

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

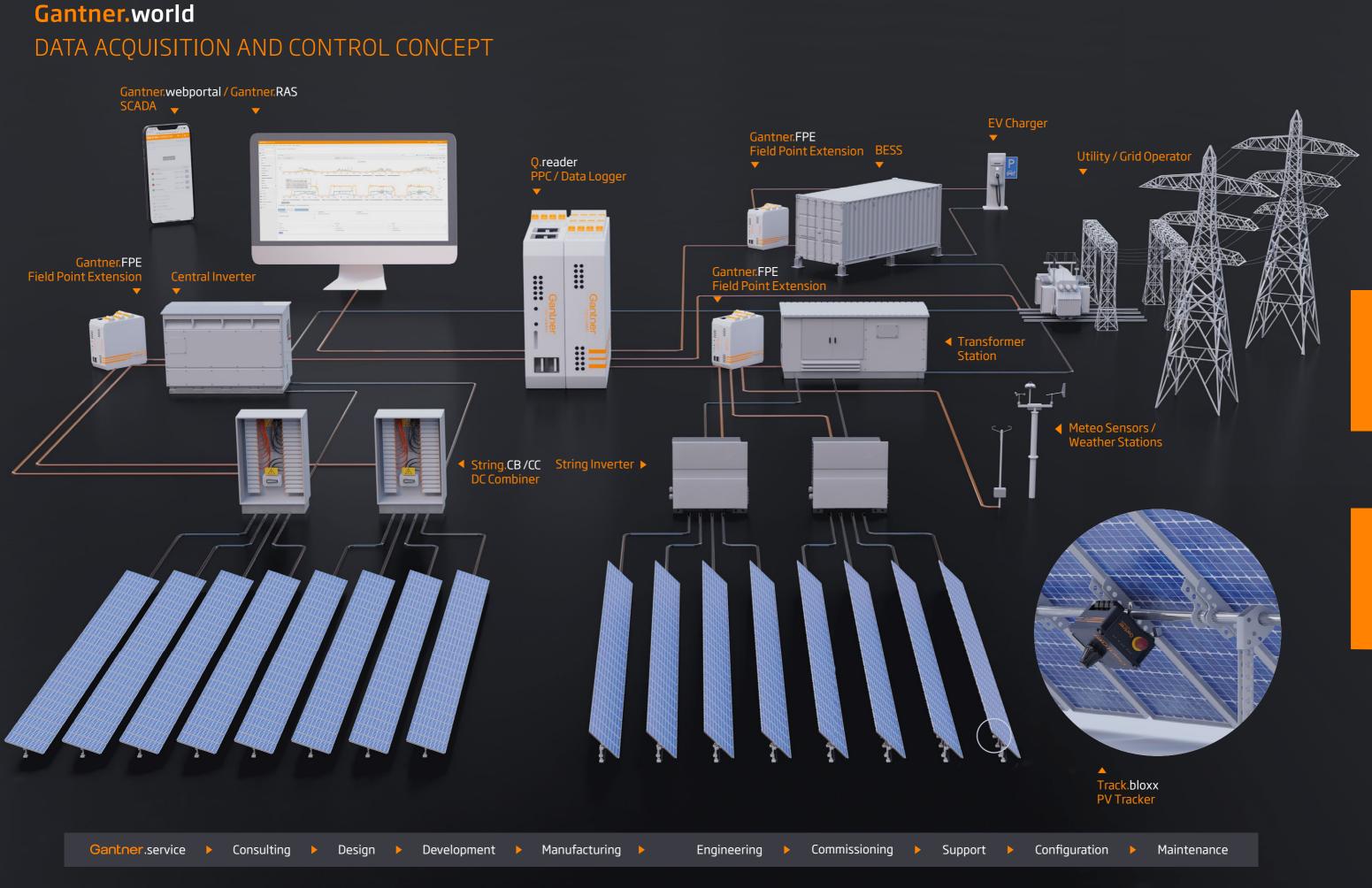
- Certified PPC according to VDE-AR-N 4110, 4120, 4130, NTS 2.1, SENP 1.1, Portaria 73/2020, Regulation (EU) 2016/631 for medium voltage to extra high-voltage
- Supports multiple grid connection points with up to 380 kV voltage
- Supports all leading electrical grid simulation and modeling tools
- Supports 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

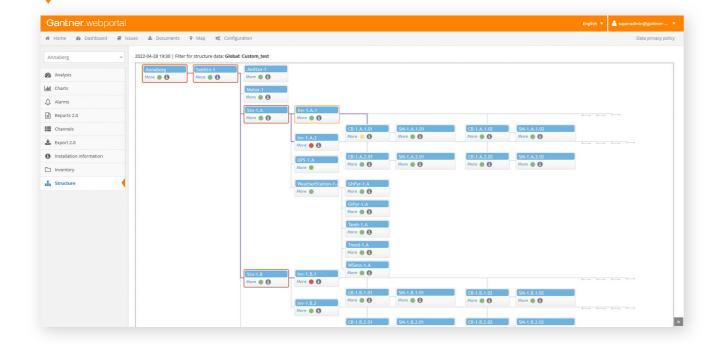


Gantner.webportal SAAS MONITORING, CONTROL, REPORTING AND ANALYTICS

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



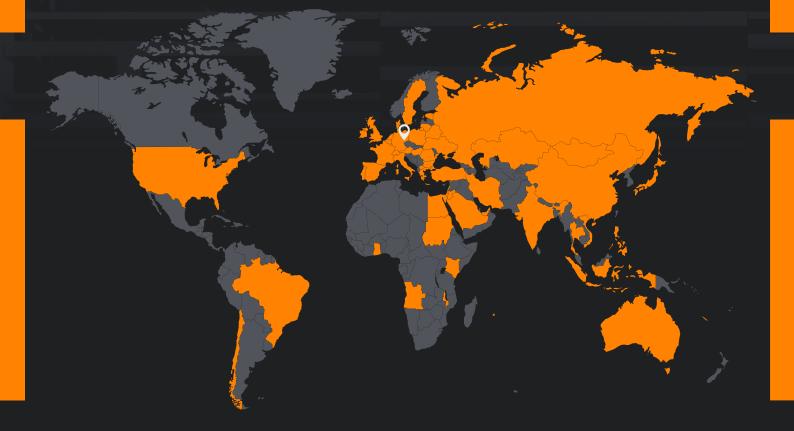
Track.bloxx

- 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



CONTACT Get in touch with us! Gantner Instruments Environment Solutions GmbH Werner-von-Siemens-Straße 5 08297 Zwoenitz / Germany

phone +49 37754 33 51 0 office@gantner-environment.com www.gantner-environment.com

