



SolarEdge Power Optimizer Module Add-On



A superior approach to maximizing the throughput of photovoltaic systems using module embedded electronics

- Up to 25% increase in power output
- Superior efficiency (99.5%) - peak performance in both mismatched and unshaded conditions
- Flexible system design for maximum space utilization
- Next generation maintenance with module level monitoring and smart alerts
- Unprecedented installer and firefighter safety

- **The most cost effective solution for residential, commercial and large field installations**



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SolarEdge Power Optimizer OP250-LV OP300-MV Module Add-On OP400-EV OP400-MV

HIGHLIGHTS

- Module level MPPT - optimizes each module independently
- Module-level monitoring for automatic module and string level fault detection allowing easy maintenance
- Electric arc detection - reduces fire hazards
- Unprecedented installer and firefighter safety mode - safe module voltage when inverter is disconnected or off
- Allows parallel uneven length strings and multi-faceted installations
- Immediate installation feedback for quick commissioning

TECHNICAL DATA

	OP250-LV	OP300-MV/OP400-MV	OP400-EV	
INPUT				
Rated Input DC power (*)	250	300 / 400	400	W
Absolute Maximum Input Voltage (Voc)	55	75	125	Vdc
MPPT Operating Range	5 - 55	5 - 75	15 - 125	Vdc
Maximum Input Current (Isc)	10	10	7	Adc
Reverse-Polarity Protection	Yes			
Maximum Efficiency	99.5			%
European Weighted Efficiency	98.8			%
CEC Weighted Efficiency	98.7			%
Overvoltage Category	II			
OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)				
Maximum Output Current	15			Adc
Operating Output Voltage	5 - 60			Vdc
Total Maximum String Voltage (Controlled by Inverter) - US and EU 1-ph	500			Vdc
Total Maximum String Voltage (Controlled by Inverter) - EU 3-ph	950			Vdc
OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)				
Safety Output Voltage per Power Optimizer	1			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			
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 (WxLxH)	120x130x37 / 4.72x5.11x1.45			mm / in
Weight	450 / 1.0			gr / lb
Output PV Wire	0.95 m / 3 ft length ; 6 mm ² ; MC4		1.3 m / 4 ft length ; 6 mm ² ; MC4	
Input Connector	MC4 / MC3 / Tyco / H+S / Amphenol			
Operating Temperature Range	-40 - +65 / -40 - +150			°C / °F
Protection Rating	IP65 / NEMA 4			
Relative Humidity	0 - 100			%

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

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



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