Gantner
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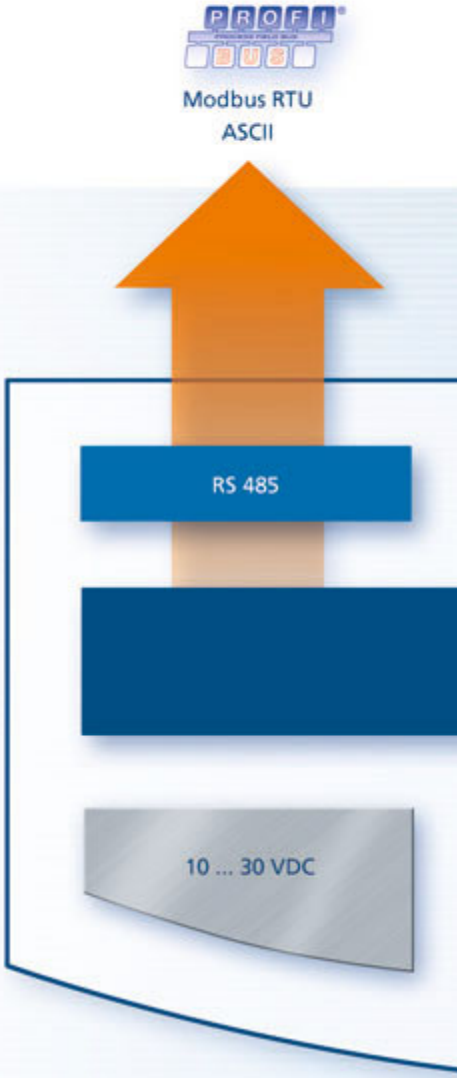
e.bloxx

Intelligent Solutions for Measurement and Test Automation

e.bloxx

A Complete Measurement Solution for Test Automation

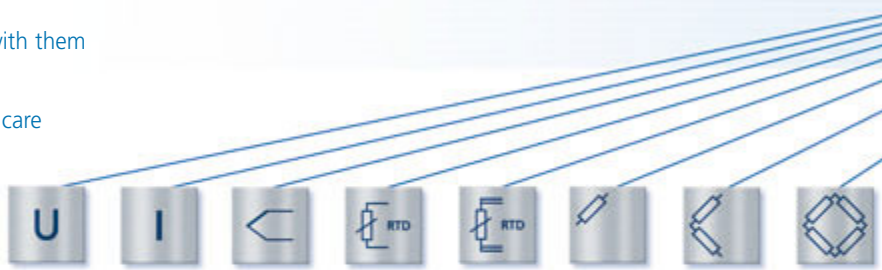


e.bloxx

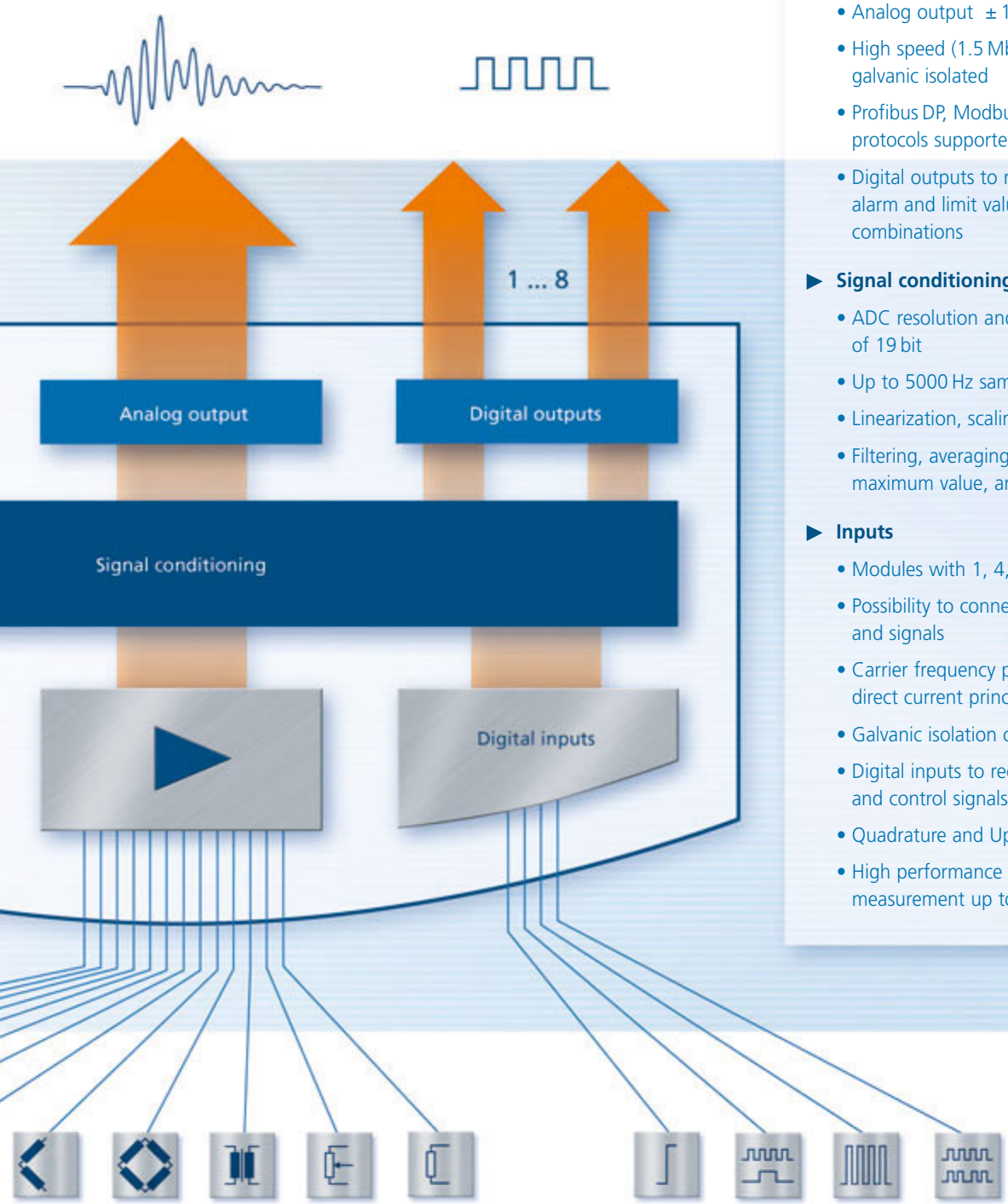
The e.bloxx family of products was specifically developed for high performance measurement and testing applications. All modules are designed for the fast and accurate collection of common digital and analog signals. Built in signal conditioning relieves the host automation systems from unit conversion logic. Finally, flexible RS 485 communications allows the easy creation of a distributed measurement system.

The benefits of e.bloxx

- **Modular package**
  Build up your testing / measurement system according to today's requirements, but easily expand when needed. Determine the signal types, number of channels, and the best fieldbus interface (Modbus RTU, Profibus DP, etc.) for your application
- **Easy configuration**
  With e.bloxx you can start measuring immediately. Predefined templates and an existing sensor database help to get your system quickly up and working
- **Future proof**
  As your requirements grow, e.bloxx will grow with them
- **Robust and accurate**
  Concentrate on your application while we take care of accurate, fast, and reliable measurements. All e.bloxx modules have been designed for, and field tested in, harsh industrial environments
- **Costs**
  All this power and flexibility is available for a reasonable price, just compare it to other solutions and see for yourself



Modules are available to connect all common transducers and sensors



▶ Communications and outputs

- Analog output ± 10 V or 0 to 20 mA
- High speed (1.5 Mbps) RS 485 serial link, galvanic isolated
- Profibus DP, Modbus RTU, and ASCII protocols supported
- Digital outputs to register the actual status, alarm and limit value, arithmetic and combinations

▶ Signal conditioning

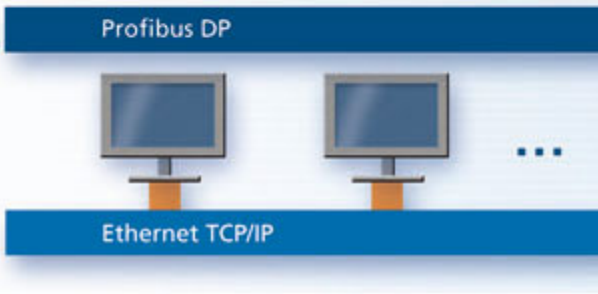
- ADC resolution and calculation accuracy of 19 bit
- Up to 5000 Hz sample rate
- Linearization, scaling and data type formatting
- Filtering, averaging, memory of minimum and maximum value, arithmetic and combinations

▶ Inputs

- Modules with 1, 4, 8 or 16 inputs
- Possibility to connect all common sensors and signals
- Carrier frequency principle and direct current principle
- Galvanic isolation of all incoming signals
- Digital inputs to receive status and control signals
- Quadrature and Up / Down counters
- High performance Chronos frequency measurement up to 400 kHz

e.bloxx

Independent or Integrated



In addition to the Profibus DP (12 Mbps) e.gate DP and e.pac DP also offer Ethernet ports (10/100 Mbps, supporting the TCP/IP, FTP, Streaming UDP, ASCII, Modbus RTU protocols). Both interfaces can work on a parallel basis.

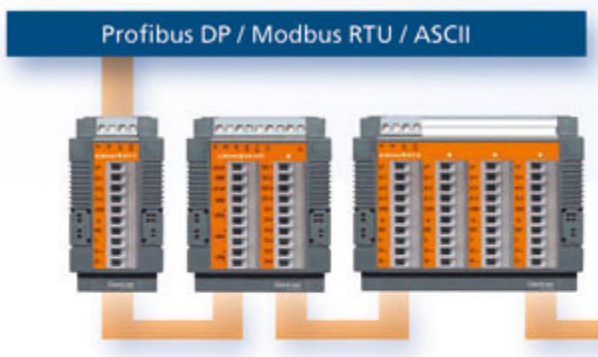
A data serving system of 1 MB supports the dynamic recording of data

e.gate DP – The gateway to higher performance

Using standard e.bloxx modules alone may be more than enough power for your application. However, in those more demanding applications adding one or more e.gate DP may be warranted. Up to 120,000 values per second can be received by implementing Profibus DP.

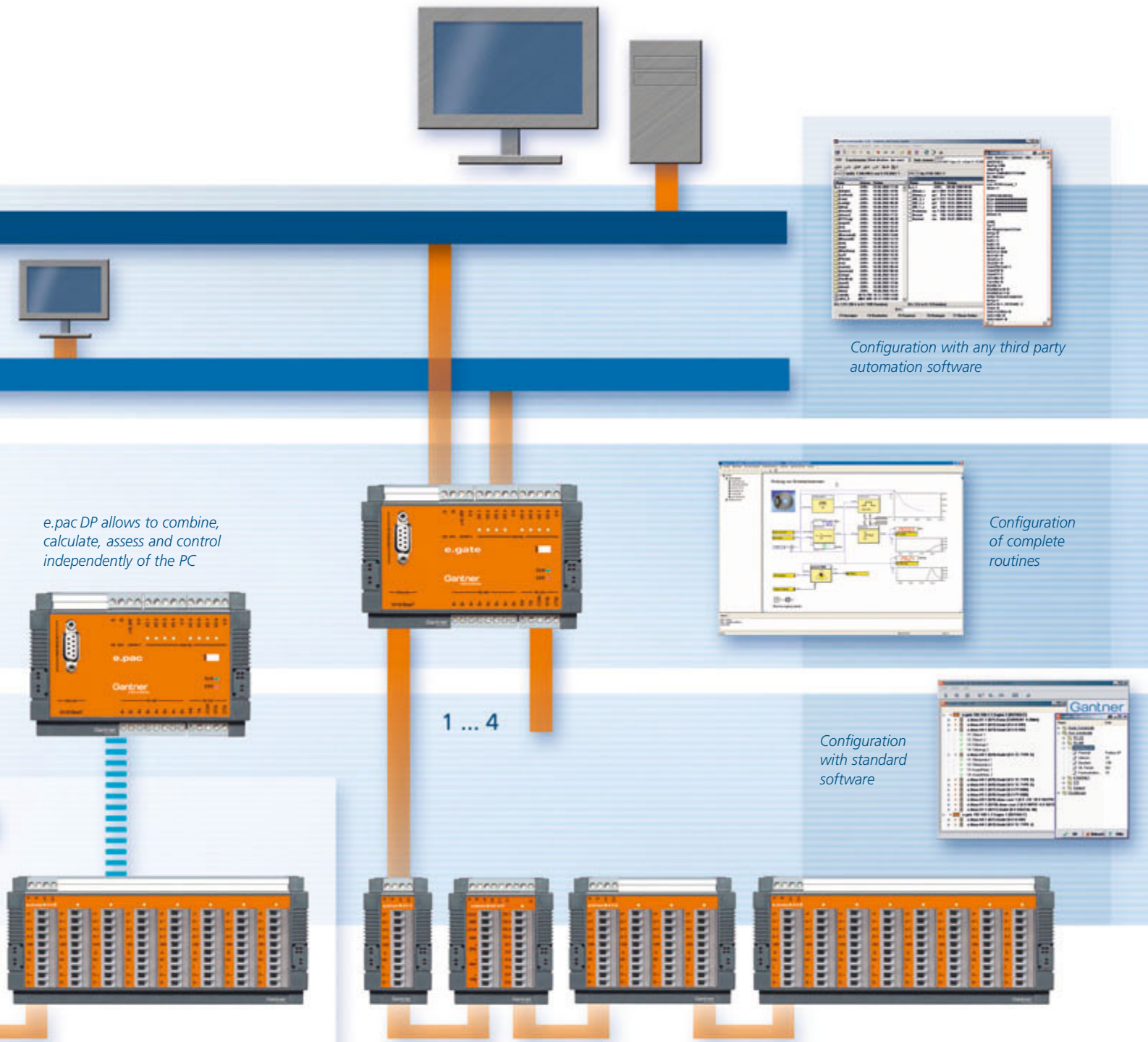
e.pac DP – ideal for measurement

With the e.pac DP application generator e.con you can graphically manipulate your measurement data, I/Os, calculations, controllers, connections, and more. This allows the system to fulfill many functions of a PAC (Programmable Automation Controller) and allows it to operate independently of the host computer.



A host system using a direct fieldbus connection to the e.bloxx modules

- **Configuration and management software**
  You set up e.bloxx modules by using the ICP 100 software. For systems involving an e.gate DP, the e.commander software supports the configuration of the entire system in one integrated package. The e.bloxx family is "Measurement Ready": You can start your testing process immediately
- **Easy configuration**
  You can create complex sensor configurations and testing routines using e.con and easily load those (Drag & Drop) into the measuring system
- **Easy integration**
  The open data structure and the complete documentation of all system functions allow the seamless integration of the e.bloxx family into any third party automation software



Configuration with any third party automation software

Configuration of complete routines

Configuration with standard software

e.pac DP allows to combine, calculate, assess and control independently of the PC

Up to 120 measurement channels can be connected to one e.gate DP

The intelligent solution

Flexible and Scalable to meet a Variety of Needs

The e.bloxx product family offers a variety of input and output modules, single or multiple channels, which can be combined to build systems small or large.

e.bloxx advantages at a glance

- **Suitable for every application**
  The A1 module has a universal input and is available with 1, 4 and 8 channels
- **Improved channel density**
  The A3 and A4 modules have 4 dedicated inputs (voltage, current and thermocouple) with galvanic isolation
- **Precise RTD based temperature measurement**
  It is possible to connect up to 6 Pt100 / Pt1000 sensors to the A5 module
- **Special plugs**
  for the cold junction compensation of thermocouples or as a supplement for measuring bridges for single SG are available
- **All modules include a RS 485 interface**
  supporting the Profibus DP, Modbus RTU and ASCII protocols
- **Universal power supply**
  10 to 30 VDC
- **Easy mounting**
  on DIN standard rails

e.bloxx

- Voltage
- Current
- Resistor
- Thermocouple
- Pt100 / Pt1000
- Potentiometer
- SG transducer
- Single SG
- Inductive transducer
- LVDT
- Piezoresistive
- Status
- Frequency
- Counter
- Analog output
- Digital output
- ASCII
- Modbus RTU
- Profibus DP 1,5 Mbps

e.gate DP / e.pac DP

- Status
- Digital output
- Profibus DP 12 Mbps
- Ethernet TCP / IP, UDP
- Modbus RTU
- Memory
- Time channel

A1	A3	A4	A5	A6	A9	D1	D2
■	■	■					
■	■						
■			■				
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e.gate DP	e.pac DP
■	■
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With the e.gate DP the recording of measurement signals is synchronized up to 20 µs. The synchronization of multiple e.gate DP is performed by utilizing the built in digital I/Os

With the addition of e.pac DP, the e.gate DP becomes a powerful signal processing and control computer capable of a variety of autonomous tasks

e.bloxx

Your Best Choice for Measurement and Testing Applications

We offer individual solutions for end users and OEM customers.
Our experts are available to discuss your application's needs.

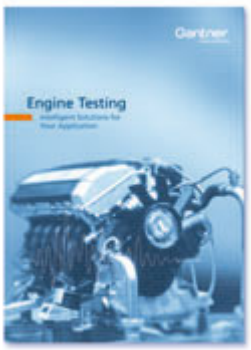
Please contact us.

www.gantner-instruments.com

Component testing

Definition and qualification of product and material specifications.

Definition and qualification of mechanical, thermal and electronic ratios.



Engine testing

Collection of a large number of measurement data which will be conditioned and transmitted to a host automation system for further processing.

Process monitoring

Monitoring of relevant process production and quality measurements for six sigma and other Statistical Process Control (SPC) applications.

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