



e.bloxx D2-1

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 5000 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 USB ports.

4 Relay outputs

2 x 1a, 2 x 1a1b (2 x NO, 2 x NO/NC)

Switching capacity

250 VAC / 3 A, 30 VDC / 3 A

Fast operation

Operate- and release time 10 ms

Status and alarm outputs

Process or host controlled

RS 485 fieldbus interface

Profibus-DP, Modbus-RTU, ASCII

Order Information

Product	Article No.
e.bloxx D2-1	244780
Accessories	
Configuration Software	
ICP 100	633214
Interface Converter	
RS232 / RS485	
ISK 200	229682
ISK 101	689326

Additional Features

- Live expectancy 10^7 operations
- Contact material Gold flash over silver alloy
- Data transmission up to 1.5 Mbps
- Up to 32 modules on a single two wire RS-485 interface
- PC-Software (ICP 100) for easy configuration of the modules
- Galvanic isolation of I/O signals, power supply, and communication interface
- Power supply 10 to 30 VDC
- DIN rail mounting (EN 50022 rail)
- Pluggable screw terminals for field, power, and communication connections
- Electromagnetic Compatibility according to EN 61000-4 and EN 55011

Digital Outputs

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 x 10 ⁷
electrical (restive)	1 x 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
Power consumption	overvoltage and overload protection approx. 2.3 W

Mechanical

Case	Aluminium and ABS
Dimensions (W x H x D)	45 x 90 x 83 mm (1.77 x 3.54 x 3.27 in)
Weight	160 g (0.35 lb)
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