

Leading monitoring, control and analytics solutions for a renewable future.

Gantner Instruments Environment Solutions GmbH

### **Gantner Instruments Environment Solutions**

MONITORING, CONTROL AND ANALYTICS OF UTILITY SCALE **PV POWER PLANTS** 

Gantner Instruments Environment Solutions is a world leading full-service provider for monitoring, control and analytics of utility-scale solar systems. The Gantner product portfolio is engineered and manufactured 100% in Germany.

#### **PORTFOLIO:**

- Data logger & power plant controller Q.reader,
- DC String combiner boxes String.CB and monitoring devices String.bloxx
- Monitoring and analytics software Gantner.webportal
- Customized services and engineering Gantner.service
- Certificates & quality management systems according to ISO 9001
- Information security management system according to ISO 27001
- PPC product certificates according to e.g. VDE-AR-N 4110, 4120, 4130, NTS 2.1, SENP 1.1, Portaria 73/2020, Regulation (EU) 2016/631 for medium voltage to extra high-voltage
- Compliant with IEC 61724 Ed.2.0 "Photovoltaic System Performance Monitoring Guidelines for Measurement, Data Exchange and Analysis"

### **Q**.reader DATA LOGGER AND POWER PLANT CONTROLLER "PPC"

The data logger and power plant controller "PPC" Q.reader is a reliable and flexible solution for the control of utility scale as well as industrial and commercial power plants.

- Absolute production constraint
- Power gradient constraint
- Voltage control
- Reactive power control
- Power factor control
- Frequency control

#### Q.reader

VDD BOO DX1 FDX RX1 TX1 R02 TX2 D1 D12

Q.read

RST-IP

C3 TXC3 C4 TXC4 C5 TXC5 C6 TXC5 C6 TXC5 C1 C1 2

er Fyo

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Homepage	Device:	
Custom Overview Inverter Bar		
Inverter Bar Inverter Charts Inverter	Reactive_Pow	er
Report Online Data Events Datafiles Charts	Node: Active: Inputs:	Main V Always Active:
Configuration Logging Settings Channels Setpoint Schedule Modbus Slave Controller		Type: Power Power Chann Adjust
Power Limitation Power Factor Data Upload Custom Pages Management		Active: Delete Type:
System Settings Network Update Maintenance Internal Scripts		Power Power Chann Adjust

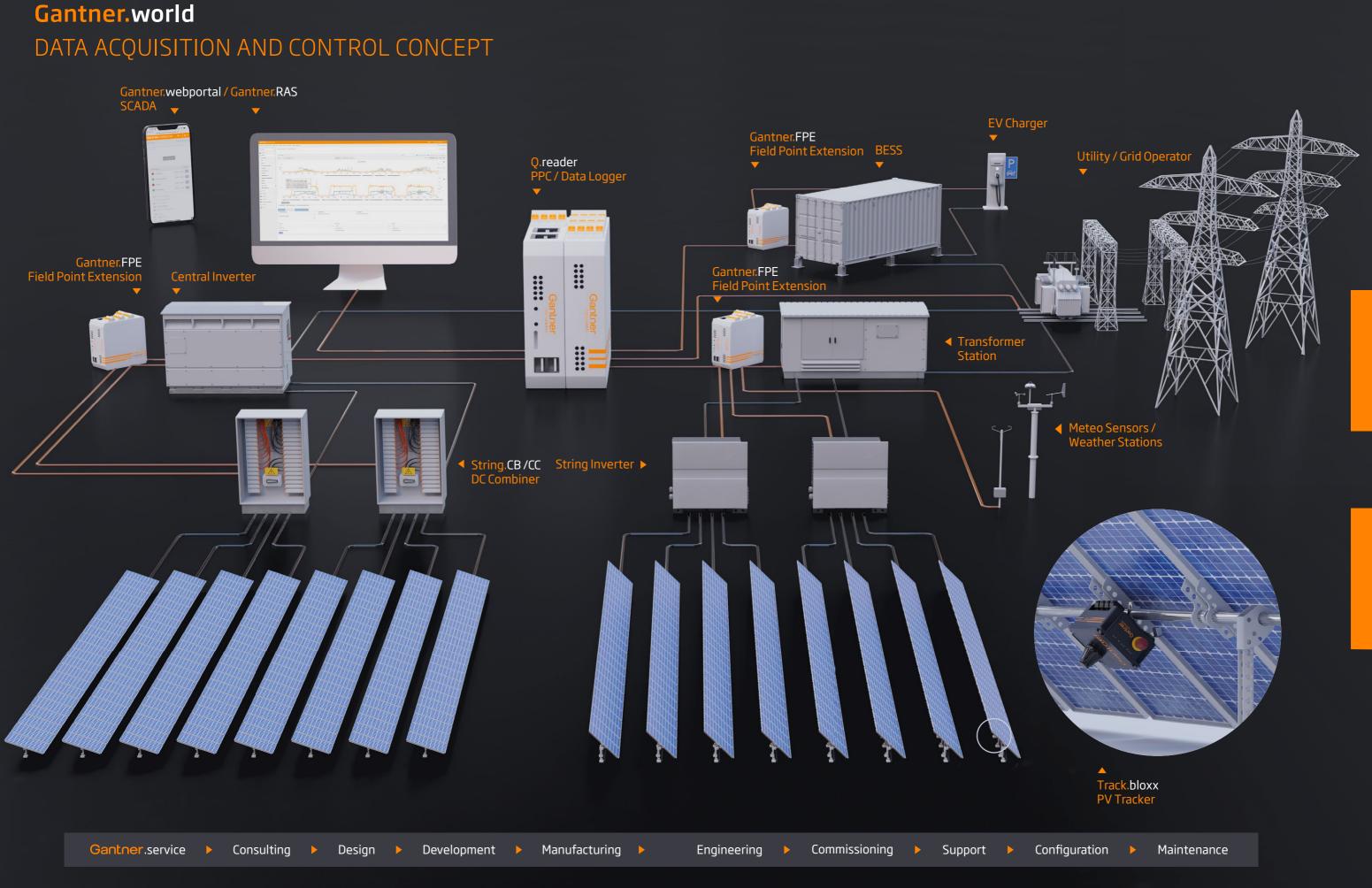
- Certified PPC according to VDE-AR-N 4110, 4120, 4130, NTS 2.1, SENP 1.1, Portaria 73/2020, Regulation (EU) 2016/631 for medium voltage to extra high-voltage
- Supports multiple grid connection points with up to 380 kV voltage
- Supports all leading electrical grid simulation and modeling tools
- Supports multiple industry standard communication protocols such as IEC 60870, DNP3, Modbus and proprietary protocols from solar inverter, PQM and sensor manufacturers
- Scalable distributed IO's analog, digital and communication interfaces e.g., RS-485, Ethernet
- Q.reader customized cabinets "QRC" as plug & play solutions

#### DATA LOGGING AND POWER PLANT CONTROL "PPC"

- Zero Feed-In and battery control "BESS"
- Data acquisition and control up to 10 Hz

			Gantner
			Warning: The default password for the 'admin' user is
~			
Input	Always V		
Direction:	Channel V		
Type:	Consumer V Power factor V		
el:	any	✓ Setpoint	▼ CosPhi_User ▼ ▼
Speed:	Static V	5 s. v	
	Enable 🗙 any	✓ QRCWago	✓ MB_Reactive_Power_Regulation_ON
Input	Channel V		
Direction:	Producer V		
Туре:	Absolute V		
el: Speed:	any	✓ QRCWago	✓ C_Reactive_Power_Regulation
speed:	Static V	5 s ~	

- PSS/E, PSCAD, PowerFactory including EMT simulations
- Software platform independent configuration via web frontend

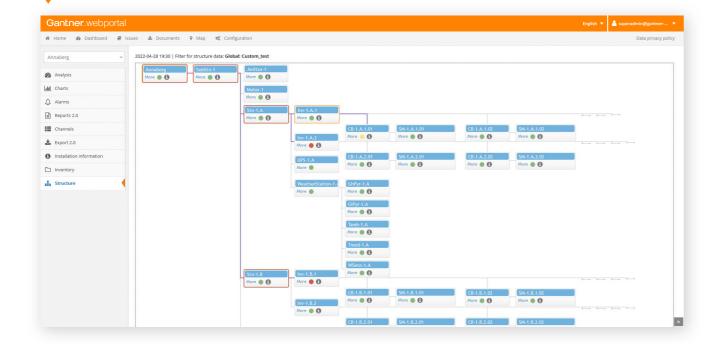


### **Gantner.webportal** SAAS MONITORING, CONTROL, REPORTING AND ANALYTICS

Gantner.webportal is an independent real-time analytics platform for data acquisition, storage and control of PV power plant portfolios & battery energy storage solutions "BESS".

- Vendor-independent PV power plant monitoring for improved bankability
- Unified platform for effective and automated portfolio management of PV power plants
- Portfolio overview with traffic light status system and key performance indicators (KPI)
- Digital Twin enhanced by mechanistic power model Gantner.MPM
- Dashboard, diagrams, table view
- Now-/Forecast of energy production
- Alarm management and integrated issue tracking system
- Automated reporting system
- Inventory management
- API for access by third party solutions





# **String.**bloxx, **String.**CB/CC **RF.**01, **Track.**bloxx BALANCE OF SYSTEM (BOS)

Gantner Instruments offers a broad range of hardware devices for monitoring and control of utility scale PV power plants.



#### String.bloxx 216 HC

- Designed for 1500 V DC
- Dimensioned for up to 32 PV strings



# String.CB/CC

- String combiner boxes DCCBs
- 2-32 string inputs
- Passive or monitored
- Up to 1500 V DC
- Wall or ground mountable enclosure



- Wireless mesh module
- RS485 interface
- 24 V or 200-1500 V power supply



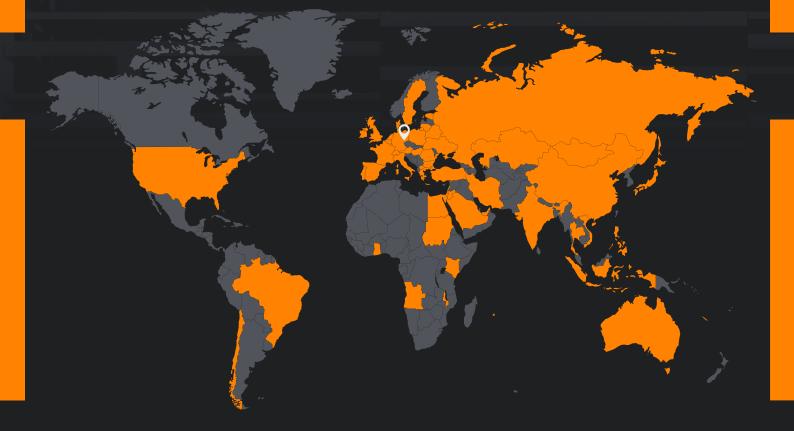
#### Track.bloxx

- The next generation of single axis tracker control
- 3D backtracking
- Diffuse optimization



Scan the QR code for the latest updates and additional languages.

# **Gantner Instruments** GLOBAL COMPETENCE WITH REFERENCES IN 47 COUNTRIES ON 5 CONTINENTS



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