



SolarEdge PowerBox™ 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 PowerBox™

Module Add-On Box Solution

PB250-A0B
PB350-A0B

HIGHLIGHTS

- Add-On PowerBox 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

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 (POWERBOX 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 (POWERBOX DISCONNECTED FROM INVERTER OR INVERTER OFF)		
Safety Output Voltage per PowerBox	1	Vdc
PV SYSTEM DESIGN		
Minimum Number of PowerBoxes per String (1 or More Modules per PowerBox)	8 (1ph system) / 15 (3ph system)	
Maximum Number of PowerBoxes per String (1 or More Modules per PowerBox)	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	UL1741, IEC-62103 (class II safety), IEC61730	
Material	UL-94 (5-VA), UV Resistant	
RoHS	Yes	
INSTALLATION SPECIFICATIONS		
Dimensions (WxLxH)	149.5x142x27.2 / 5.9x5.6x1.1	mm / in
Weight	800 / 1.8	g / lb
Output PV Wire	1.05 m / 3.6 ft length ; 6 mm ² ; 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

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