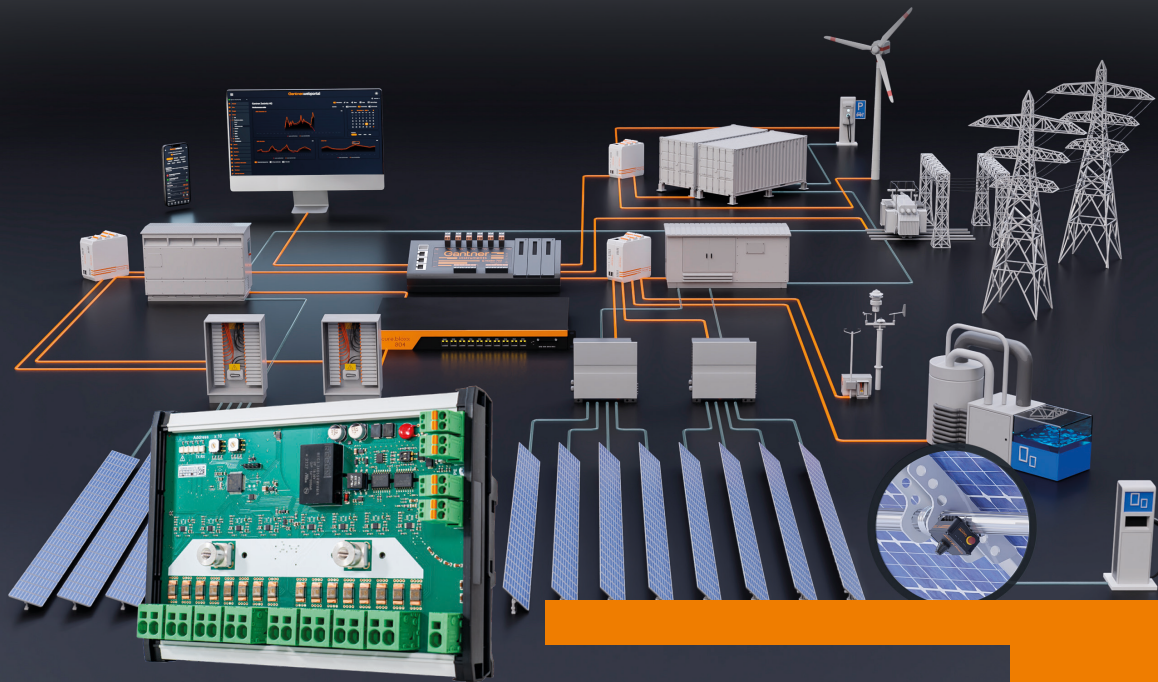


String.bloxx 216 HC

Item number: GI26011168

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String.bloxx 216 HC1500 V 16/32 Channel String Monitoring

Effective PV Monitoring requires constant, solid and traceable PV Plant monitoring data in order to determine actual performance and fulfil owner/investor expectations.

Operators are interested to identify errors and losses in a reliable way to trigger appropriate actions for maximizing energy harvest during the total system lifetime.

With the monitoring of PV Module strings, design and production errors will be recognized on the DC side with high resolution down to PV Module level.

Using DC shunts (vs. Hall Effect sensors) the String.bloxx provides current measurements typically 10 times more accurate and not susceptible to temperature variance. This equates to higher accuracy measurements and better understanding of true system performance. In addition, string voltage (up to 1500V) and DC power on every string can be continuously monitored ensuring maximum system productivity.

Continuous measurement of both cabinet and panel temperatures, along with overvoltage monitoring and main switch control greatly and improves system diagnostics.

This accurate measurement is inverter independent and gives feedback about losses due to inverter malfunction, soiling, shading, PV Module degradation etc.

The String.bloxx communication uses industry standard Modbus protocols for easy and fast integration and reliable data exchange with the data logger.

For longer communication distances fiber optic technology is used.

Key features:

- **16/32 Solar String Inputs Variants for 1500 V system design**
1500VDC system design "String.bloxx 216 HC 1500V"
- **16 Analog inputs for current measurements**
+ 40 A string current (calibrated)
- **1 Analog input for voltage measurements**
0-1500 VDC string voltage
- **2 Digital inputs**
Monitoring of overvoltage protection and main switch
- **Signal conditioning**
Calculated DC Power, linearization, mean value, scaling, alarm
- **RS485 fieldbus interface**
up to 115,2 kbps: Modbus-RTU, (optional OEM protocols)
- **Connectivity**
Data logger (e. g. Q.reader) and www.gantner-webportal.com for worldwide access or other 3rd party applications
- **Electromagnetic Compatibility**
according to EN 61000-4 and EN 55011
- **Power Supply 18 ... 36 VDC**
- **DIN rail or wall mounting according to DIN 50022**

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String.bloxx 216 HC

Technical Data

Input current

Max. number	16
Range	-5A to + 40 A
Accuracy	0,5 %
Connection	0.25 mm ² - 6 mm ² push-in spring-cage connection

Current measurement

Max	400 A
Connection	2x M6 bolt connector for cable ring terminals

Voltage measurement

Number	1
Range	0-1500 VDC
Accuracy	1%
Connection	0.25 mm ² - 6 mm ² push-in spring-cage connection

Cabinet temperature

Type	1 Digital, onboard, accuracy ±1°C, -40°C to 125°C
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Digital inputs

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

Digital inputs

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

Power supply

Power supply	18 up to 36 VDC, overvoltage and overload protection
Power consumption	approx. 1.0 W (0.4W at 30 seconds sample rate)
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, 19k2 bps up to 115k2 bps
Number of devices on the bus	max. 32
Connection	0.25 mm ² - 1.5 mm ² push-in spring-cage connection

Environmental

Storage temperature	-40 °C up to +85 °C
Relative humidity	5 % up to 95 % at 50°C, non-condensing
Electromagnetic Compatibility	according to EN 61000-4 and EN 55011
Maximum operating altitude	6000 m

Mechanical

Case	Polycarbonate
Dimensions (B x H x D)	143 x 196 x 55 mm
Weight	approx. 600 g
Mounting	DIN EN-rail or wall mounting

Data sheet is preliminary and subject to change without notice

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