

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
- 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, VDE-AR-N 4120, VDE-AR-N 4130, NTS 2.0
- 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 BOX FDX1 FDJ RX1 FDJ RX1 TX1 RX2 TX2 DI1 DI2

Q.read

RST-IP

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

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Homepage	Device.		
Custom			
Inverter Bar			
Inverter Charts	Reactive_Power		
Denest	Node:	Main ~	
Online Data	Active:	Ahvays	
Events	Inputs:	Cimage	
Datafiles	inputs.	Active	
Charts			
		Delete	
Configuration Logging Settings		Type:	
Channels		Power	
Setpoint		Power	
Schedule		Chann	
Modbus Slave		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Controller		Adjust	
Power Limitation			
Power Factor			
Data Upload Custom Pages		Active:	
Management		Delete	
management		Type:	
System		Power	
Settings		Power	
Network Update		Chann	
Maintenance			
Internal		Adjust	
Scrints			

- interfaces e.g., RS-485, Ethernet

DATA LOGGING AND POWER PLANT CONTROL "PPC"

Zero Feed-In and battery control "BESS"

Data acquisition and control up to 10 Hz

			Warning: The default password for the 'admin' user i
v			
Input:	Always V		
Direction. Type:	Consumer V Power factor V		
el: Speed:	Staffer w	✓ Setpoint	▼ CosPhi_User V ✓
	Enable 🖌 any	✓ QRCWago	V MB Reactive Power Regulation ON
nput:			
	Channel 👻		
Direction	Producer 👻		
Type:	Absolute 🛩		
el:	any	✓ QRCWago	✓ C_Reactive_Power_Regulation
Speed:	C Static M	5	

• Certified PPC according to VDE-AR-N 4110, 4120, 4130, NTS 2.0 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

• PSS/E, PSCAD, PowerFactory including EMT simulations

• Supports multiple industry standard communication protocols

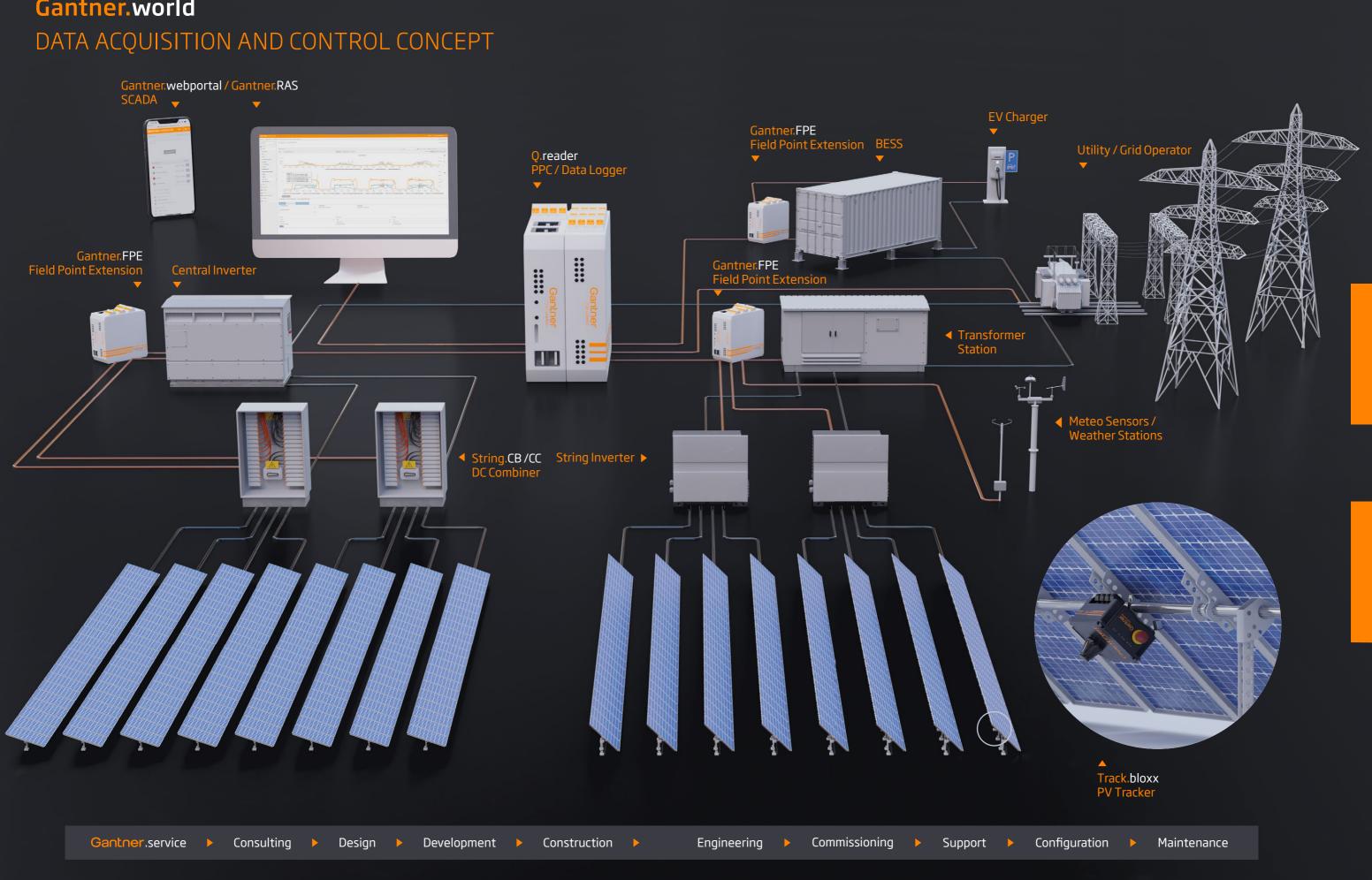
such as IEC 60870, DNP3, Modbus and proprietary protocols from solar inverter, PQM and sensor manufacturers

• Software platform independent configuration via web frontend

• Scalable distributed IO's analog, digital and communication

• Q.reader customized cabinets "QRC" as plug & play solutions

Gantner.world

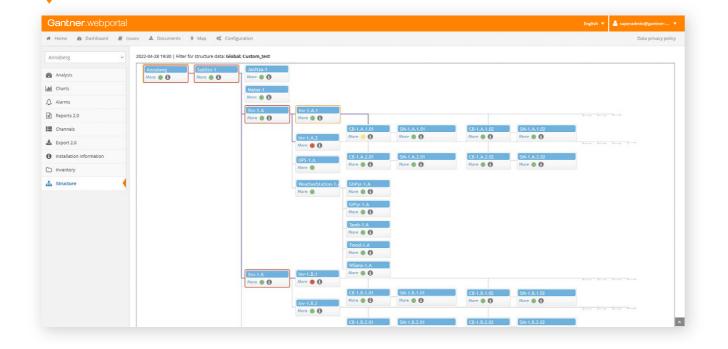


Gantner.webportal SAAS MONITORING, CONTROL, REPORTING AND ANALYTICS

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 116/124 EM

- 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



RF.01

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

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0--- 0 IST--



Track.bloxx

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

GANTNER INSTRUMENTS GLOBAL COMPETENCE WITH REFERENCES IN 41 COUNTRIES ON 5 CONTINENTS

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