SolarEdge Power Optimizer

Module Add-On For North America

P300 / P320 / 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 / P320 / P400 / P405

	P300 (for 60-cell modules)	P320 (for high-power 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	320	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	11	10.1		Adc
Maximum DC Input Current	12.5	13.75	12.63		Adc
Maximum Efficiency				99.5	%
Weighted Efficiency				98.8	%
Overtoltage 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	
<b>INSTALLATION SPECIFICATIONS</b>					
Maximum Allowed System Voltage				1000	Vdc
Compatible inverters				All SolarEdge Single Phase and Three Phase inverters	
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 48 / 5 x 5.97 x 1.89	mm / in
Weight (including cables)	760 / 1.7		830 / 1.8	1064 / 2.3	gr / lb
Input Connector				MC4 Compatible	
Output Wire Type / Connector				Double Insulated; MC4 Compatible	
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.

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/P400/P600/P700 in one string.

