



string.CC 16 Generator Connection Column

Gantner
instruments



Most important features:

- **16 PV strings can be connected**
other versions available on request
- **Current, voltage and temperature measurement**
- **Overvoltage protection**
1000 VDC and communication
- **Signal contact monitoring**
Circuit breakers and protective devices
- **Signal conditioning**
calculated DC Power, linearisation, mean value, scaling, Min/Max storage, alarm
- **Integrated LC display**
Display of all readings, including current and DC power for each string, configuration
- **RS485 fieldbus interface**
up to 115,2 kbps: Modbus-RTU, ASCII (optional OEM protocols)
- **Can be connected to test controller and data logger**
e. g. Q.reader and Q.pac
- **Lever type switch fuse holder in positive and negative pole**
with contact protection
- **DC load break switch**
- **Consistent 1000 VDC layout**
- **String connection terminals**
1.5 - 10 mm² (optional MC3, MC4)
- **Housing**
Heavy duty industrial quality material and workmanship, IP65, UV and weather resistant, -35°C to +80°C

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 the Generator Connection Column string.CC the individual solar module strands of a photovoltaic system can be connected in parallel and connected to larger wire cross sections to the inverter.

With the integrated string.bloxx it is possible to monitor and to control, inverter-independent precisely the DC side of photovoltaic systems. The data exchange between a string.bloxx and superior management system can be direct, for example, the data logger Q.reader or the Controller Q.pac directly via the open standard Modbus RTU BUS. Thus, for example, a SCADA integration via OPC server without problems.

Specifications

Design	string.CC 16	Design	string.CC 16
DC Input		DC Output	
Number Inputs	16	Max. permitted total current	315 A
Connection	Screwed connection 1,5-10 mm ²	Max. output voltage	1000 VDC
Max. accepted DC input voltage	1000 VDC	Output terminal, Copper plate with hole diameter	11 mm
Current measuring range	±20 A	Maximum connectable tube lug	M10 unisulated
Accuracy	0.25 %	Maximum recommended cable	185 mm ²
Maximal accepted total Voltage measurement	0-1000 VDC	Maximum permissible total current	315 A
Accuracy	0.2 %		
Fuses	Lever release fuses in the plus and minus line		
Current string fuses	2-20 A (optional)		
Fuse dimensions	10 x 38 mm		
Earth terminal	35 mm ²		

DC Output

Max. permitted total current	315 A
Max. output voltage	1000 VDC
Output terminal, Copper plate with hole diameter	11 mm
Maximum connectable tube lug	M10 unisulated
Maximum recommended cable	185 mm ²
Maximum permissible total current	315 A
Temperature measurement	
Number	4
Type	Pt1000 in 2 wire connection
Measuring range	-40 up to +160°C
Connection	0.25 mm ² - 1.5 mm ² push-in spring-cage connection

Digital Input

Use	Monitoring circuit breaker, DC and RS485 OVP
Number used / free	2/4

Digital Output

Number	2
Output	Status, Alarm
Contact	Relay change over contact
Load capacity	30 VDC/1 A (ohmic load)
Connection	0.25 mm ² - 1.5 mm ² push-in spring-cage connection

Auxiliary voltage

Input voltage range	Direct connection 10 up to 60 VDC
Connection	Tension, cross section: 0,08 mm ² bis 1,5 mm ²

Communication

Standard	RS-485, 2-Wire
Data format	8e1
Protocol	Modbus-RTU, ASCII: 19.200 bps up to 115.200 bps
Number of the devices on the bus	maximum 250
Connection	0.25 mm ² - 1.5 mm ² push-in spring-cage connection
Maximum cable length	1200 m over active repeater expandable

General

Width	780 mm
Depth	315 mm
Height without mounting base	845 mm
Height entrenched base / burial depth	900 mm / 600 mm
General information to entrenched base	To avoid an inner condensation of the housing, it has proven to be expedient to replenish after assembly, the foundation in the interior to the height of the cable fastening rail. When you use filler primer base (approximately 75 l, 25l bag, Item no. 95 075), the stack height should be about 200-300 mm. If soil moisture is present or expected, the additional installation of a heating cabinet (approx. 33 W) is recommended.
Weight	55 kg
Housing	UV and weather resistant, fibreglass, RAL 7035 (light grey)
Protection according to EN 60529	IP 43
Class according to EN 61140	2
Overvoltage protection	DC-Side: Class II Communication Cat. 3
Operating temperature	-25°C up to +60°C
Storage temperature	-40°C up to +85°C