



SolarEdge Power Optimizer Module Add-On



A superior approach to maximizing the throughput of photovoltaic systems

- Up to 25% More Energy - module-level MPPT eliminates power loss due to module mismatch
- Superior efficiency - Peak (99.5%), Weighted (98.9%)
- Next generation maintenance with module-level monitoring & smart alerts
- Automatic DC Safety - safety during installation, maintenance and firefighting
- Maximum roof utilization - flexible design allowing parallel uneven string lengths & multi-faceted installations
- Independent optimization technology (IndOP™) - allows operation with any inverter and requires no additional interface hardware
- Operates in extreme environmental conditions



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The most cost effective solution for residential, commercial & large field installations



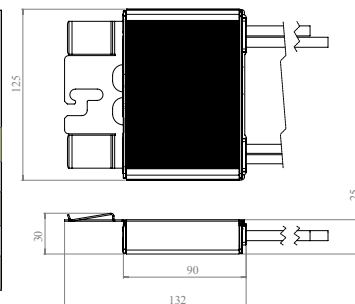
SolarEdge Power Optimizer Module Add-On

OPA250-RV / OPA300-LV / OPA400-MV / OPA400-EV

SOLUTION OVERVIEW

SolarEdge power optimizers can be installed with a SolarEdge inverter or with any third party inverter without the need for additional interface hardware. When installed with a third party inverter, the SolarEdge Safety & Monitoring Interface is required in order to support module-level monitoring and safety capabilities.

BENEFITS PER SOLUTION	SolarEdge power optimizer and SolarEdge inverter	SolarEdge power optimizer with SolarEdge Monitoring & Safety Interface and any inverter	SolarEdge power optimizer with any inverter
Added Energy	✓	✓	✓
Safety	✓	✓	-
Monitoring	✓	✓	-
Longer and Uneven Strings	✓	Module & inverter dependent	Module & inverter dependent
Multi-facet Design	✓	✓	✓



TECHNICAL DATA

	OPA250-RV	OPA300-LV	OPA400-MV	OPA400-EV	
INPUT					
Rated Input DC power (*)	250	300	400	400	W
Absolute Maximum Input Voltage (Voc)	47	55	75	130	Vdc
MPPT Operating Range	5 - 47	5 - 55	5 - 75	15 - 130	Vdc
Maximum Input Current (Isc)	10	10	12.5	7	Adc
Maximum Efficiency	99.5				%
Weighted Efficiency	98.9				%
Overtoltage Category	II				
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO A SOLAREEDGE INVERTER)					
Maximum Output Current	15				Adc
Operating Output Voltage	5 - 60				Vdc
Total Maximum String Voltage - US and EU 1-ph	500				Vdc
Total Maximum String Voltage - EU 3-ph	950				Vdc
PV SYSTEM DESIGN USING A SOLAREEDGE INVERTER					
Minimum Number of Power Optimizers per String (1 or More Modules per power optimizer)	8 (1-ph system) / 16 (3-ph system)				
Maximum Number of Power Optimizers per String (1 or More Modules per power optimizer)	Module power dependent; maximum 25 (1-ph system) / 50 (3-ph system)				
Maximum Power per String	5250 (1-ph system) / 11250 (3-ph system)				W
Parallel Strings of Different Lengths or Orientations	Yes				
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)					
Safety Output Voltage per Power Optimizer	1 (**)				Vdc
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO A THIRD PARTY INVERTER)					
Maximum Output Current	15				Adc
Operating Output Voltage	5 - Voc				Vdc
Maximum System Voltage - US	600				Vdc
Maximum System Voltage - EU	1000				Vdc
PV SYSTEM DESIGN USING A THIRD PARTY INVERTER					
According to Inverter Design Rules					
STANDARD COMPLIANCE					
EMC	FCC Part15 Class B, IEC61000-6-2, IEC61000-6-3				
Safety	IEC-62103 (class II safety), UL1741				
Material	UL-94 (5-VA), UV Resistant				
RoHS	Yes				
INSTALLATION SPECIFICATIONS					
Dimensions includ. mounting bracket (W x L x H)	125 x 132 x 30 / 4.9 x 5.2 x 1.2				mm / in
Dimensions excl. mounting bracket (W x L x H)	125 x 90 x 25 / 4.9 x 3.5 x 1.0				mm / in
Net Weight (Weight Includ. cables)	400 (800) / 0.8 (1.7)				gr / lb
Output Wire Type	Double insulated PV wire; 6 mm ² ; MC4				
Output Wire Length	0.95 m / 3 ft	0.95 m / 3 ft	1.2 m / 4 ft	1.5 m / 5 ft	
Operating Temperature Range	-40 - +85 / -40 - +185				°C / °F
Input Connector	MC4 / MC3 / Tyco / H+S / Amphenol				
Protection Rating	IP67 / NEMA6				
Relative Humidity	0 - 100				%

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

(**) When either a SolarEdge inverter or a SolarEdge Safety and Monitoring Interface (if connected to a 3rd party inverter) is turned off



■ USA ■ Germany ■ Italy ■ France ■ Japan ■ China ■ Israel

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