Q.core 201 EIS

High Performance Data Acquisition Server

The Q.core is Gantners high-performance streaming data platform for test & measurement with a powerfull data acquisition core.



Key Features

- **Web interface for data visualization and export**
  Built-in web server with convenient front end for visualizing all live data streams or stored data, export function for all data in multiple data formats
- **Ethernet interface for communication with Q.stations and network**
  2x 1 Gbps Ethernet ports (RJ45), 1x 2,5 Gbps
- **Data storage 4TB**
  Internal 4 TB SSD for storage of large data sets. Multiple data loggers can be configured for continuous or triggered storage. Data streams from multiple Q.stations and different sampling rates can be merged into a single stream or data file
- **Very high data rates up to 96 channels with 100 kHz**
  Data streams of up to 6 Q.stations with 16 channels, 100 kHz each can be acquired. Plugins can be installed e.g. EIS Engine, OPC UA, Rainflow HCM, ...



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Technical Data

Power Supply

Input voltage	90 ... [230] ... 264 VAC
Power consumption	Typ. 100 W
Connector	Cold appliance plug

Environmental

Operating temperature	-5 °C to +60 °C
Storage temperature	-40 °C to +85 °C
Relative humidity	5 % to 90 % at 50 °C, non-condensing

Q.core 201

General	
Type	Intel Core i5-1145GRE, Quad Core, 8M Cache, 1.5GHz (4.1GHz), 15W
RAM	32 GByte
Flash	128 GB
Real Time Clock (RTC)	Battery buffered
Watchdog	Programmable
OS	Real-time Linux
Ethernet Interface	
Channels	2x 1GB, 1x 2.5 GB
Protocols	HTTP, TCP/IP, High Speed Port
USB Interface	
Channels	4
Version	USB 3.0
EtherCAT Interface	
Electrical standard	Ethernet
Data rate	1024 Byte Data (253 variables read and 253 variables write)
Baud rate	100 Mbps
Cycle time	≥100 µs
SSD Specification	
Storage capacity	4TB
Interface	SATA 6 Gb/s (compatible with SATA 3 and SATA 1.5)
SSD Technology	3D NAND
Data rate	600 Mbyte/s
TBW (Terabytes written)	560 MB/s, 530 MB/s

Mechanical Information

Material	Aluminium
Measurements (W x H x D)	483 x 133 (3 HU) x 475 mm
Weight	3000 g
Ventilation Requirements	Requires forced air ventilation mounted above the Q.core rack (to be ordered separately). 19" FAN Unit, 1U with 6 Fans, 230 AC powered Schroff 10713-104. Depending on installation add Air Deflectors on top and bottom, Schroff 10713-141 with Air Filter Mat Schroff 60713-331.

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Reference Signal Generation

Channel	1
Maximum Frequency	10 kHz
Sample rate	200 MSa/s
Basic waveforms	Sinus
Frequency characteristics	
Sinus	1 mHz - 10 kHz
Amplitude (50 Ω)	
Range	≤ 10 mHz: 1.0 Vpp to 10 Vpp
Accuracy	typical (1 kHz Sinus, 0V offset, > 10 mVpp, Auto)
Flatness	typical (Sinus 2.5 Vpp) ≤ 10 mHz: ±0.1dB ≤ 60 mHz: ±0.2dB
Resolution	0.1 mVpp or 4 digits
Offset (50 Ω)	
Range (Peak ac+dc)	± 5Vpk ac+dc
Accuracy	± (1 % of setting + 5 mV + 0.5 % of amplitude)
Waveforms output	
Impedance	50 Ω (typical)
Protection	short-circuit protection, automatically disable waveform output when overload occurs

Remarks

Warm-up time	Are subject to a warm-up period of at least 45 minutes
	Specifications subject to change without notice

Ordering Information

Article number	822525

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