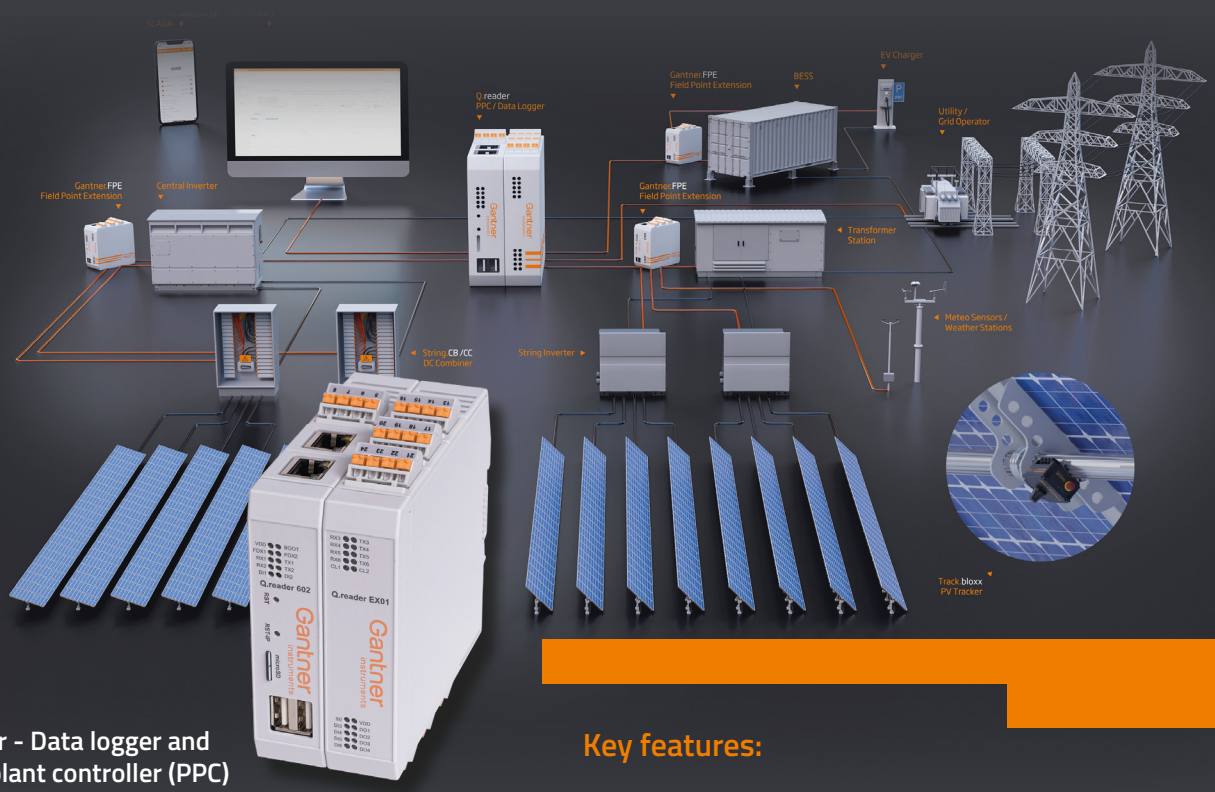
Q.reader 602

Item number: GI190832

Gantner instruments | intelligence for energy



Q.reader - Data logger and power plant controller (PPC)

Supports with extensions multiple industry standard communication protocols such as IEC60870, DNP3, Modbus and proprietary protocols from solar inverter, PQM and sensor manufactures.

Data logger features:

- String level data (current, voltage)
- Inverter data
- Meteorological data from weather stations
- Grid measurements
- Other state variables (switch gear, transformer status)

Features of the PPC:

- Absolute production constraint
- Power gradient constraint
- Voltage control
- Reactive power control
- Power factor control
- Frequency control
- Zero feed IN
- Battery control "BESS"
- EV charger

The data acquisition can be performed with a resolution of up to 10 Hz. This is often required by utilities during grid impact tests.

Signal conditioning, data storage and transfer, compression and multi-path communication are the strengths of this flexible data solution.The data transmission is possible via cable (Ethernet / LAN) or wireless with an external router (5G, WiFi). The Q.reader meets the latest industrial security requirements.

The data acquisition system grows with the requirements and distributed Z.bloxx and Q.series measurement modules can be integrated at any time.

Key features:

- Certified PPC VDE-AR-N 4110, 4120, 4130 for medium voltage to extra high-voltage, NTS, CEI 0-16
- PSS/E, PSCAD, PowerFactory including EMT simulations
- Supports multiple grid connection points with up to 380kV voltage
- 2 x RS485 fieldbus interface - up to 115.2kbps
  Galvanic isolated
- 2 digital inputs
- 2 Ethernet interfaces for configuration and data transfer
  TCP/IP, UDP, FTP Server and FTP client functionality
  Configurable functions
- 2 USB interfaces
- Analog and digital channel extension via Z.bloxx or Q.series modules - up to 24bit resolution
- Data memory with individual logging interval
  8GB flash (standard) - 1s up to 24h, individual per channel
- Configurable monitoring - advanced configurable arithmetic functions
- Direct link to the Gantner.IQX
- Operating system Linux

Document date: 2026/02/09

Gantner Instruments
Environment Solutions GmbH
Werner-von-Siemens-Straße 5
08297 Zwoenitz / Germany

Phone +49 37754 33 51 0
Email office@gantnerenvironment.com
Website www.gantner-environment.com

Contact Us:

Q.reader 602
Technical Data

Gantner instruments | intelligence for energy

Data logging and control	
Logging interval	10Hz up to 24h individual per channel with local arithmetic functions
Data memory	8GB industrial flash (standard)
Grid control, interaction	DNP 3, others
Operating system	Linux
Communication interface	
RS485	2, 6[1]) galvanically isolated
Ethernet TCP/IP	2
USB	2
Protocols	Modbus-RTU, Modbus TCP, inverter protocols, sensor protocols
Data transfer	FTP Server and FTP client functionality
Data format	Comma-separated values "CSV"
SCADA integration	Via OPC-server or Modbus TCP/RTU
Connection	0.25mm² - 1.5mm² push-in spring-cage connection
Digital inputs	
Number	2, 6[1])
Input	State
Connection	0.25mm² - 1.5mm² push-in spring-cage connection
Digital inputs counter[1])	
Number	1[1])
Input	Counter/S0 up to 1kHz
Connection	0.25mm² - 1.5mm² push-in spring-cage connection
Configuration interface	
Web frontend	Web browser
Recommended web browser	Latest Google Chrome
Power Supply	
Type	12 up to 36VDC, overvoltage and overload protection
Power consumption	Approx. 3W
Environmental	
Operating temperature	-10°C up to +55°C
Storage temperature	-40°C up to +85°C
Relative humidity	5% up to 95% at 50°C, non-condensing
Mechanical	
Case	Polyamide/PA
Dimensions (HxWxD)	H100 W25 D120mm
Weight	Approx. 160g
Mounting	DIN rail mounting (EN 50022)

1) With Extension 02

Data sheet is preliminary and subject to change without notice

Document date: 2026/02/09

Gantner Instruments
Environment Solutions GmbH
Werner-von-Siemens-Straße 5
08297 Zwoenitz / Germany

Phone +49 37754 33 51 0
Email office@gantnerenvironment.com
Website www.gantner-environment.com

Contact Us: