

Q.brixx XL boost LLP

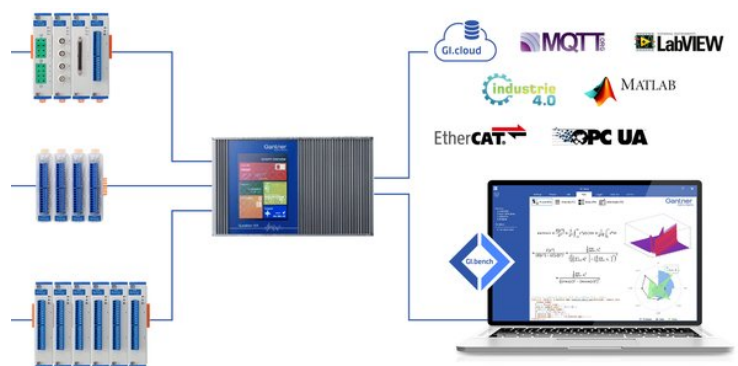
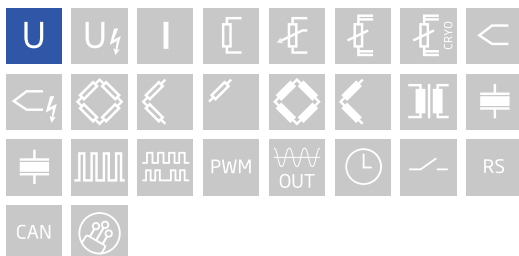
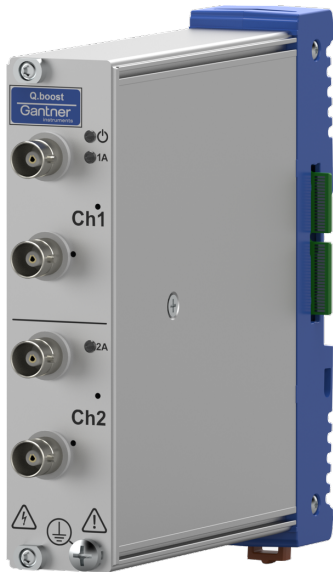
High Speed Measurement Module

Q.brixx XL is a new addition to the Q.series product family - the ideal DAQ solution for on-the-go applications requiring higher performance in potentially harsh environments. Q.brixx XL DAQ systems consist of up to 16 measurement modules and an integrated, high-performance controller for communication, control, and data logging purposes, all within a robust aluminum housing capable of withstanding severe shock and vibration without sacrificing performance.

- High density and flexibility with 16 modules in one system in any constellation
- Electromagnetic Compatibility according to EN61000-4 and EN55011
- Connectable to Controller Q.station
- Power supply 10 ... 30 VDC

Key Features

- 4 MHz sample rate per channel with 1.7 MHz Bandwidth
- 2 channels with up to +/- 10 VDC input range
- Extremely high precision: $\pm (0.015\% \text{ Signal} + 0.015\% \text{ Range})$
- 2 digital inputs
- 2000 VDC continuous isolation voltage on input channel
- must be Supplement with Coupling Module Q.bloxx XL boost BC-S
- up to 16 channels on one Coupling Module
- Multiple Coupling Modules connectable to Q.core



Technical Data

Analog Input

Q.boost A102	2-Channel precision data acquisition system with 2 analog inputs: - 4 MHz // 24 Bit ADC per channel - ± 500 mV, ± 10 V AC/DC - Digital-I/O (LVCMOS/LVTTL 0 V to 3.3 V) - 2.5 kV galvanic isolation - Coupling Module necessary for Power Supply, USB3.0 data interface, LinkUp/LinkDown-Sync.-Interface - Sampling rate max. 2MHz per channel with 4 boost modules, max. 1 MHz per channel with 6 boost modules on one coupling module
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Input Characteristics

Quantization	24 bits			
max. sample rate	4 MSamples/s per channel			
max. Bandwidth	DC - 1.7 MHz			
Filter	Analog: 1.7 MHz low-pass filter Digital: a variety of selectable filters			
linter-Channel-Phase-Difference	< 1 ns			
galvanic isolation	± 2500 V			
input voltage Impedance	1 MΩ_50 pF			
input voltage range	Channel 1 (Top) ± 500 mV and ± 10 V with BNC Channel 2 (Bot) ± 500 mV and ± 10 V with BNC			
Dynamic range	Range	Bandwidth		
		5 kHz	50 kHz	1 MHz
	± 10 V	115 dB	109 dB	98 dB
	± 500 mV	102 dB	94 dB	82 dB
ENOB (THD + noise)	Range	effective bits		dB @ 125 Hz sample rate
effective number of bits	± 10 V	typ 15.6 Bit		- 97 dB
	± 500 mV	typ 14.3 Bit		- 89 dB
Crosstalk	< - 120 dB (DC - 200kHz)			
Input protection	± 17.5 V @ range ± 500 mV, ± 10 V			

Digital Inputs

Channels	2 digital inputs
Mode(s) of operation	status
Input voltage	8 VDC max.
Logic voltage	< 0.8 VDC (Low) > 2 VDC (High)

Operations Conditions

input voltage	12 to 16 VDC in standard temperature range
	10 to 35 VDC in extended temperature range
	5 W typical per channel
Environmental temperature	Standard: +10 °C to 30 °C
	Extended: +10 to 45 °C (requires air inlet and outlet openings if mounted in a cabinet)

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Data Recording

RAM	64 MByte per channel 512 MByte RAM with 8 channels
interface to Host	via couple module
recording media	Q.core or Computer hard disk

Data Transfer Rates

Internal SSD	256 MByte/s *
PC with USB	170 MByte/s (USB 3.0) - 35 MByte/s (USB 2.0)

Technical specifications – Optional specifications marked with *

Number of Channels

max. number-of-devices	Up to 8 Q.boost one one Coupling Module Q.bloxx XL boost BC-S, multiple Coupling Modules on Q.core or Computer
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Mechanical information

Material	Aluminum
Measurements (W x H x D)	30x 137 x 135mm
Weight	approx. 500 g

Ordering Information

Article number	702522
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Gantner Instruments

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