

Power Optimizer Zep Compatible™

Module Add-On For North America

P320-ZEP, P400-ZEP



POWEROPTIMIZER

Compatible with Zep Groove framed modules

- Specifically designed to work with SolarEdge inverters
- Certified Zep Compatible™ bracket
- Attaches to module frame without screws - reduces on-roof labor and mounting costs
- Power optimizer equipment grounded through the bracket
- High efficiency with module-level MPPT, for maximized system energy production and revenue, and fast project ROI
- Superior efficiency (99.5%)
- Mitigates all types of module mismatch losses, 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

/ Power Optimizer - Zep Compatible™

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Optimizer model (typical module compatibility)	P320-ZEP (for 60-cell modules)	P400-ZEP (for 72 & 96-cell modules)	
INPUT			
Rated Input DC power ⁽¹⁾	320	400	W
Absolute Maximum Input Voltage (Voc at lowest temperature)	48	80	Vdc
MPPT Operating Range	8 - 48	8 - 80	Vdc
Maximum Short Circuit Current (Isc)	11	10.1	Adc
Maximum DC Input Current	13.75	12.63	Adc
Maximum Efficiency	99.5		%
Weighted Efficiency	98.8		%
Overvoltage Category	II		
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)			
Maximum Output Current	15		Adc
Maximum Output Voltage	60		Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR 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
Input Connector	MC4 ⁽²⁾		
Output Connector	Double Insulated; 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	IP68 / NEMA 6P		
Relative Humidity	0 - 100		%

* These specifications apply to power optimizers with part number Pxxx-5NM4Mx

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

⁽²⁾ Other input connector types available upon request; contact SolarEdge for details.

PV System Design Using a Solaredge Inverter ⁽³⁾	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 ⁽⁴⁾	
Maximum Power per String	5700 (6000 with SE7600H-US)	5250	6000	12750	W
Parallel Strings of Different Lengths or Orientations	Yes				

⁽³⁾ For detailed string sizing information refer to: http://www.solaredge.com/sites/default/files/string_sizing_na.pdf

⁽⁴⁾ A string with more than 30 optimizers does not meet NEC rapid shutdown requirements; safety voltage will be above the 30V requirement