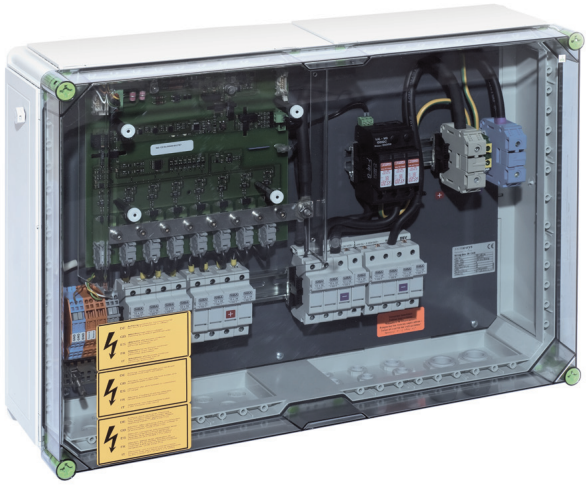
SOLAR INVERTER



Sunways String Box CAN

The Sunways String Box CAN is the optimal solution for string consolidation near the modules with the aim of reducing line losses on the DC side. Integrated string monitoring ensures high yields for years to come.

Design

The string box features a weather-resistant housing with IP65 rating for consolidating up to 8 PV strings.

String monitoring

The string currents for each input, the system voltage, the PCB temperature and tripping of the surge protector are monitored. The measured values are transferred to the PT Solar Inverter via the CAN bus (using the CANopen DS-437 protocol), which sends the data via e-mail to the Sunways Portal for analysis.

Overview

The Sunways String Box CAN is available with the options listed below. It should be noted that per every 10 String Boxes you need a version with 24 V DC power supply (Art. No. SE113E10A or SE115E10A) because one String Box can only supply up to nine further String Boxes with power via CAN bus.

String Boxes

Art. No.	Description
SE112E10A	String Box CAN 08 OVP
SE113E10A	String Box CAN 08 OVP, VDC
SE114E10A	String Box CAN 08 OVP, DCL
SE115E10A	String Box CAN 08 OVP, VDC, DCL

OVP = Overvoltage Protection

DCL = DC switch

VDC = 24 V power supply

PV fuses 10 x 38 mm (set of 10)

Art. No.	Description
SE106E10A	8 A, 1000 V (for 5“ cell)
SE117E10A	10 A, 1000 V
SE107E10A	12 A, 1000 V (for 6“ cell)
SE108E10A	16 A, 1000 V
SE116E10A	20 A, 1000 V

PV sleeves 10 x 38 mm Aluminium (set of 10)

Art. No.	Description
SE109E10A	hollow shafts as fuse substitute

Information and Sales

Sunways AG · Photovoltaic Technology · Macairestraße 3-5
D-78467 Konstanz · Telephon +49 (0)7531 996 77-0
Fax +49 (0)7531 996 77-444 · E-Mail info@sunways.de
www.sunways.de

sunways
Photovoltaic Technology

Technical Data String Box CAN

Input		
Number of inputs	8 x plus, 8 x minus	
Max. DC voltage/terminal	1000 V	
Max. DC current/terminal	14 A (notice max. output current)	
DIN fitting	M16	
Wire cross-section terminal	max. 25 mm²	
Fuse socket	10 x 38 mm	
Fuse socket configuration	minus side: dummy sleeves / plus side: order suitable fuses separately	
Output		
Number of outputs	1 x plus, 1 x minus	
Max. DC voltage / max. DC current	1,000 V / 80 A	
Wire cross-section terminal	fine-strand / fine-strand with end splice:	16 - 70 mm²
	single-strand / multi-strand:	16 - 70 mm²
DC load break switch (optional)		
Max. open-circuit voltage (VDC)	1,000 V	
Max. DC current (ADC)	80 A	
Output terminals	screw terminals, 70 mm²	
Cable entry	DIN fittings	
String monitoring		
Power supply	230 V AC / 24 V DC power supply unit for supply of up to 10 String Boxes, integrated in the corresponding version.	
Power consumption	max. 1.5 W	
Measuring channels	8 x string currents, 1 x string voltage, 2 x potential-free digital inputs for connection of signal contacts	
Data bus	CAN bus (CANopen DS-437 protocol)	
Data bus cable type	external application: Li2YCYv / internal application: patch cable CAT 5e	
Maximum number of bus devices	50 Solar Inverter PT, 50 String Boxes (per CAN bus)	
Overvoltage protection category / type	class II / „C“ / Phoenix VAL MS1000 DC	
String comparison and alarming	Sunways Portal Pro access (with costs)	
Housing		
Design	protection class II / IP65, polycarbonate	
Dimensions	approx. 640 x 440 x 320 mm (W x H x D)	
Ambient temperature	-25°C to 45°C	
Other features	2 pressure compensation elements to prevent condensation	

Diagram of String-Box CAN