



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**



architects of energy™



SolarEdge Power Optimizer

Module Add-On Box Solution

PB250-A0B
PB350-A0B

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 | | |
| INPUT | | | |
| 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 |
| 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 | 550 | | 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 | | | |
| 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 | | |
| 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) | 170x140x35 / 5.9x5.6x1.1 | | mm / in |
| Weight | 800 / 1.8 | | g / lb |
| Output PV Wire | 1.05 m / 3.6 ft length ; 6 mm² ; MC4 compatible | | |
| Input Connector | MC4 compatible / Huber-Suhner / Tyco | | |
| Operating Temperature Range | -40 - +65 / -40 - +150 | | °C / °F |
| Protection Rating | IP65 Outdoor Use / NEMA 3R | | |
| Relative Humidity | 0 - 100 | | % |

(*) TFI version up to 100V

USA 900 Golden Gate Terrace, Suite E, Grass Valley CA 95945, USA
Germany Bretonischer Ring 18, 85630 Grasbrunn (Munich), Germany
Japan B-9 Ariake Frontier Building, 3-7-26 Ariake, Koto-Ku, Tokyo 135-0063, Japan
Israel 6 HeHarash St. P.O.Box 7349, Neve Neeman, Hod Hasharon 45240, Israel

www.solaredge.com

© SolarEdge Technologies, Inc. 2009-2011 . 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: 06/2011. Subject to change without notice.



solaredge
architects of energy™