



## SolarEdge Power Optimizer Module Add-On Box Solution



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

- Up to 25% increase in power output
- 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**
- **Designed for any crystalline silicon module**



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# SolarEdge Power Optimizer

## Module Add-On Box Solution

PB250-AOB  
PB350-AOB

### HIGHLIGHTS

- Add-On power optimizer installed on each panel
- Lower installation costs with faster design, less wiring, diodes, fuses and better maintenance
- Module-level monitoring - for easy module and string level fault detection with no added wiring
- Immediate installation feedback for quick commissioning
- Unprecedented installer and firefighter Safety Mode - safe module voltage when inverter is disconnected or off
- Part of SolarEdge's patented Smart-DC system
- Easy no constraint installation – use the same installation methods as exist today with all the SolarEdge added benefits
- Panel level MPPT - optimizes each panel separately
- Allows parallel uneven length strings with no added diodes
- Simplifies panel inventory considerations

### TECHNICAL DATA

	PB250-AOB / PB350-AOB	
<b>INPUT</b>		
Rated Input DC power	250 / 350	W
Absolute Maximum Input Voltage (Voc)	60 (*)	Vdc
MPPT Operating Range	5 - 60	Vdc
Maximum Input Current	10	Adc
Reverse-Polarity Protection	Yes	
Maximum Efficiency	98.6	%
European Weighted Efficiency	97.8	%
CEC Weighted Efficiency	97.7	%
Inductive Lightning Protection	1 / 3	m / ft
Nighttime Power Consumption	0	W
<b>OUTPUT DURING OPERATION (POWER OPTIMIZER CONNECTED TO OPERATING INVERTER)</b>		
Maximum Output Current	15	Adc
Operating Output Voltage	5 - 60	Vdc
Total Maximum String Voltage (Controlled by Inverter) - US and EU 1-ph	550	Vdc
Total Maximum String Voltage (Controlled by Inverter) - EU 3-ph	950	Vdc
<b>OUTPUT DURING STANDBY (POWER OPTIMIZER DISCONNECTED FROM INVERTER OR INVERTER OFF)</b>		
Safety Output Voltage per Power Optimizer	1	Vdc
<b>PV SYSTEM DESIGN</b>		
Minimum Number of Power Optimizers per String (1 or More Modules per power optimizer)	8 (1ph system) / 15 (3ph system)	
Maximum Number of Power Optimizers per String (1 or More Modules per power optimizer)	module power dependant; typically 20 - 25 (1ph system) / 45 - 55 (3ph system)	
Parallel Strings of Different Lengths or Orientations	Yes	
<b>STANDARD COMPLIANCE</b>		
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	
<b>INSTALLATION SPECIFICATIONS</b>		
Dimensions (WxLxH)	170x140x35 / 5.9x5.6x1.1	mm / in
Weight	800 / 1.8	g / lb
Output PV Wire	1.05 m / 3.6 ft length ; 6 mm <sup>2</sup> ; MC4 compatible	
Input Connector	MC4 compatible / Huber-Suhner / Tyco	
Operating Temperature Range	-40 - +65 / -40 - +150	
Protection Rating	IP65 Outdoor Use / NEMA 3R	
Relative Humidity	0 - 100	

(\*) TFI version up to 100V

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