

DC-Combiner Box

DC combiner.



In Cooperation with
HIS
we connect solar energy

Make short work of long cables.

Designed for a DC system voltage of 1000 V to 1 500 V

Direct connection of DC strings

String monitoring (optional)

Protection rating IP65

IEC 61439-2 compliant planning and construction

Surge protection device type I + II

Flexible number of DC inputs

Fuse protection on plus and minus side 15 A / 20 A / 30 A

Depending on the version, the size and appearance of the housing may vary



Technical Data

DC input data	CD-Combiner Box	
Max. no-load voltage	1 000 V	1 500 V
Max. input current	15 / 20 A	15 / 20 / 30 A
Max. short circuit current $I_{sc \max}$	250 / 400 A	250 / 400 A
Number of DC connections	10 / 12 ¹⁾	10 / 13 / 15 ²⁾ und 16 / 20 / 24 ¹⁾
String monitoring (optional) ³⁾		
Measurement range-current	0 - 360 A	
Current measurement tolerance	< 0.5 %	
Measurement range-voltage	0 - 1500 V	
Voltage measurement tolerance	< 0.5 %	
Interfaces	RS485 (Modbus RTU) 2 x digital input	
Control units	dip-switches for setting the baud rate, address and protocol type	
Number measuring channels	up to 24	
Self-consumption	< 3 W	
General data		
DC connection (input)	direct connection	
DC connection (output)	cable lug, max. 240 mm ² (0.372 in ²) Cu or Al	
Ambient temperature	-20 °C – +55 °C	
Humidity	0 - 95 %	
Max. installation elevation (above MSL)	2 000 m	
Protection class	IP65	
H x W x D	845 x 635 x 300 mm (16 string) ⁴⁾ 1056 x 852 x 350 mm (20 / 24 string) ⁴⁾	

¹⁾Standard fuse size ²⁾Standard fuse size 30 A

³⁾Measurement tolerances may vary depending on the manufacturer

⁴⁾Depending on the version, the size and appearance of the housing may vary

Versionen	Box 10-16	Box 10-16 Mon	Box 18-24	Box 18-24 Mon
Number of DC inputs	10-16	10-16	18-24	18-24
DC switch	✓	✓	✓	✓
String protection 20 A / 30 A / PV+	✓	✓	✓	✓
String protection 20 A / 30 A / PV -	✓	✓	✓	✓
Fuses	✓	✓	✓	✓
DC surge protection	Typ 1 + 2	Typ 1 + 2	Typ 1 + 2	Typ 1 + 2
String monitoring	-	✓	-	✓
Internal power supply for measuring board	-	✓	-	✓
Overvoltage protection RS485 / Measuring board	-	✓	-	✓
Weight ⁵⁾	31 kg	57 kg	55 kg	59 kg

⁵⁾Depending on the version, the weight of the DC-Combiner may vary

standard = ✓