



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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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)	
INPUT					
Rated Input DC Power ⁽¹⁾	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	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)					
Maximum Output Current				15	Adc
Maximum Output Voltage	60			85	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)					
Safety Output Voltage per Power Optimizer				1	Vdc
STANDARD COMPLIANCE					
EMC				FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3	
Safety				IEC62109-1 (class II safety), UL1741	
RoHS				Yes	
INSTALLATION SPECIFICATIONS					
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 50 / 5 x 5.97 x 1.96	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	%

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

PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER ⁽²⁾	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

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

