

Gantner

instruments



Quality Made in Germany

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, 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"



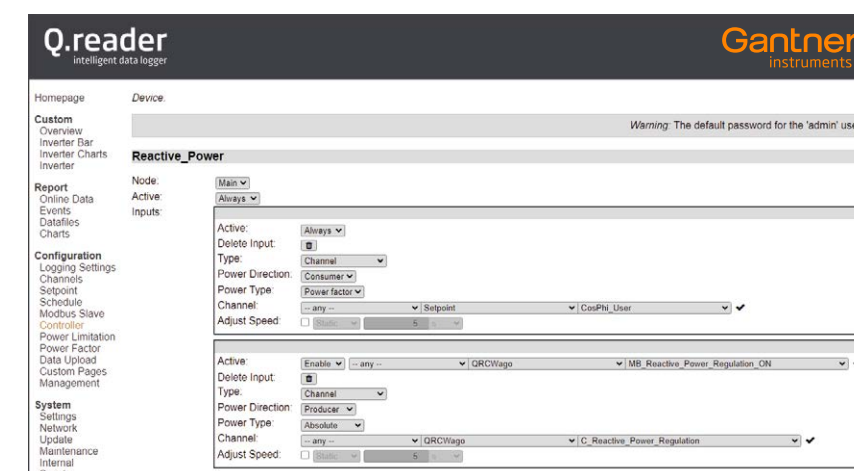
Q.reader

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.

DATA LOGGING AND POWER PLANT CONTROL "PPC"

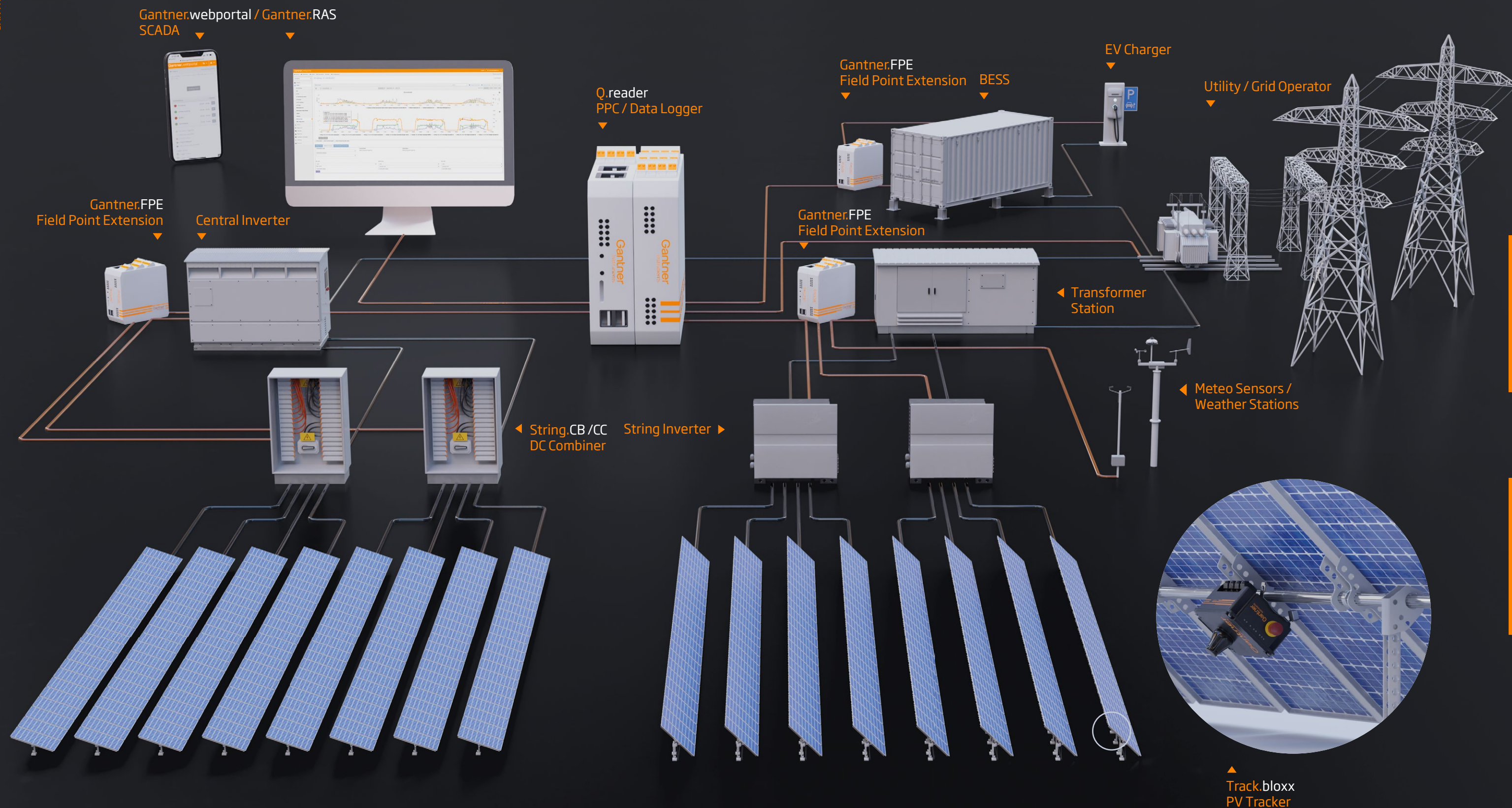
- Absolute production constraint
- Power gradient constraint
- Voltage control
- Reactive power control
- Power factor control
- Frequency control
- Zero Feed-In and battery control „BESS“
- Data acquisition and control up to 10 Hz



- 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 interfaces e.g., RS-485, Ethernet
- Q.reader customized cabinets "QRC" as plug & play solutions

Gantner.world

DATA ACQUISITION AND CONTROL CONCEPT

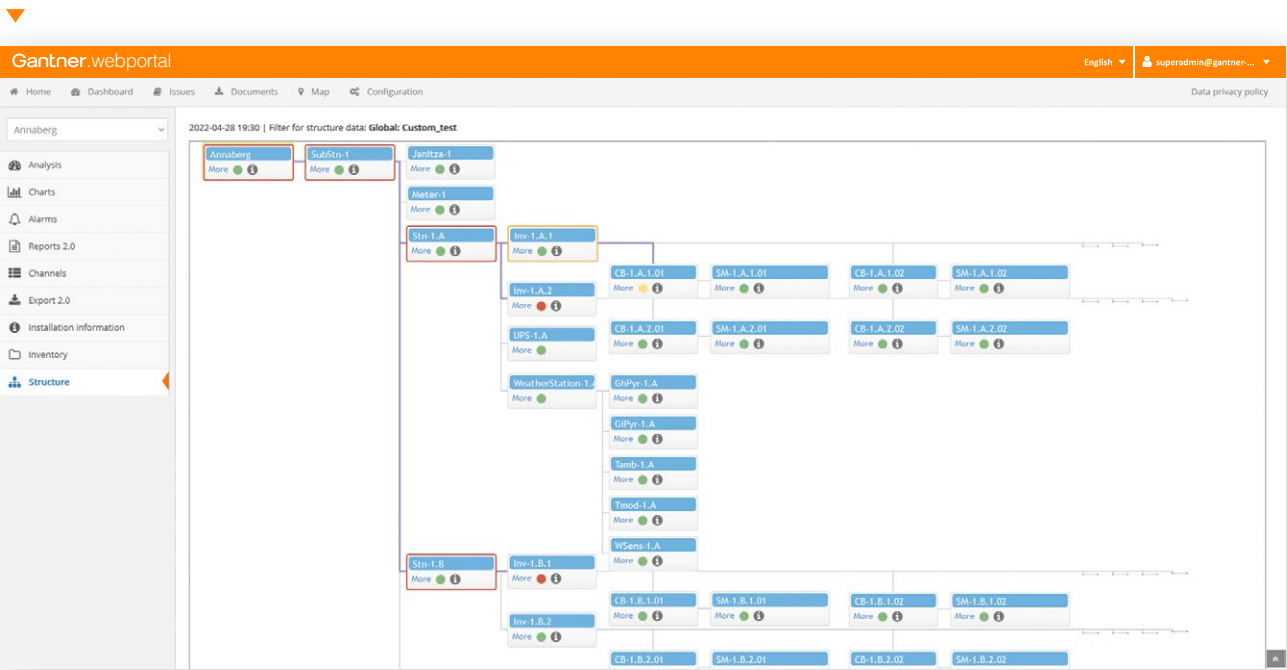
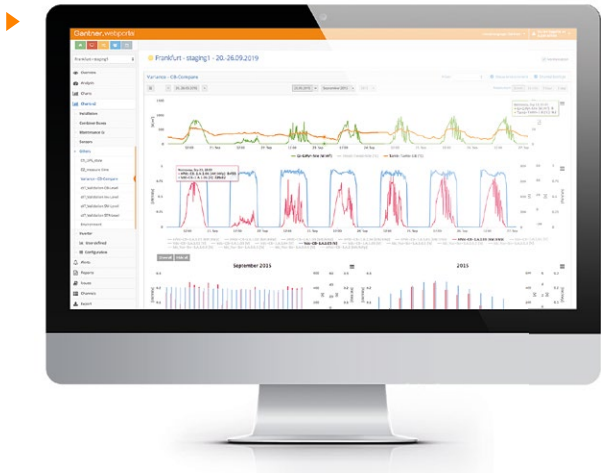


Gantner.webportal

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

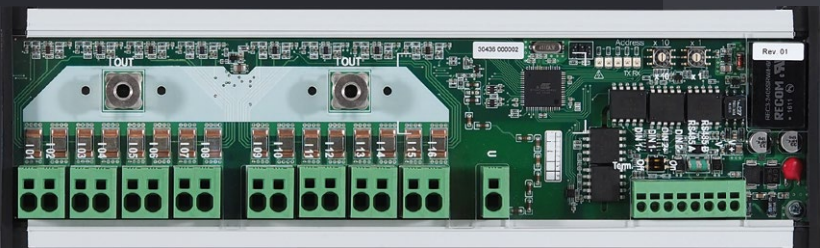


String.bloxx, String.CB/CC

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.



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



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

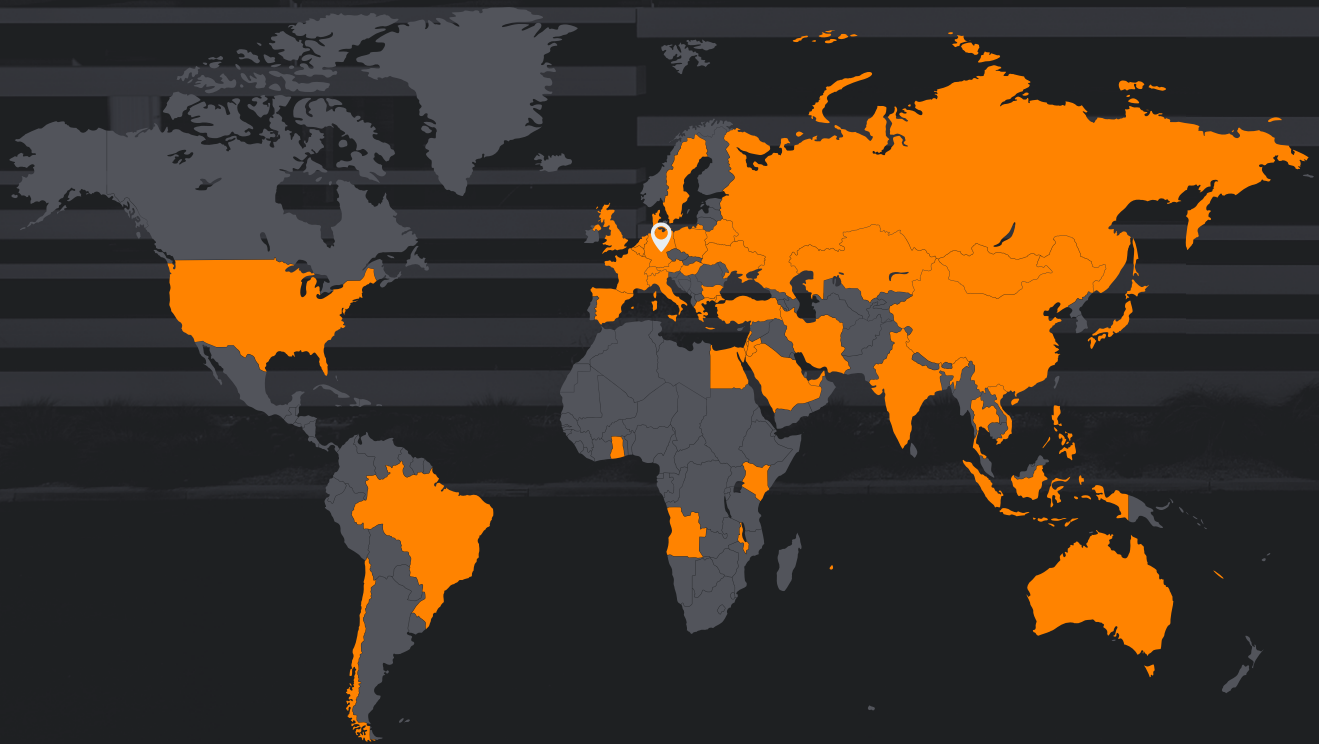


- String combiner boxes DCCBs
- 2-32 string inputs
- Passive or monitored
- Up to 1500 V DC
- Wall or ground mountable enclosure



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

GLOBAL COMPETENCE WITH REFERENCES IN 41 COUNTRIES ON 5 CONTINENTS



Get in touch with us!

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

