SMA PV OFFSET BOX





Economical

- Low power consumption
- Maintainance of performance capability
- Regeneration of PV modules affected by PID

Flexible

- Different operating modes, as night operation, continuous operation
- Ideal for transformerless inverters

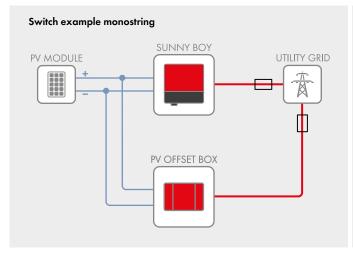
Simple

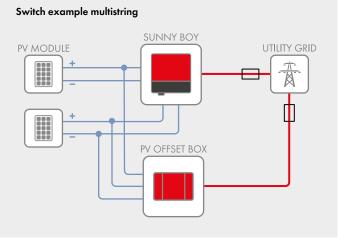
- Fully automatic operation
- Integrated function control

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Automatic Night-Time Discharging of PV Modules

Certain kinds of PV modules are subject to power degradation when exposed to negative voltage to ground (polarization). The PV Offset Box maintains the performance capability of these modules even if they have inverters that cannot be grounded. If the degradation has already started, the device helps to regenerate the modules. The PV Offset Box is designed for inverters up to 1,000 V. Operation with all PV array components (PV modules, cables, inverters) has to be released by the respective manufacturer.





Technical data	PV Offset Box
PV array / inverter input	
Max. PV voltage	1000 V
Min. MPP voltage (in feed-in operation of the inverter)	75 V
Max. PV voltage (in offset operation)	50 V
Min. system voltage (V) of all components	400 V
Min. insulation resistance	200 kΩ
Output voltage to ground	400 V to 1000 V
Max. output current	3.3 mA
Grid (AC)	
Nominal AC voltage	100 V to 240 V
Nominal AC grid frequency	50 Hz to 60 Hz
Power consumption in standby operation	< 0.5 W
Typical power consumption in operation	3 W
General data	
Dimensions (W / H / D)	270 / 230 / 100 mm (10.6 / 9.0 / 3.9 inches)
Weight	1.4 kg (3.08 lb)
Operating temperature range	-25 °C to +60 °C (-13 °F to +140 °F)
Indoor / outdoor installation (IP65)	• / •
Features	
PV connection (spring clamp terminal for cables up to 6 mm²)	PV (-) / PVA (+) / PVB (+)
AC-connection (spring clamp terminal for cables up to 1.5 mm²)	IN: N / L / FE
7 to connection (spring claim) ferminarior casies up to 1.5 min 7	OUT: N / L / FE
LED display: operation	green
LED display: failure	red
Warranty	•
Certificates and approvals	www.SMA-Solar.com
Approvals	
The PV OFFSET BOX has been approved by SMA for the following string inverters:	SB 3000TL-21 ¹ , SB 3600TL-21 ¹ , SB 4000TL-21 ¹ SB 5000TL-21 ¹ , SB 6000TL-21 ¹
	STP 8000TL-10, STP 10000TL-10, STP 12000TL-10 STP 15000TL-10, STP 17000TL-10
	STP 5000TL-20 ² , STP 6000TL-20 ² , STP 7000TL-20 ² , STP 8000TL-20 ² , STP 9000TL-20 ² STP 10000TL-20, STP 12000TL-20
	STP 15000TLEE-10 ² , STP 20000TLEE-10 ²
	SB 3500TL-JP-22, SB 4500TL-JP-22
	STP 10000TLEE-JP-10, STP 10000TLEE-JP-11, STP 20000TLEE-JP-11
From date of manufacture 02/03/2014	
² From date of manufacture 02/10/2014	
Status October 2014	
Type designation	PVO-N-20