Q.raxx gate IPT

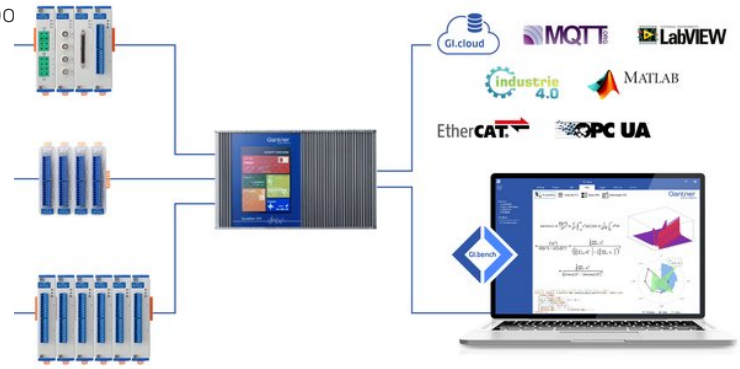
Controller

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

- Connection of up to 32 Q.bloxx modules
  via 2 UARTS, Baud rate up to 24 MBaud each UART Recording of up to 256 variables (real format 4 Byte)
- Synchronization and time stamp of measurement values
  IRIG based master slave principle on RS485 standard, DCF77, AFNOR etc, GPS time and Position data, SNTP over Ethernet
- Ethernet interface for configuration and data output
  FTP, TCP/IP, UDP optional fieldbus interface Profibus-DP, 12 Mbps
- FTP Server and FTP Client functionality
  configurable function
- High data rate over Ethernet
  128 real variables with 1 kHz (block transfer)
  16 real variables with 10 kHz (block transfer)
  64 real variables with 300 Hz (online)
- Data buffer memory 16 MByte
  Data buffer at block transfer of measurements,
  different logger possibilities, extendable by USB device
- PAC functionality
  Sequences, data logger, PID-controller, transfer functions, mathematic, numeric, Boolean combinations, functions generator
- Galvanic isolation
  of po



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Technical Data

Host Interface Ethernet

Protocols	TCP/IP, UDP, PING, ASCII, Modbus TCP/IP
Service	DHCP, FTP-Server, FTP-Client, e-Mail-Send-Client (SMTP)
Baud rate	10/100 Mbps
Data rate	max 800 kByte/s
Number of simultaneous clients	10
Isolation voltage	500 V

Host Interface USB

Version	USB 2.0
Data rate	typ. 100 kByte/s
Devices	Data storage, formatted with FAT or FAT 32

Module Slave Interface (UART)

Number of interfaces	2
Electrical standard	RS 485
Data format	8E1
Protocol	Local Bus
Baud rate	9,6 kbps to 24 Mbps
Connectable devices	max. 16 modules at one UART line
Isolation voltage	500 V

Data Memory

RAM	16 MByte (optional 90 MByte), cycle buffer

Synchronization of a Multi Controller System

Interface	RS 485 Electrical standard
Mode	Master Slave principle, IRIG electrical standard
	DCF77, AFNOR etc. GPS over IRIG electrical standard
	GPS NMEA over RS232
	SNTP over Eternet

Operating System Independent

Standardized interface	Ethernet (FTP/Berkeley-Socket)

Power Supply

Input voltage	10 to 30 VDC, overvoltage and overcurrent protection
Power consumption	approx.. 3 W

Encironmental

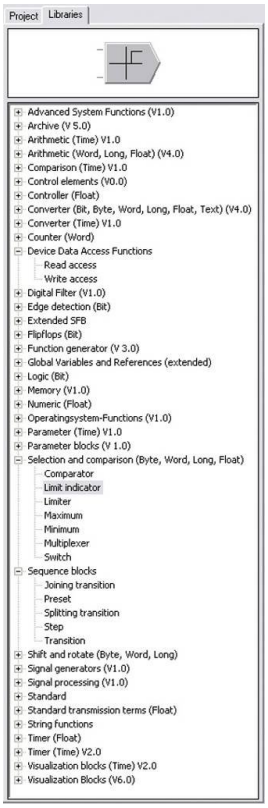
Operating temperature	-20°C to +60°C
Storage temperature	-40°C to +85°C
Relative humidity	5 % to 95 % at 50°C, non-condensing

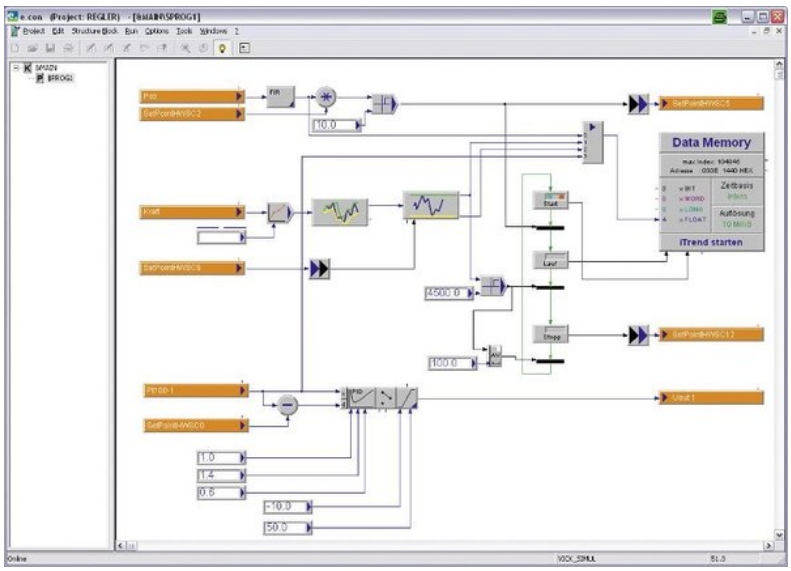
PAC Functionality

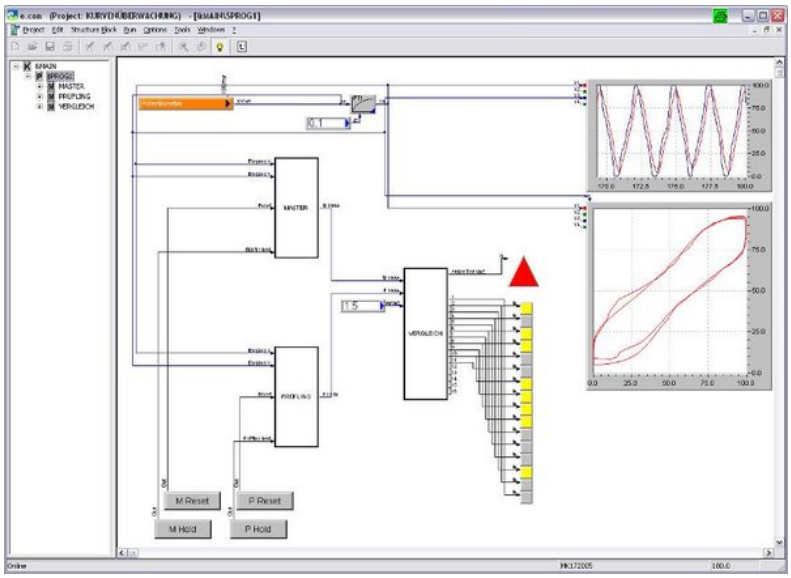
Cycle time	≥1 ms
Processing	cyclic or synchronized with data acquisition

Programming Tool test.con

using test.con for programming of the PAC-function in a graphical way:







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	102217

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