



## SBB 16-10

### String Booster Box

- ✓ **Four independent MPP-Trackers included.**
- ✓ Achieve **direct DC coupling** of a PV Plant to an Energy Storage System.
- ✓ Specially developed **IGBT modules with Silicon Carbide (SiC) diodes** for outstanding performance.
- ✓ **IP66 rated protection class** – for the most demanding environments.
- ✓ **CAN-Bus** communication interface.

TECHNICAL DATA		
MODEL NAME		
String Booster Box SBB 16-10 (HW510)		
ELECTRICAL SIDE		COMMENTS
Maximum DC-voltage ( $U_{max(DC)}$ )	1000 V	For DC coupled systems, see below*
Number of MPPTs	4	
Number of strings per MPP-Tracker	4	
MPP-range ( $U_{DC, mpp}$ )	From 400 V up to 820 V	
Rated string current ( $I_{N(DC), string}$ )	8 A	
Maximum string current ( $I_{max(DC), string}$ )	10 A	
Number of string current measuring points	8	
Number of strings per measuring point	2	
Maximum output current ( $I_{max(DC), SBB}$ )	125 A	
Nominal output DC-voltage ( $U_{N(DC), SBB}$ )	820 V	
Efficiency	(97.6   99.1   99.2   99.1   98.6) %	At ( 10   25   50   75   100 ) % power
EU efficiency	98.8 %	Including auxiliary power
Auxiliary power	100...240 V <sub>AC</sub> 0,17...0,4 A 45...65 Hz	
Auxiliary losses	40 W	
GENERAL		
Communication interface	CAN-Bus	
Maximum bus length per CAN-Bus string	800 m	
Maximum number of boxes per CAB-Bus string	25	
Ambient temperature	From -25°C up to 60°C (From -13°F up to 140°F)	Direct sun radiation not permitted
Power reduction	From 50°C (122°F)	
Maximum altitude	1500 m above sea level	Without power derating
Cooling type	Active air cooling	
Protection class	IP66	
Dimensions (L × W × H)	400 x 600 x 800	Dimensions in millimeters
Weight	Approx. 58 kg	
Colour	RAL 7035	
Noise level	<70 dBA	
EMI	Complies EN61000-6-2, EN61000-6-4	
CE-conformity	Complies	

**\*DC coupled systems:**

Direct DC coupling of a PV Plant to an Energy Storage System requires that the  $U_{OC(DC)}$  of the PV field has to be below the minimum Voltage of the battery system.

**FEATURES & OPTIONS**

		COMMENTS
Overcurrent and short circuit protection	F	
Surge protection	F	
Fuses in supply and return lines of each string	F	
Class 2 surge arrester with monitoring function	F	
External power supply	F	
Mounting kit for walls and pillars	O	
Class 1 surge arrester with monitoring function	O	

(O) – Optional      (F) – Feature

**MECHANICAL DRAWINGS**



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