string.CC

8,16,24,32 Generator Connection Box

Most important features

DC Combiner Box
String.CC IP65 with ground mountable pedestal
String.CB IP65 wall mount enclosure
Version available

- **8, 12, 16, 24, 32 PV strings can be connected**
  other versions available on request

- **Consistent 1000 VDC layout (option 1500)**

- **String monitoring measure device String.bloxx or String.bloxx "E"**

- **Overvoltage protection**
  SPD 1000 VDC

- **Lever type switch fuse**
  in positive and negative pole with contact protection
  push-in terminal block for string connection
  Conductor cross section 1,5 – 10 mm²

- **PV Fuse 10-20A/1000VDC**
  in positive and negative pole with contact protection

- **DC load break switch**
  120-400A

- **String connection terminals**
  1,5 - 10 mm² (optional MC3, MC4)

- **enclosure IP65 (material: polyester)**
  H800 x W600 x D300mm
  pedestal for burying into soil
  H925xW585xD310enclosure

- **Cable gland**
  M16 string cable (4,0-10,0mm)
  M50 DC Out cable (22,0-29,0mm)
  M25 COM cabel (10,0-17,0mm)
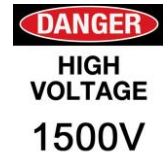 M20 grounding cabel (6,5-12,0mm)

String Monitor Features

- **Features string monitoring "String.bloxx"**
- 8,16, 24 Current measurement channels
- 1 analog input channel for voltage, 0-1000 VDC string voltage
- 2 Digital inputs
  Monitoring of overvoltage protection and main switch
- RS485 fieldbus interface
  up to 115,2 kbps: Modbus-RTU (optional OEM)
- Signal conditioning
  calculated DC Power, linearization, mean value,
  Min/Max storage, alarm
- **Features String.bloxx 208, 116, 124**
- Integrated LC display, Display of all readings including current and DC power
- Analog current measurements ± 26 A
- 1 PT1000 Cabinet temperature sensor
- 1 PT1000 Input
- Monitoring of overvoltage protection and main switch
- **Features String.bloxx 116 E, 124 E**
  - o 16/24 Analog current measurements + 26 A
  - o On board Temperature sensor

string.bloxx

8/16/24 Channel String Monitor

String.bloxx 208, 116, 124

String.bloxx 116 E, 124E

DANGER HIGH VOLTAGE 1500V

Key features:

- **8-32 PV solar strings per board,**

- **String.bloxx 208, 8 analog input channels for current**
  ± 26 A string current

- **String.bloxx 116, 16 analog input channels for current**
  ± 26 A string current

- **String.bloxx 124, 24 analog input channels for current**
  ± 26 A string current

- **1 analog input channel for voltage**
  0-1000 VDC string voltage

- **3 digital inputs**
  Monitoring of overvoltage protection and main switch

- **2 input channels for temperature**
  Panel and switch cabinet temperature

- **1 digital output**

- **Signal conditioning**
  calculated DC Power, linearization, mean value, scaling, alarm

- **Integrated LC display**
  Display of all readings, configuration,

- **RS485 fieldbus interface**
  up to 115.2 kbps: Modbus-RTU (optional OEM protocols)

- **Connectable to data logger**
  e. g. Q.reader or other 3rd party applications

- **Electromagnetic Compatibility**

Key features:

- **16-32 PV solar strings per board,**

- **String.bloxx 116E, 1000V System Voltage, 16 analog input channels for current**
  ± 26 A string current

- **String.bloxx 124E, 1000V System Voltage, 24 analog input channels for current**
  ± 26 A string current

- **String.bloxx 116E 1500V, 1500V System Voltage, 16 analog input channels for current**
  ± 26 A string current

- **String.bloxx 124E 1500V, 1500V System Voltage, 24 analog input channels for current**
  ± 26 A string current

- **1 analog input for voltage measurements**
  0-1000 VDC string voltage

- **2 Digital inputs**
  Monitoring of overvoltage protection and main switch

- **On board temperature channel**
  Digital onboard temperature, -40°C to +125°C

- **Signal conditioning**
  Calculated DC Power, linearization, mean value, scaling, alarm

- **RS485 fieldbus interface**
  up to 115.2 kbps: Modbus-RTU (optional OEM protocols)

- **Connectable to data logger**
  e. g. Q.reader or other 3rd party applications

- **Electromagnetic Compatibility**
  according to EN 61000-4 and EN 55011

- **Power Supply 18 .. 36 VDC 1.5W**

- **DIN rail or wall mounting a ccording to DIN 50022**

In large solar systems monitoring and troubleshooting becomes more and more complex. Each operator is interested in finding errors in a module, string, Diaggroup quickly because they can reduce the amount of energy produced and the life of the system greatly. With the help of the Generator Connection Box the individual solar module strings of a photovoltaic system can be connected in parallel and controlled in easy wire and the target wire means valid actions to the inverter.

With the help of string.bloxx it is possible to monitor inverter side currents precisely the DC side of photovoltaic systems. The data exchange between a string bloxx and superior management systems can be done via Open standard Modbus-RTU Bus.