



string.bloxx 208 String Monitor

Gantner
instruments



Most important features:

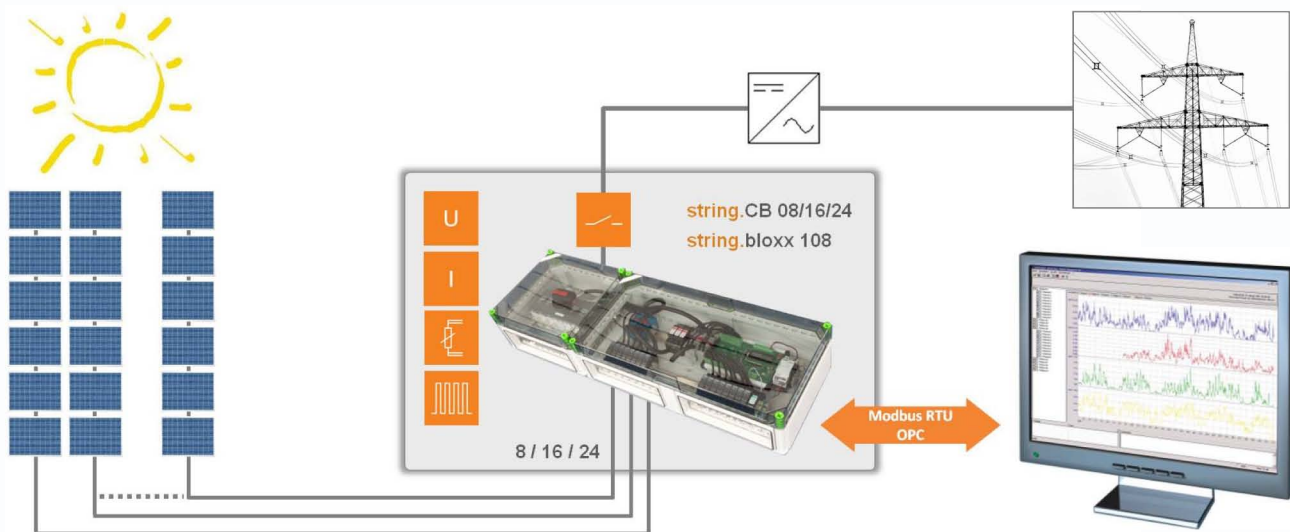
- **8 analog input channels for current**
± 26 A string current, ± 208 A summary
- **1 analog input channel for voltage**
0-1000 VDC string voltage
- **2 input channels for temperature**
Panel and switch cabinet temperature
- **3 digital inputs**
Monitoring of overvoltage protection and main switch
- **1 digital output**
Actuation of main switch
- **Signal conditioning**
calculated DC Power, linearisation, mean value, scaling, alarm
- **Integrated LC display**
Display of all readings, configuration
- **RS485 fieldbus interface**
up to 115,2 kbps: Modbus-RTU, ASCII (optional OEM protocols)
- **Connectable to data logger**
e. g. Q.reader
- **Electromagnetic Compatibility**
according to EN 61000-4 and EN 55011
- **Power supply 10...60 VDC**
- **DIN rail mounting according to DIN 50022 or wall mounting**

In large solar systems monitoring and troubleshooting becomes more complex. Each operator is interested in finding errors in a module, string, or a group quickly because they can reduce the amount of energy produced and the life of the system greatly.

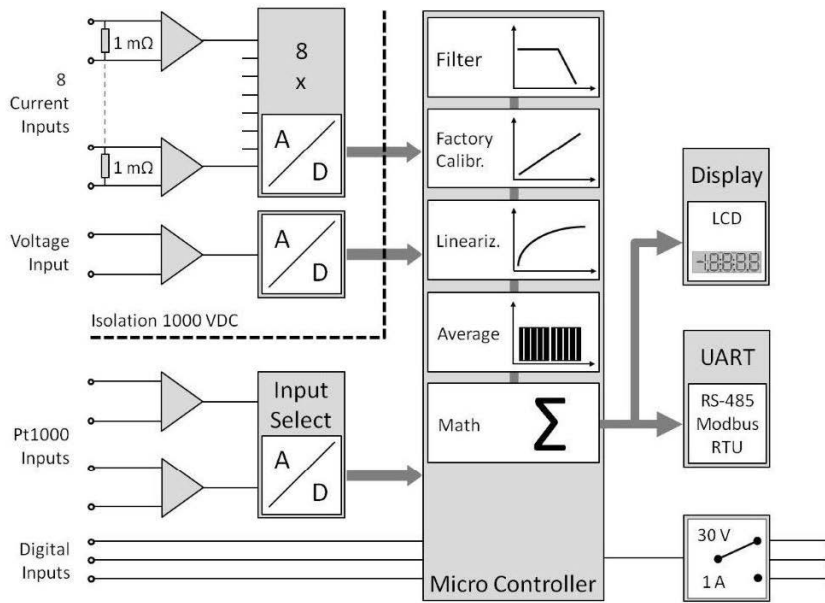
With the help of string.bloxx it is possible to monitor and control inverter-independent precisely the DC side of photovoltaic systems. Thus, defects, contamination, theft or misinterpretation of individual strings are detected and corrected promptly and accurately.

The data exchange between a string.bloxx and superior management system can be direct, for example, the data logger Q.reader.

Innovative is the integrated LCD screen to assist in the installation or trouble shooting control without additional measuring equipment directly in the field every single string.



Block Diagram



Specifications

Input Current

| | |
|-------------|---|
| Max. Number | 8 |
| Range | ± 26 A |
| Accuracy | 0.25% |
| Connection | 0.25 mm ² - 6 mm ² push-in spring-cage connection |

Output Current

| | |
|------------|--|
| Max. | 208A |
| Connection | M8 bolt connector for cable ring terminals |

Input Voltage

| | |
|------------|---|
| Number | 1 |
| Range | 0-1000 VDC |
| Accuracy | 0.2% |
| Connection | 0.25 mm ² - 6 mm ² push-in spring-cage connection |

Input Temperature

| | |
|------------|---|
| Number | 2 |
| Type | Pt1000, 2- and 4-wire |
| Range | -40 bis to 160° |
| Accuracy | 0.5 % |
| Connection | 0.25 mm ² - 1.5 mm ² push-in spring-cage connection |

Digital Inputs

| | |
|------------|---|
| Number | 3 |
| Input | State |
| Connection | 0.25 mm ² - 1.5 mm ² push-in spring-cage connection |

Digital Output

| | |
|------------|---|
| Number | 1 |
| Output | State, Alarm |
| Contact | Relay change |
| Load | 30 VDC/1000 mA (ohmic load) |
| Connection | 0.25 mm ² - 1.5 mm ² push-in spring-cage connection |

Power Supply

| | |
|-------------------|---|
| Power supply | 10 up to 60 VDC, overvoltage and overload protection |
| Power consumption | approx. 1.5 W (0.4W at a sampling rate of 30 seconds) |
| Connection | 0.25 mm ² - 1.5 mm ² push-in spring-cage connection |

Communication Interface

| | |
|------------------------------|---|
| Standard | RS-485, 2-wire |
| Data format | 8e1 |
| Protocols | Modbus-RTU, ASCII: 19.200 bps up to 115.200 bps |
| Number of devices on the bus | max. 250 |
| Connection | 0.25 mm ² - 1.5 mm ² push-in spring-cage connection |

Environmental

| | |
|-----------------------|--|
| Operating temperature | -20°C up to +60°C @ max 208 A current |
| Operating temperature | -20°C up to +75°C, max. 160 A current |
| Storage temperature | -40°C up to +85°C |
| Relative humidity | 5 % up to 95 % at 50°C, non condensing |

Mechanical

| | |
|------------------------|------------------------------|
| Case | Polycarbonate |
| Dimensions (B x H x T) | (221 x 142 x 55) mm |
| Weight | approx. 470 g |
| Mounting | DIN EN-rail or wall mounting |

Warm Up Time

All declarations are valid after a warm up time of 45 minutes.

Valid from March 2011. Specification subject to change without notice