



e.bloxx D2

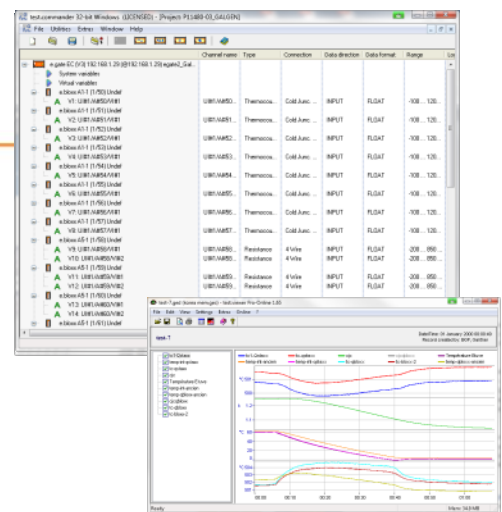
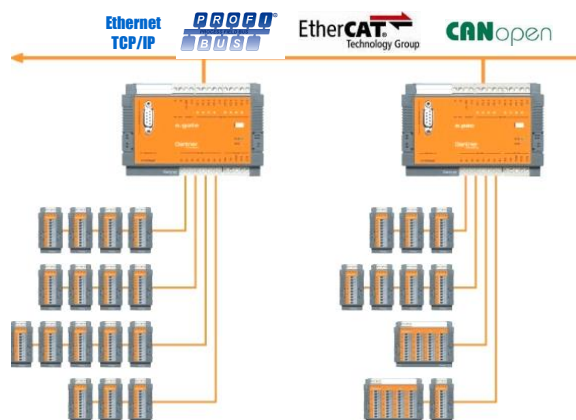
The e.bloxx series is designed for industrial and experimental test systems requiring precise high speed measurement of electrical, thermal, and mechanical quantities in engine and component test beds.

All units are based on a clean modular design, and easily connect to the wide variety of field devices used in today's test beds. Sample rates up to 1000 Hz and resolutions up to 19 bit are possible depending on the module and signal type used. Standardized communication protocols (Profibus-DP and Modbus-RTU) allow the e.bloxx family to work with a wide variety of application hardware and software.

Adding an e.series Test Controller dramatically increases the system's throughput and connectivity options. An e.series Test Controller is a data concentrator, communication gateway, and optionally a Programmable Automation Controller (PAC) with 100Mbps Ethernet, Profibus-DP, EtherCAT, or CANopen.

Most important features:

- **4 Relay outputs**
2 x 1a, 2 x 1a1b (2 x NO, 2 x NO/NC)
- **Switching capacity**
Switching capacity
- **Short time delays**
Operate and release time 10 ms
- **Long expected live time**
10⁷ operations
- **RS 485 fieldbus interface**
Profibus-DP, Modbus-RTU, ASCII
as well as connectable to any e.series Test Controller
- **Galvanic isolation**
of I/O-signals, power supply and interface
Isolation voltage 500 VDC
- **Electromagnetic Compatibility**
according EN 61000-4 and EN 55011
- **Power supply 10...30 VDC**
- **DIN rail mounting (EN500022)**



e.bloxx D2 Technical Data

Digital Inputs

Arrangement	2 x 1a1b (NO/NC) 2 x 1a (NO)
Contact material	Gold flash over silver alloy
Initial contact resistance	max. 30 mΩ
Nominal switching capacity	250 VAC / 3 A 30 VDC / 3 A (resistive)
Switching power	max. 1250 VA, 150 W
Switching voltage	max. 250 VAC, 30 VDC
Switching current	max. 3 A
Operate time	max. 10 ms
Release time	max. 10 ms
Expected live time	
mechanical	5×10^7
electrical (restive)	1×10^5 at 250 VAC / 3A, 30 VDC / 3 A

Communication Interface

Standard	RS 485, 2-wire
Data format	8E1
Protocols	ASCII, Modbus-RTU, Profibus-DP Local-Bus
Baud rate	
ASCII and ModBus-RTU	19.2; 38.4; 57.6; 93.75; 115.2 kBaud
Profibus-DP	19.2; 93.75; 187.5; 500; 1500 kBaud
Local-Bus	19.2; 38.4; 57.6; 93.75; 115.2; 187.5; 500; 1500 kBaud
Connectable devices	up to 32
Galvanic isolation	500 V

Power Supply

Power supply	10 to 30 VDC overvoltage and overload protection
Power consumption	
e.bloxx D1-1	approx. 1.5 W
e.bloxx D1-4	approx. 6 W
Influence of the voltage	0.001 %/V

Mechanical

Case	Aluminium and ABS
Dimensions (W x H x D) and weight	
e.bloxx D1-1	45 x 90 x 83 mm ,160 g
e.bloxx D1-4	104 x 90 x 83 mm, 500 g
Protective system	IP20
Mounting	DIN EN-Rail

Environmental

Operating temperature	-20 °C to +60 °C
Storage temperature	-40 °C to +85 °C
Relative humidity	5 % to 95 % at 50 °C non condensing

Warm Up Time

All declarations are valid after a warm up time of 45 minutes.

Valid from Nov. 2010. Specification subject to change without notice.
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