



SolarEdge Power Optimizer Module Add-On



A superior approach to maximizing the throughput of photovoltaic systems

- 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**



architects of energy™



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



solaredge
architects of energy™

www.solaredge.com

© SolarEdge Technologies, Inc. 2009-2012. All rights reserved. SOLAREEDGE, the SolarEdge logo, ARCHITECTS OF ENERGY and OPTIMIZED BY SOLAREEDGE are trademarks or registered trademarks of SolarEdge Technologies, Inc. All other trademarks mentioned herein are trademarks of their respective owners. Date: 05/2012. V.01. Subject to change without notice.