

# Solen Series

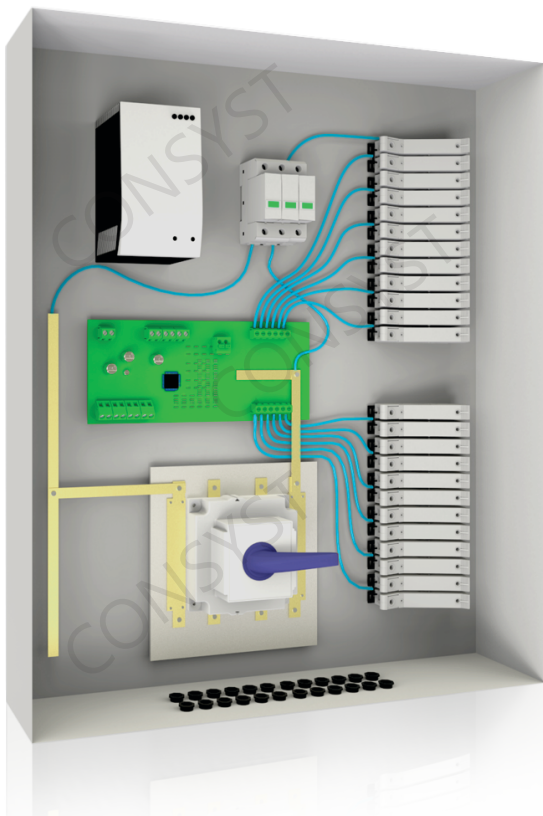
SMBs | SCBs

## DC String Combiner Boxes (SCB) with optional String level monitoring for Solar PV Power plants

DC String combiner boxes providing protection and optional performance monitoring for 1000/1500 VDC applications.

Additional optional features such as Bus voltage sensors, digital and analog inputs, onboard temperature sensors etc.

Current reading accuracy better than 0.15%, current reading precision of 0.5% and extended operation range upto +70°C.



### Easy-Installation

- Capability to connect the DC cables from PV modules in MC4 termination at the box or M16 cable gland at the fuses.
- 2 DC output cables terminated at the isolator through PG40 glands.

### Design Features

- Durable FRP/PC enclosure to prevent the system from corrosion.
- Power production tracking, detection of failure and aging of PV modules reduces OpEx.
- Well equipped for safety with no compromise on quality and reliability.

### Flexibility

- The solution fits for all PV systems irrespective of scale/type of the PV plant.
- Product with and without string current monitoring option.
- Ranges for different number of string configurations.
- Field weather sensors can be easily connected to the box without using any additional devices/ components.
- Self powering feature without any additional power supply.

# Technical Specifications



Device Name	With Monitoring				Without Monitoring
	SMB-8	SMB-12	SMB-16	SMB-24	SCB-8/12/16/24
<b>Electrical Specifications</b>					
Number of Inputs	8	12	16	24	8/12/16/24
Rated DC Voltage	1000/1500 VDC				
Max Current per Measuring Channel	25A	25A	25A	25A	25A
Maximum DC output	80A	120A	160A	240A	400A (Max)
Power Supply (By Internal DC-DC Converter)	24 VDC				-
<b>Environmental Specifications</b>					
Ambient Temperature (SMU)	from -10 to +70 Deg C				
Working Atmosphere	Without corrosive gas				
Humidity	up to 95%				
<b>Features</b>					
Measuring parameters	Input current, string voltage, onboard temp, SPD status, Disconnecter Status				-
Power consumption	<3 W				-
DC Input overcurrent protection	2+ -/ 1+ Fused protection				
DC overvoltage protection	Surge protector, 1000/ 1500 VDC, type 2				
Measuring accuracy	Better than 0.15 %				-
Digital Inputs	2				-
Analog Input	1PT 100				-
Communication Interface	Modbus RS 485/ Wireless option (Model SMB-S)				-
Input DC Cable entry	PG16 Glands termination at fuse				-
Output DC Cable Entry	PG40 Gland with ring type termination				-
<b>Features</b>					
Material	FRP/PC/ABS				-
Protection	IP65				-
Dimension(mm)	600x600x170	600x600x170	600x760x250	800x800x250	Variable as per no. of strings
Door type	Hinged, Opaque				

\*Note: Customized options are available. The Technical details are subject to change.