

# Q.raxx D104

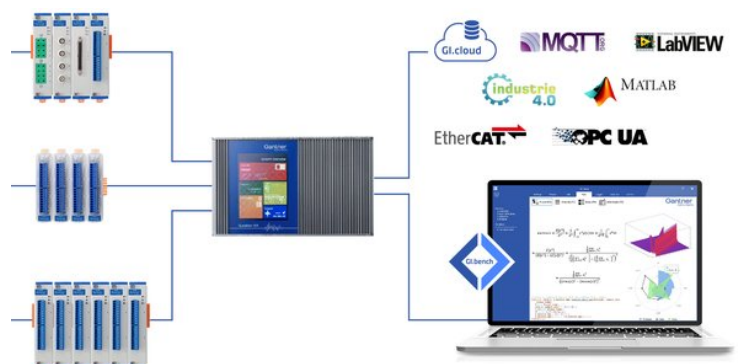
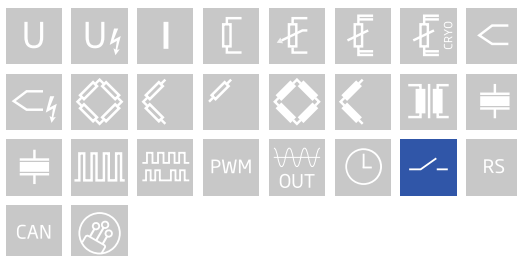
## Digital Input Module

Q.raxx is the ideal 19" rackmount DAQ solution for applications that require high channel density. Q.raxx DAQ systems can utilize an integrated, high-performance controller for communication, control, and data logging purposes. With a controller, multiple Q.raxx systems can be synchronized to each other allowing for efficient DAQ distribution with low jitter and gradual expansion up to thousands of channels.

- **High Density**  
up to 13 I/O modules per Q.raxx 3U chassis with up to 16 channels per I/O module
- **User Friendly**  
front panel indicators for module status, power, and input range error
- **Fully Customizable**  
multiple front panel termination options available
- **Maximum Flexibility**  
parallel communication available in TCP/IP, CAN, PROFIBUS, Modbus, and EtherCAT

### Key Features

- **3-Way galvanic isolation**  
500 VDC group to group, group to power supply, and bank
- **Fast response time**  
10  $\mu$ s per channel
- **16 Digital inputs**  
status, single bit or bitset
- **Configurable logic**  
TTL or 24 VDC (according IEC 61131-2, Type 1)



### Technical Data

#### Digital Input

Channels	16
Mode(s) of operation	status
Logic levels	TTL or 24 VDC according to IEC 61131-2, Type 1
TTL logic voltage	< 0.8 VDC (Low) > 3 VDC (High)
24 VDC logic voltage	-3 to 5 VDC (Low) 11 to 30 VDC (High)
Input type	PNP (current sinking)
Response time	10 µs
Input voltage	30 VDC max.
Input current	2 mA max.
Isolation voltage	500 VDC, group to group, group to power supply, channel to bus <sup>1</sup>

<sup>1</sup> noise pulses up to 1000 VDC, continuous up to 250 VDC

#### Communication Interface

Protocols	proprietary Localbus (115200 bps to 24 Mbps, latency <100 ns) ASCII (19200 bps to 115200 bps) Modbus RTU Profibus-DP (19200 bps to 12 Mbps) (special Firmware required)
Data format	8E1
Electrical standard	ANSI/TIA/EIA-485-A, 2-wire

#### Power Supply

Input voltage	10 to 30 VDC, overvoltage and overcurrent protection
Power consumption	2 W (approx.)
Input voltage influence	< 0.001 % / V

#### Environmental

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

#### Remarks

Validity of all listed specifications are subject to a warm-up period of at least 45 minutes

Specifications subject to change without notice

#### Mechanical information

Material	Aluminum
Measurements (W x H x D)	30 x 128 x 118 mm
Weight	approx. 100 g

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## Ordering Information

Article number	213523
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### Gantner Instruments

Austria | Germany | France | Sweden | India | USA | China | Singapore  
Montafonerstraße 4 · A-6780 Schruns · T +43 55 56 · 77 463-0

office@gantner-instruments.com  
www.gantner-instruments.com