



SolarEdge Power Optimizer

Frame-Mounted Module Add-On
for North America P320



POWER OPTIMIZER

Fast mount power optimizers with module-level optimization

- Specifically designed to work with SolarEdge inverters
- Quicker installation - Power optimizers can be mounted in advance saving installation time
- 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
- Next generation maintenance with module level monitoring
- Compliant with arc fault protection and rapid shutdown NEC requirements (when installed as part of the SolarEdge system)
- Module-level voltage shutdown for installer and firefighter safety



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Optimizer model (typical module compatibility)	P320 (for high-power 60-cell modules)	
INPUT		
Rated Input DC Power ⁽¹⁾	300	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	Vdc
MPPT Operating Range	8 - 48	Vdc
Maximum Short Circuit Current (Isc)	11	Adc
Maximum DC Input Current	13.75	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overvoltage Category	II	
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING SOLAREEDGE INVERTER)		
Maximum Output Current	15	Adc
Maximum Output Voltage	60	Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM SOLAREEDGE INVERTER OR SOLAREEDGE INVERTER OFF)		
Safety Output Voltage per Power Optimizer	1 ± 0.1	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 28 / 5 x 5.97 x 1.1	mm / in
Weight (including cables)	630 / 1.4	gr / lb
Input Connector	MC4 Compatible	
Output Wire Type / Connector	Double Insulated; MC4 Compatible	
Output Wire Length	0.95 / 3.0	m / ft
Operating Temperature Range	-40 - +85 / -40 - +185	
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 HD-WAVE	SINGLE PHASE	THREE PHASE 208V	THREE PHASE 480V	
Minimum String Length (Power Optimizers)	8		10	18	
Maximum String Length (Power Optimizers)	25		25	50 ⁽³⁾	
Maximum Power per String	5700 (6000 with SE7600H-US)	5250	6000	12750	W
Parallel Strings of Different Lengths or Orientations	Yes				

⁽²⁾ For detailed string sizing information refer to: http://www.solaredge.com/sites/default/files/string_sizing_na.pdf.

⁽³⁾ A string with more than 30 optimizers does not meet NEC rapid shutdown requirements; safety voltage will be above the 30V requirement

