Gantner instruments

Get started with Q.monixx

GI.bench Configuration Guide

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1. Restrictions and Recommendations

- Always use the GI.bench version with the corresponding Q.monixx firmware version.
- Do not use a bootable USB pen drive; the Q.monixx does not start.
- After configuring a device with GI.bench, hardware cannot be used with test.commander until performing a factory reset on the Q.monixx. Save test.commander projects, if needed, for future use.
- A GI.bench project is still component-specific and cannot be distributed on other similar systems.
- By using enhanced streams, a configuration can be involuntarily changed after reading a controller. Please control this parameter if using it before writing your project.

2. Software

2.1. GI.bench Installation

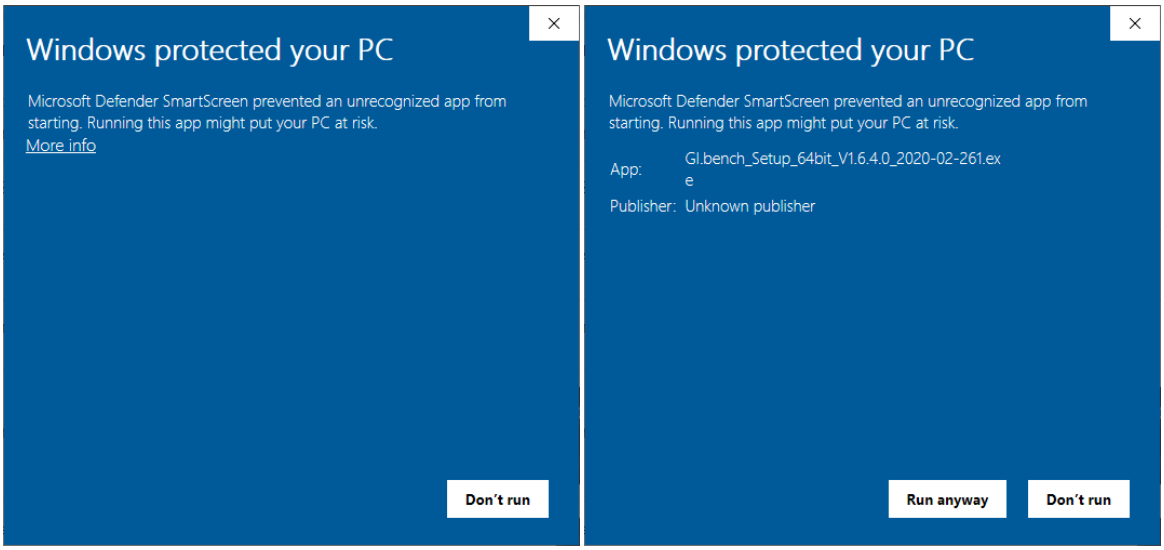
2.1.1. Download latest GI.bench version

Choose the appropriate version for your PC:

- Link for 32Bit Windows
- Link for 64Bit Windows

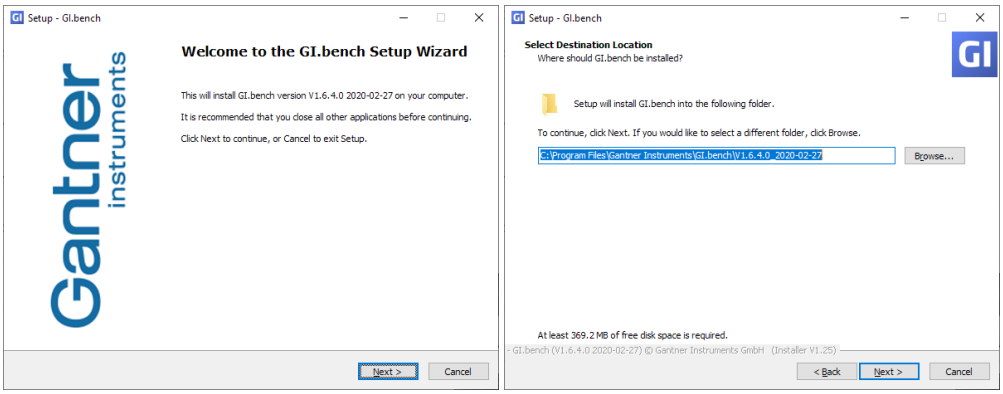
2.1.2. Install GI.bench

1. Execute the downloaded .exe file. If a blue prompt pops up on Windows 10, click More Info and then click Run anyway. The following screen confirms with Yes to let the installer work with elevated administrator rights during installation.

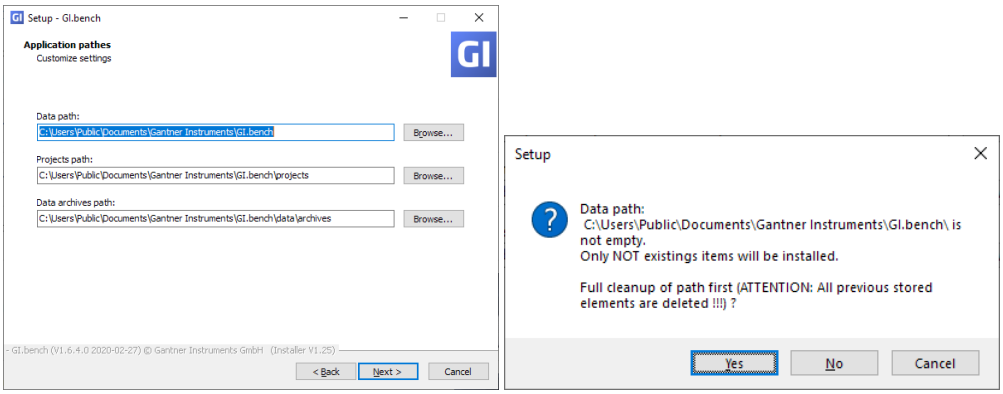


2. If GI.bench were installed previously on your PC, a prompt would ask if you want to uninstall everything before installing the new version. Be careful with this option; it is always recommended to have a backup of existing GI.bench project files before performing a clean install.

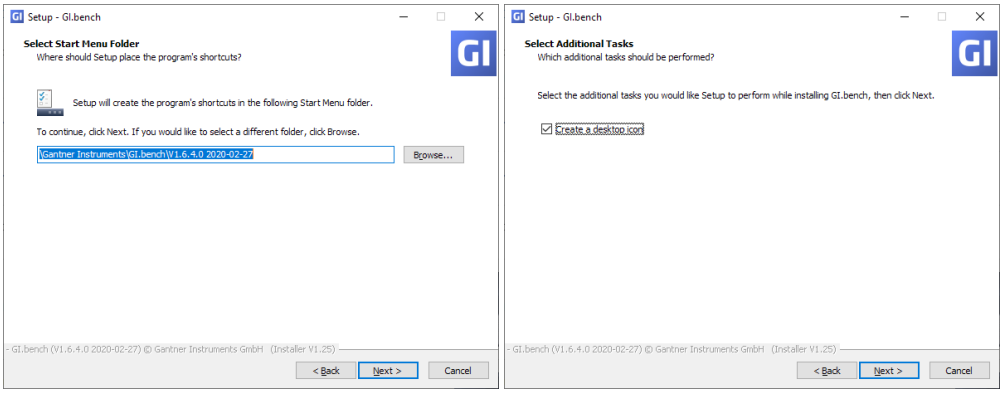
3. Follow the GI.bench Setup Wizard.



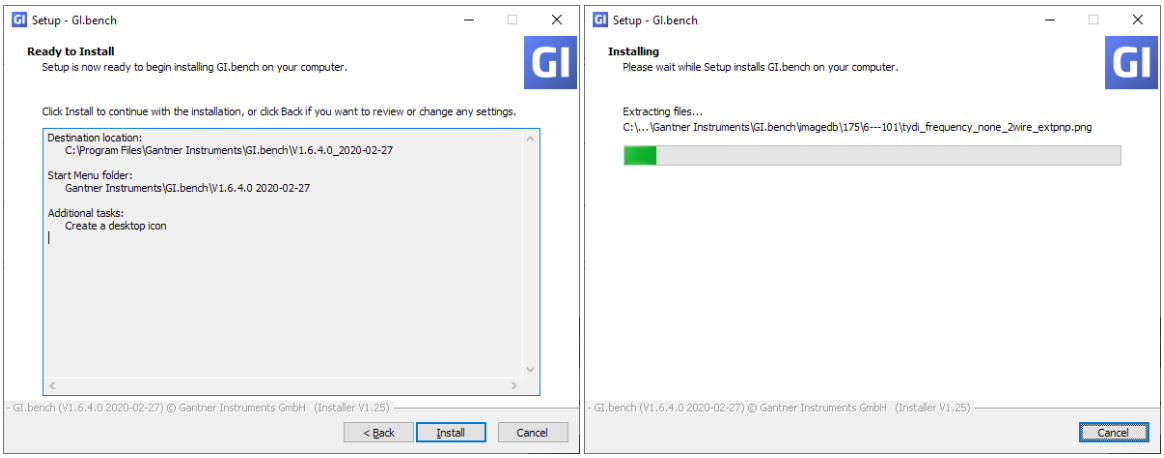
4. Be careful when asked if you want to do a full cleanup of Data path, Projects path, and Data archives path (this only applies for systems with older versions of GI.bench already installed).



5. Continue following the GI.bench Setup Wizard.



6. When ready, click Install to initiate the installation process. Wait until the installation finishes. If asked, allow all Windows Firewall Exceptions for GI.bench.



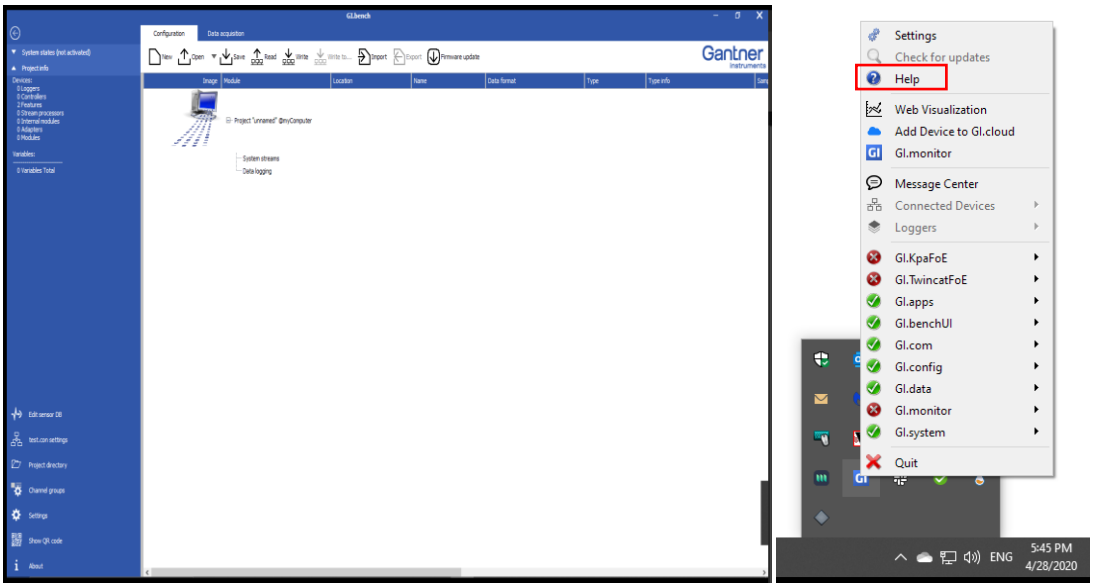
2.1.3. GI.bench UI

For further instructions on how to use GI.bench, you can refer to the GI.bench How-To Guide and GI.bench Online Help, which you can access by right-clicking on GI icon in the Windows taskbar and then choosing Help.

Help links in this How-To Guide marked with the icon, such as the one shown below, open to the corresponding chapter in the GI.bench Online Help tool. Please ensure that GI.bench is online before clicking on the Help links in this How-To Guide.

GI.bench must be online before clicking the following link. Please start GI.bench first.

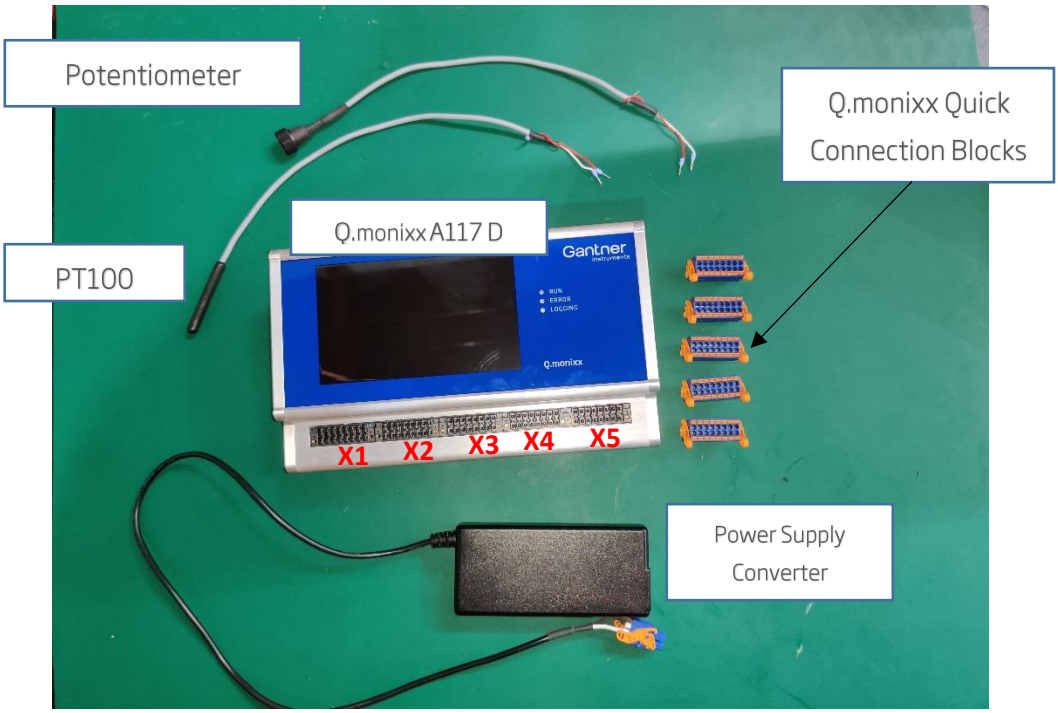
Help: http://127.0.0.1:8090/sphinx/html/ (with GI.bench online – visible in the Windows taskbar)



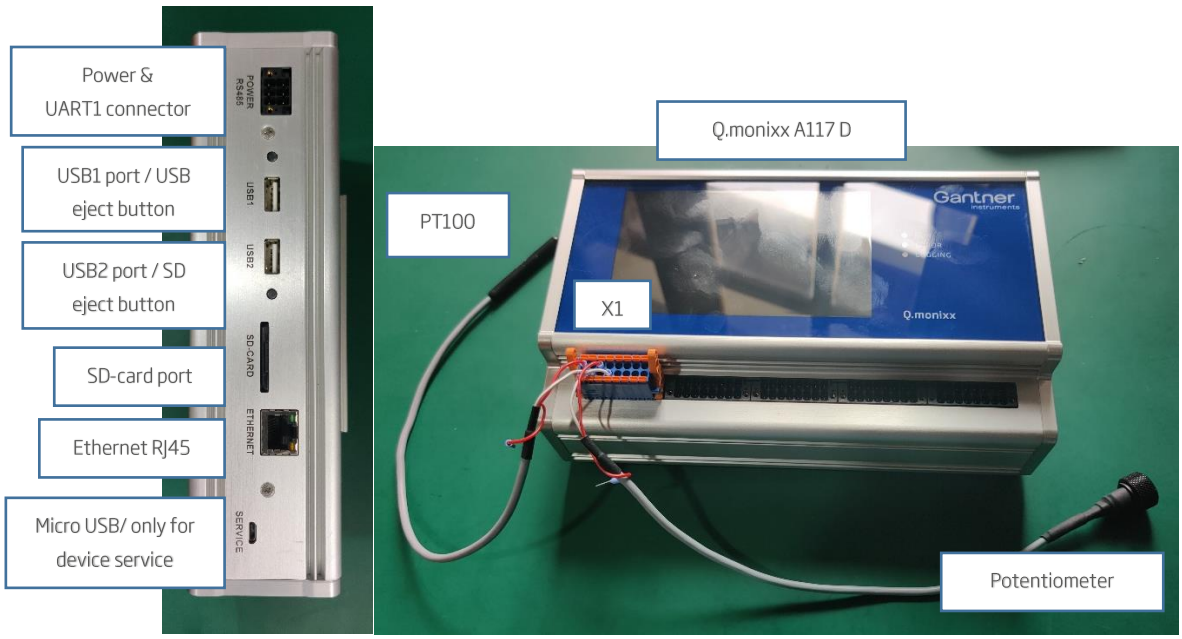
3. Hardware Configuration

3.1. Q.monixx A117 D Starter Kit

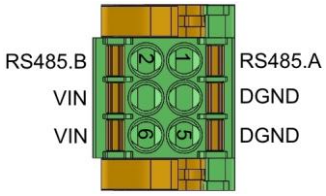
The Q.monixx A117 D Starter Kit consists of the following items:



3.2. Q.monixx Interfaces and Sensor Connection

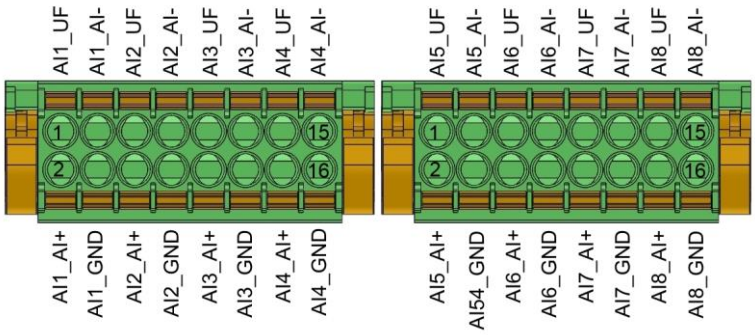


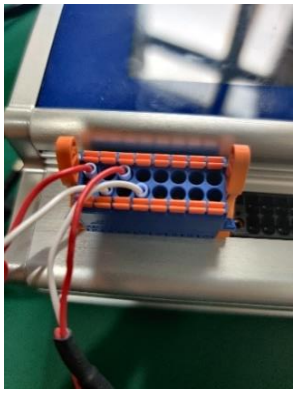
3.2.1. Connection of the Power Supply



3.2.2. Analog Input Connection Blocks X1 and X2

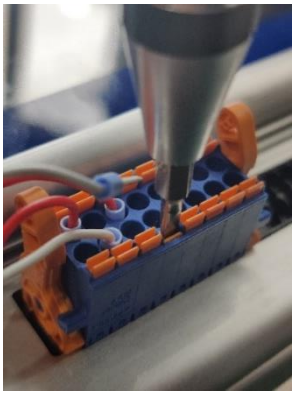
The connections of the PT100 and Potentiometer sensors should be made, as shown in the picture below. The pin connections are summarized in the table below.





Sensor	Cable	Q.monixx Connection Block X1
PT100 (+)	Red	AI1_UF
PT100 (-)	White	AI1_GND
Potentiometer (+)	Red	AI2_UF
Potentiometer (-)	White	AI2_GND

Note: The quick connection blocks are best used by pushing down the orange cramp with a screwdriver and putting in the wire into the corresponding slot. See the picture to the right.

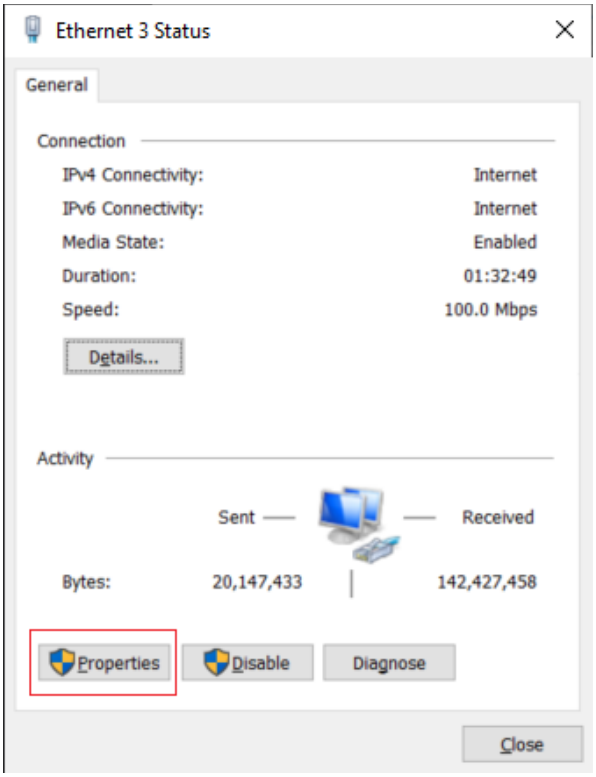


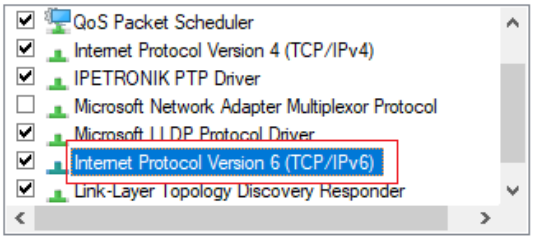
4. Scan Q.monixx in GI.bench

4.1. Network Configuration

4.1.1. Network Configuration PC

Your PC and the Q.monixx controller should be connected by an Ethernet cable and on the same ethernet network. Verify that Internet Protocol v6 (IPv6) is activated.



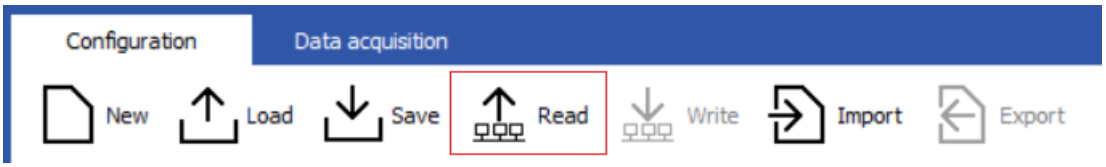


4.1.2. Network Configuration of Q.monixx in GI.bench

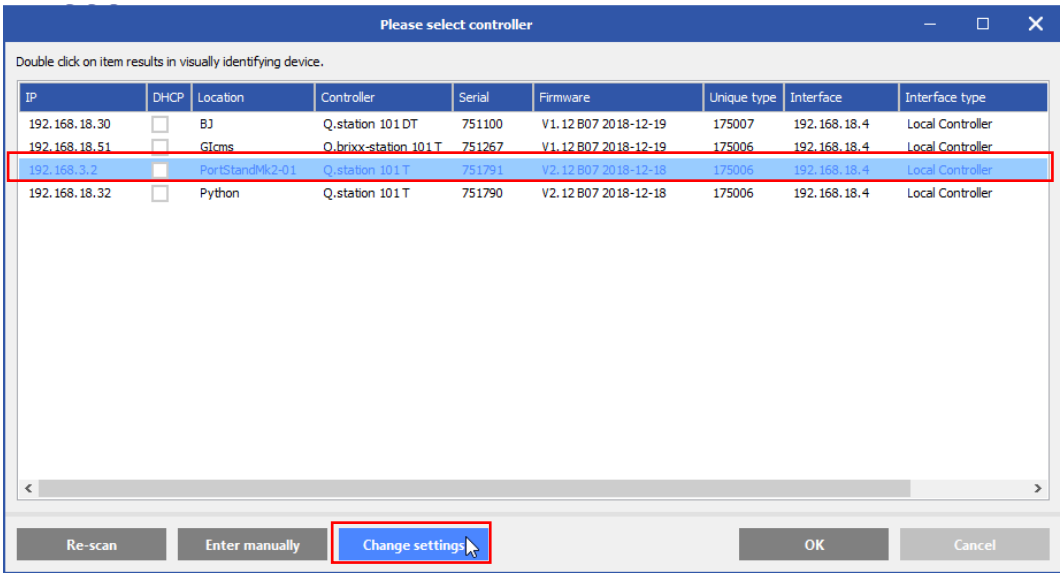
GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/gibench.html#configuration

1. Open GI.bench and scan for online devices (click the Read button).

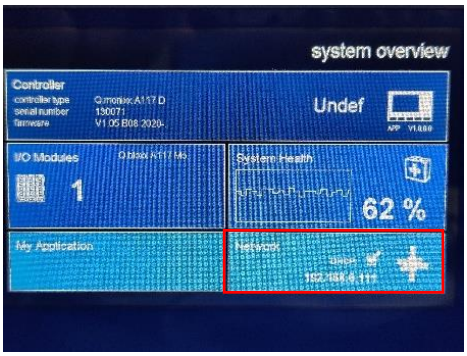


2. If the controller appears in blue, the controller is not on the same Ethernet network as the PC. Select it and choose Change settings to enter an IP address on the same Ethernet network.



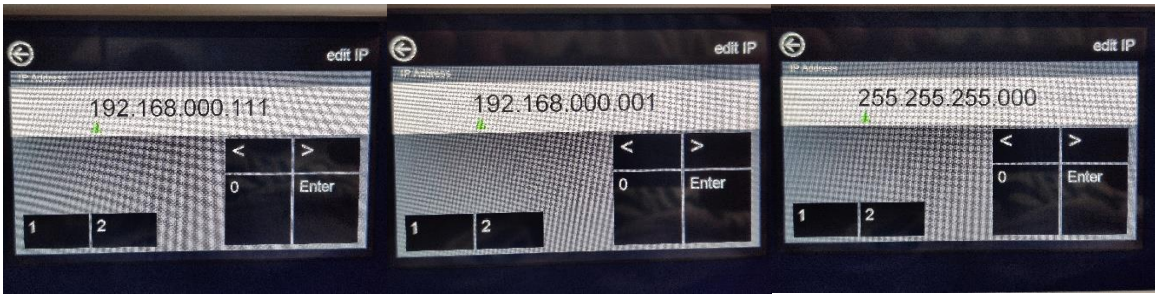
4.1.3. Network Configuration of Q.monixx via LCD Display (only Q.monixx A1xx D)

1. Tap on the Q.monixx display to wake it up if necessary. In the home screen, tap the Network tile.



2. Tap any of the network parameters to change them.

3. Use the arrow keys and digital Numpad to change the IP Address, Gateway IP Address, and Subnet Mask as needed.



IP Address Gateway IP Address Subnet Mask

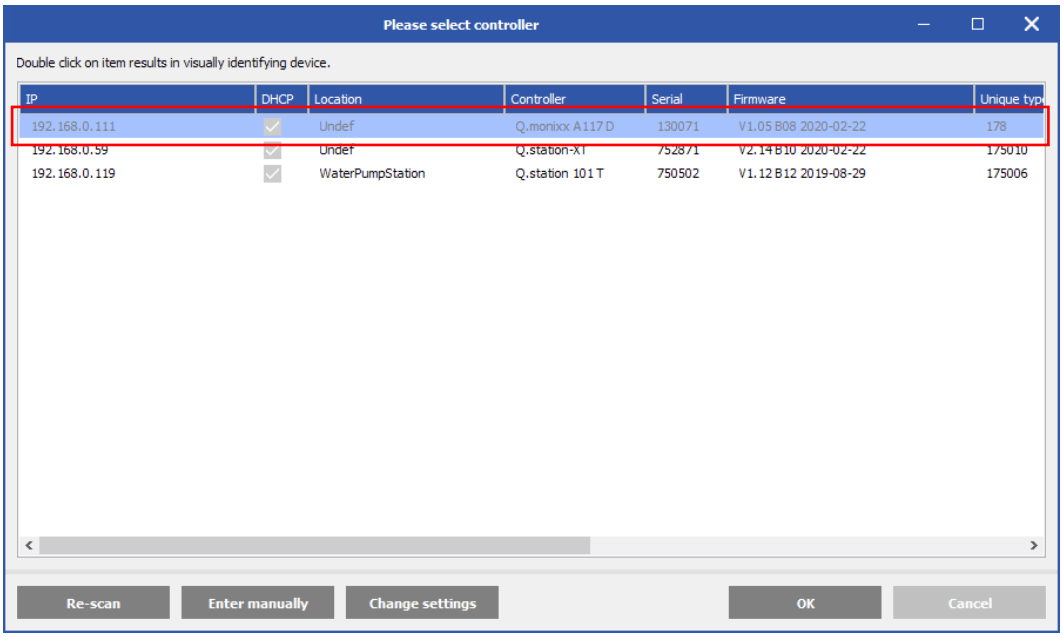
4. Tapping the checkbox for DHCP in the Network screen toggles it ON and OFF.

DHCP ON = Q.monixx receives IP Configuration from DHCP Server in local Ethernet network
DHCP OFF = Configuration must be done manually, as described above.

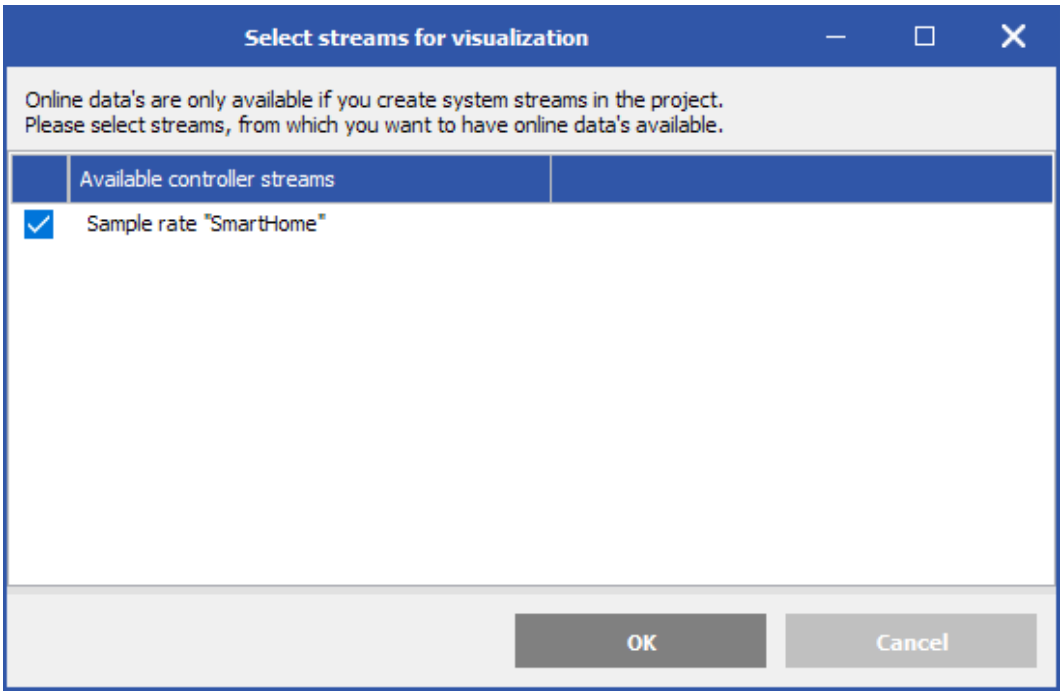
5. Hit Apply to confirm configuration and close the Network settings.

4.2. Read Configuration of Q.monixx

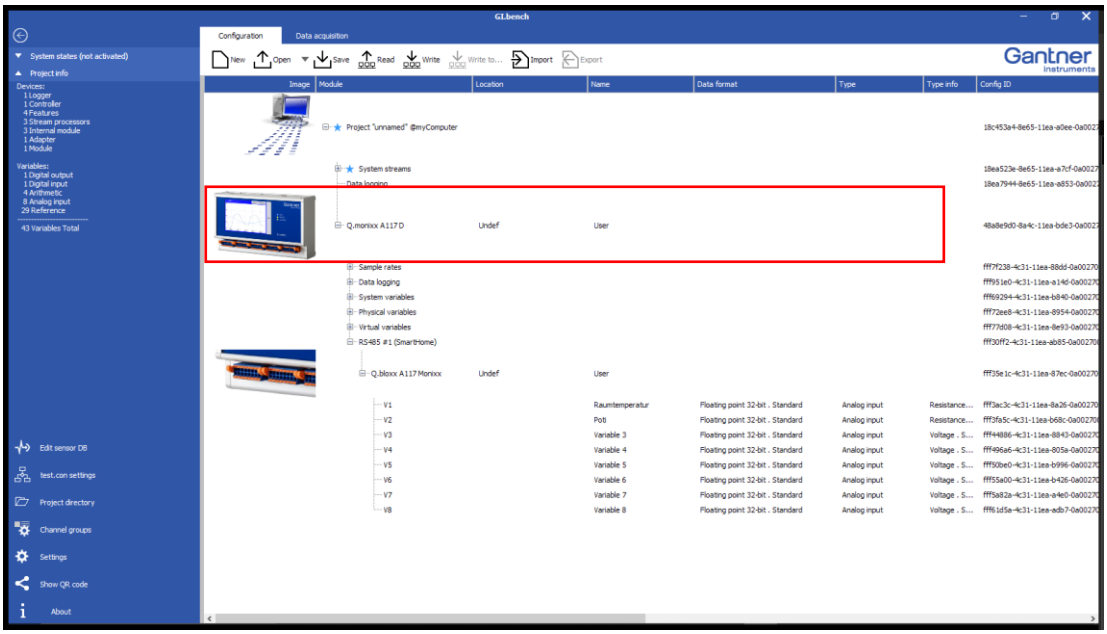
1. With the network configuration complete, you can now read the configuration of the Q.monixx. Select the Q.monixx in the window and click OK.



2. If a project configuration exists already on the Q.monixx, a prompt asks if you want to import the data streams for visualization. Click OK to create data streams; otherwise, click Cancel to continue.



3. The configuration is now loaded in GI.bench. Double-click on the Q.monixx in the project tree to open the Controller settings window.


GI.bench
Configuration
Data acquisition
New
Open
Save
Read
Write
Write to...
Import
Export
Gantner instruments
System states (not activated)
Project info
Devices:
1 Logger
1 Controller
4 Features
3 Stream processors
3 Internal module
1 Adapter
1 Module
Variables:
1 Digital output
1 Digital input
4 Arithmetic
8 Analog input
29 Reference
43 Variables Total
Edit sensor DB
test.con settings
Project directory
Channel groups
Settings
Show QR code
About
Image
Module
Location
Name
Data format
Type
Type info
Config ID
Project "unnamed" @myComputer
System streams
Data logging
Q.monixx A117 D
Undef
User
Sample rates
Data logging
System variables
Physical variables
Virtual variables
RS485 #1 (SmartHome)
Q.bloxx A117 Monixx
Undef
User
V1
Raumtemperatur
Floating point 32-bit . Standard
Analog input
Resistance...
V2
Poti
Floating point 32-bit . Standard
Analog input
Resistance...
V3
Variable 3
Floating point 32-bit . Standard
Analog input
Voltage . S...
V4
Variable 4
Floating point 32-bit . Standard
Analog input
Voltage . S...
V5
Variable 5
Floating point 32-bit . Standard
Analog input
Voltage . S...
V6
Variable 6
Floating point 32-bit . Standard
Analog input
Voltage . S...
V7
Variable 7
Floating point 32-bit . Standard
Analog input
Voltage . S...
V8
Variable 8
Floating point 32-bit . Standard
Analog input
Voltage . S...

5. Project Configuration

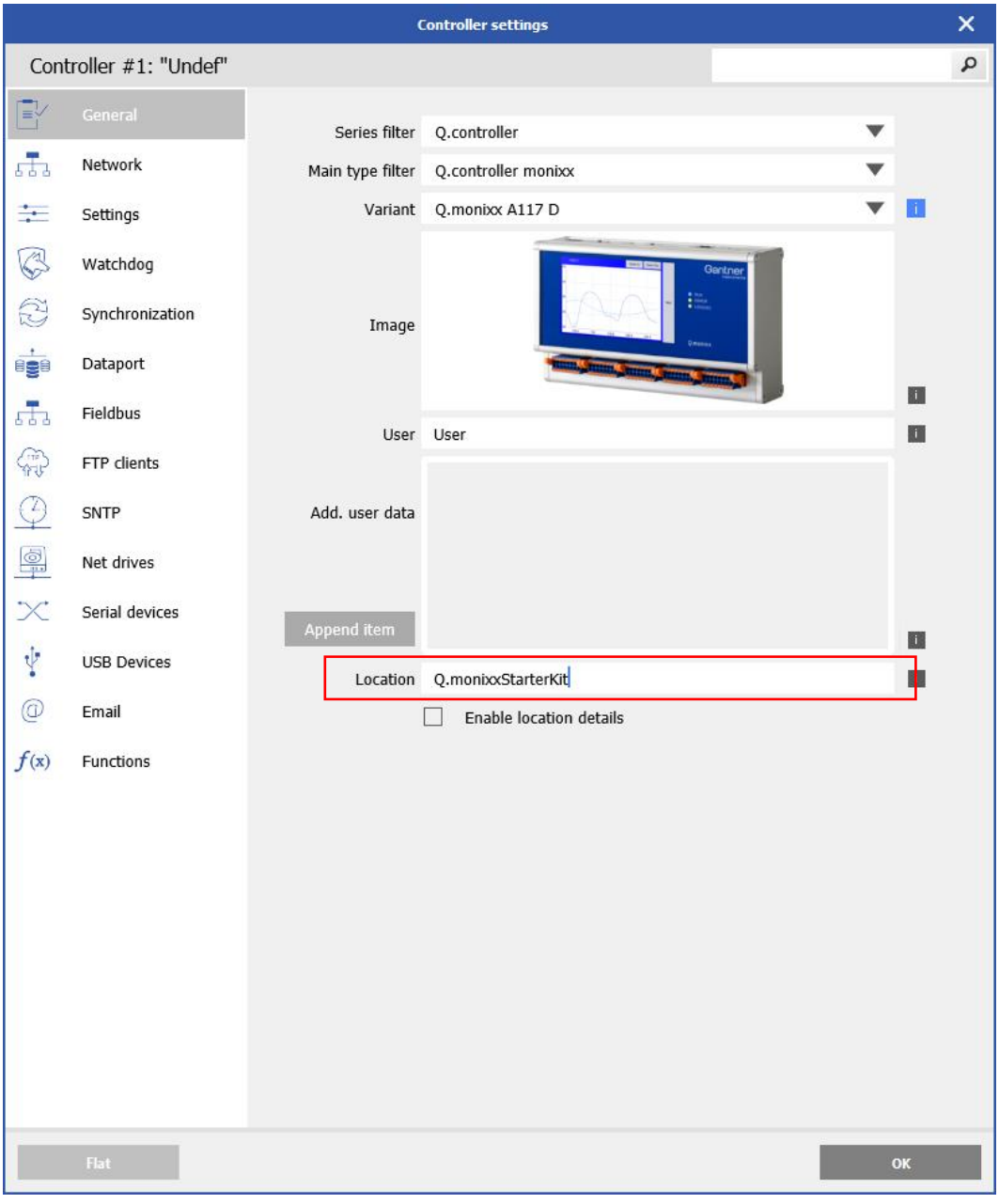
5.1. Q.monixx Controller Configuration

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://localhost:8090/sphinx/html/gi.bench/Controller.html

5.1.1. Controller Name

In Controller settings, under *General,* you can change the Q.monixx name (Location).

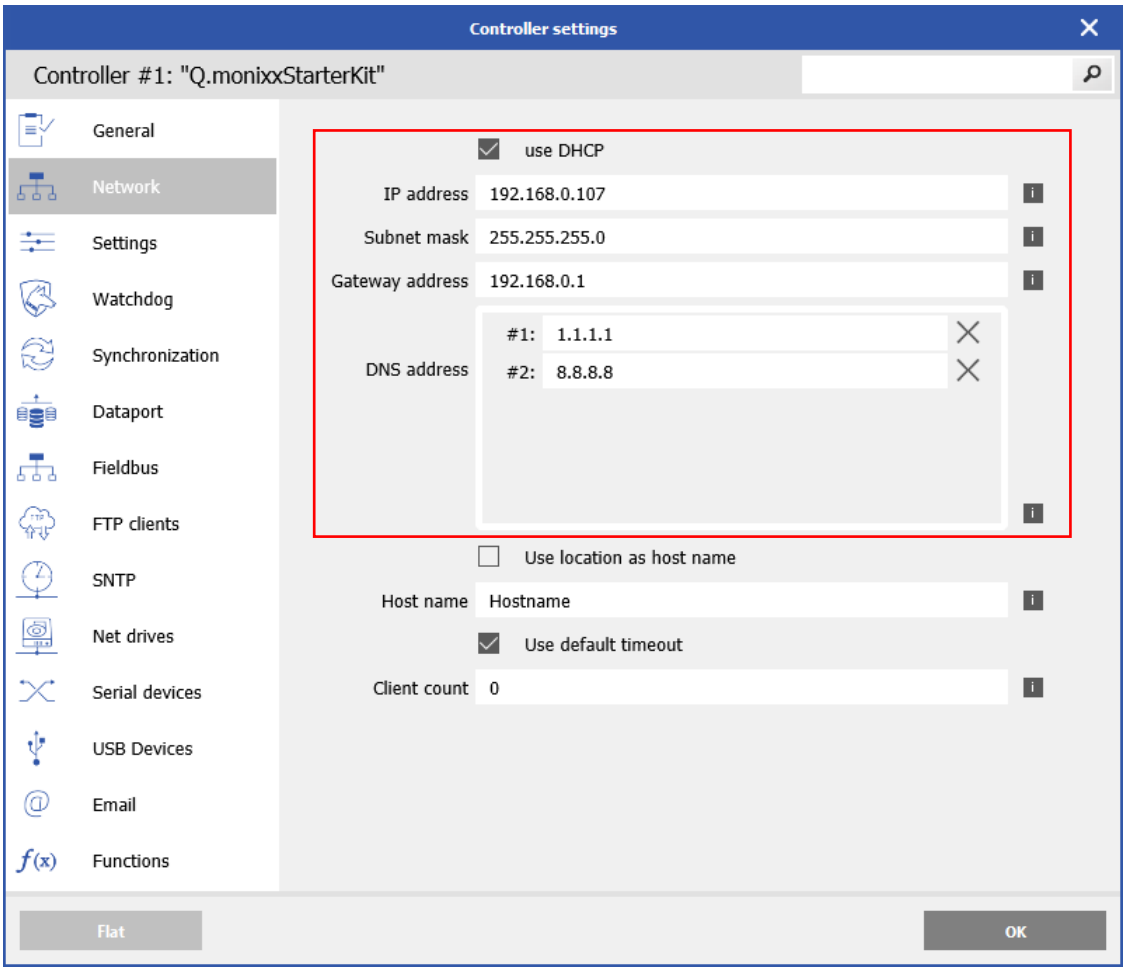


5.1.2. Network Adjustments

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html#network

You can view or make the necessary network changes under *Network*.

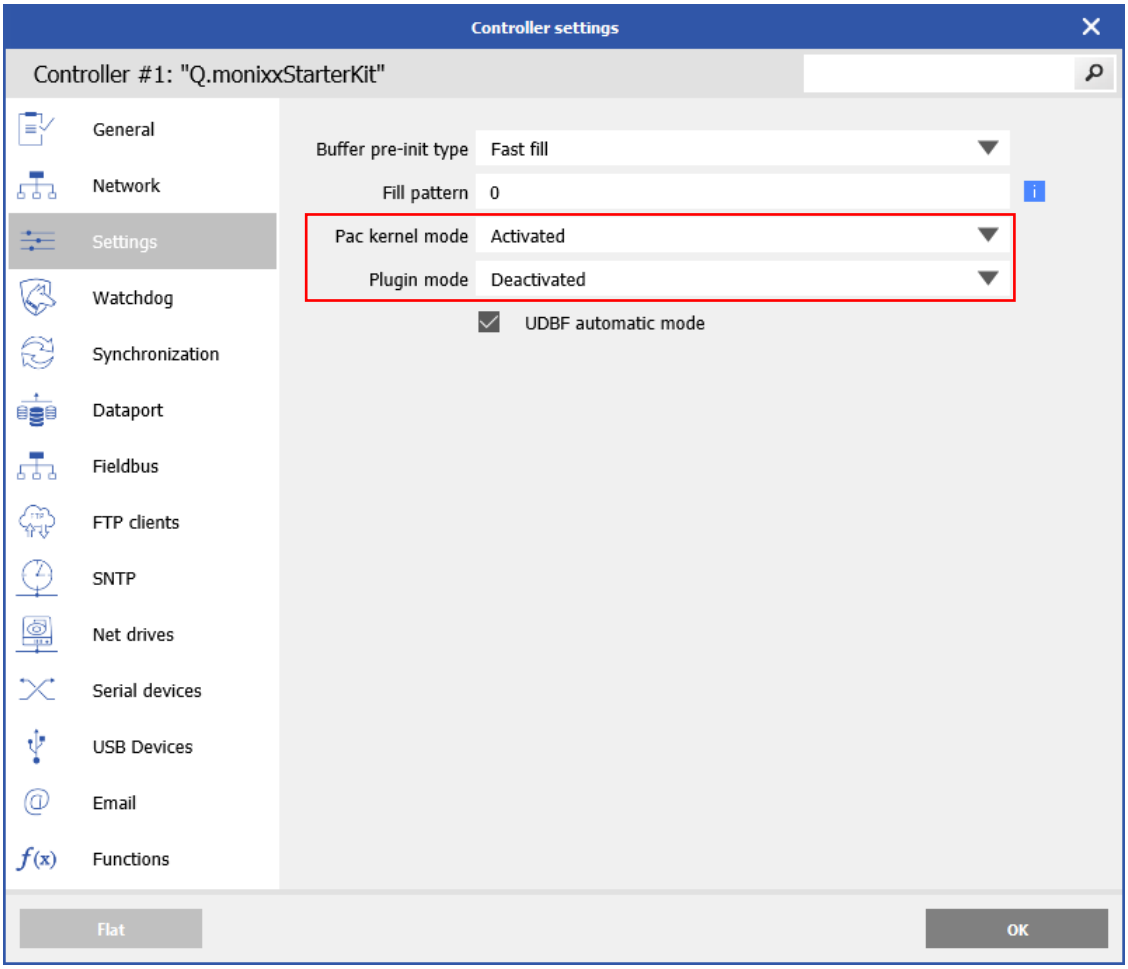


5.1.3. Activation of test.con and Plugins

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html#settings

The activation of test.con and plugins are under *Settings* → Pac kernel mode or Plugin mode.



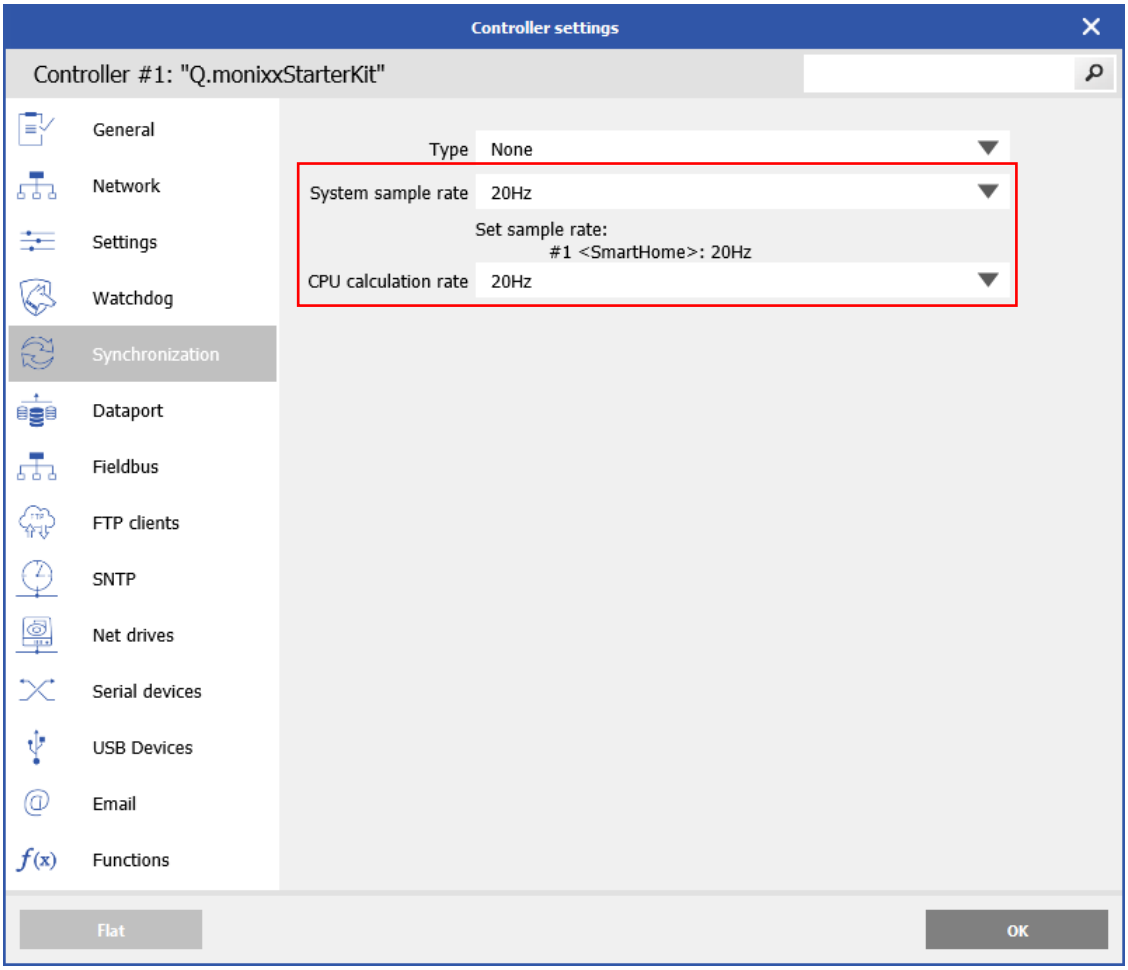
5.1.4. Controller System Frequency

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html#synchronization

To configure the system sampling frequency, go to *Synchronization* → System Sample Rate.

The internal system clock (CPU calculation rate) of Q.monixx can be set less than or equal to the highest System sample rate. The maximum system cycle frequency is 100 Hz. The system cycle frequency is a significant factor in terms of system performance and sets the rate for the execution of virtual variables.

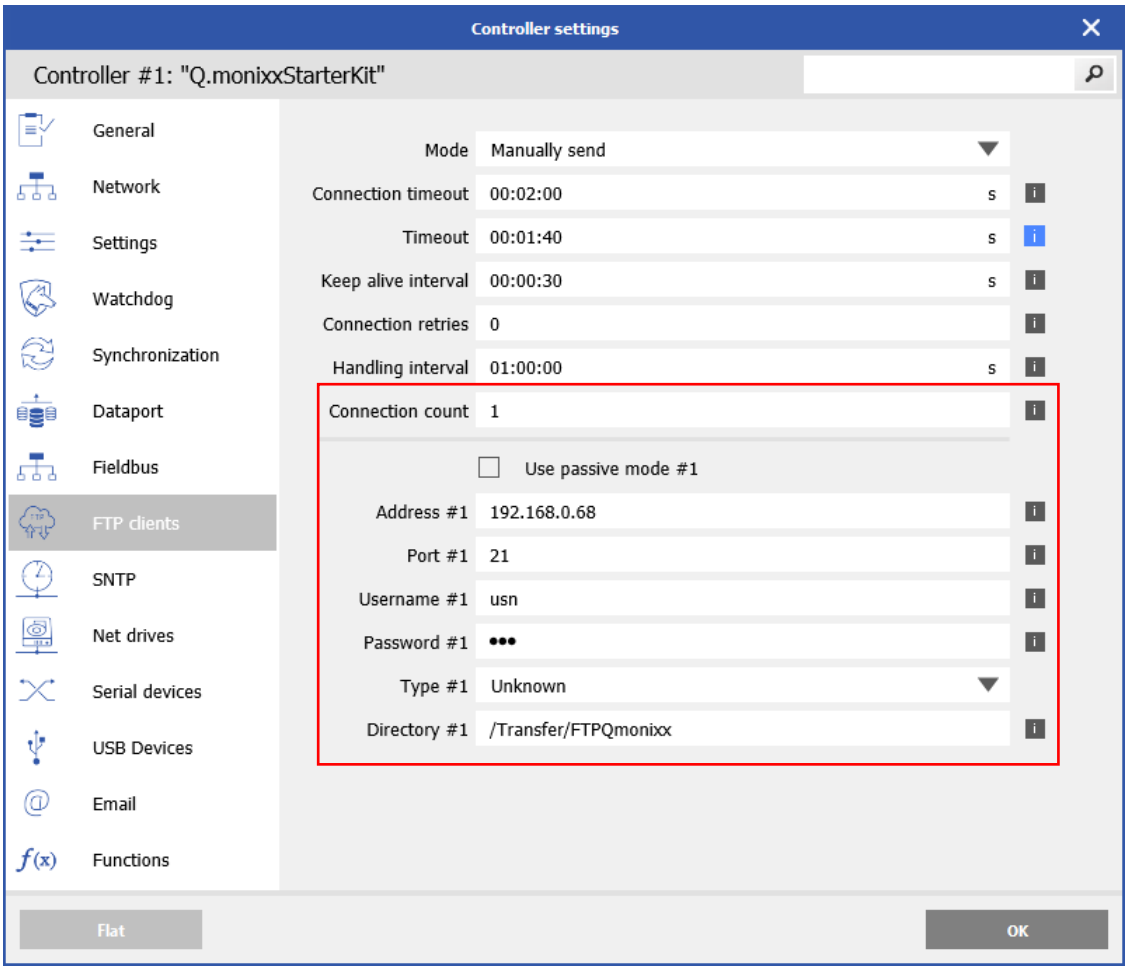


5.1.5. Send Data to FTP

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html#ftp-clients

In *FTP clients*, you can configure to send logged files to an FTP server. Set the Connection count to a value of 1 or higher to configure the FTP server(s).



The logger configuration is shown in Chapter 6.

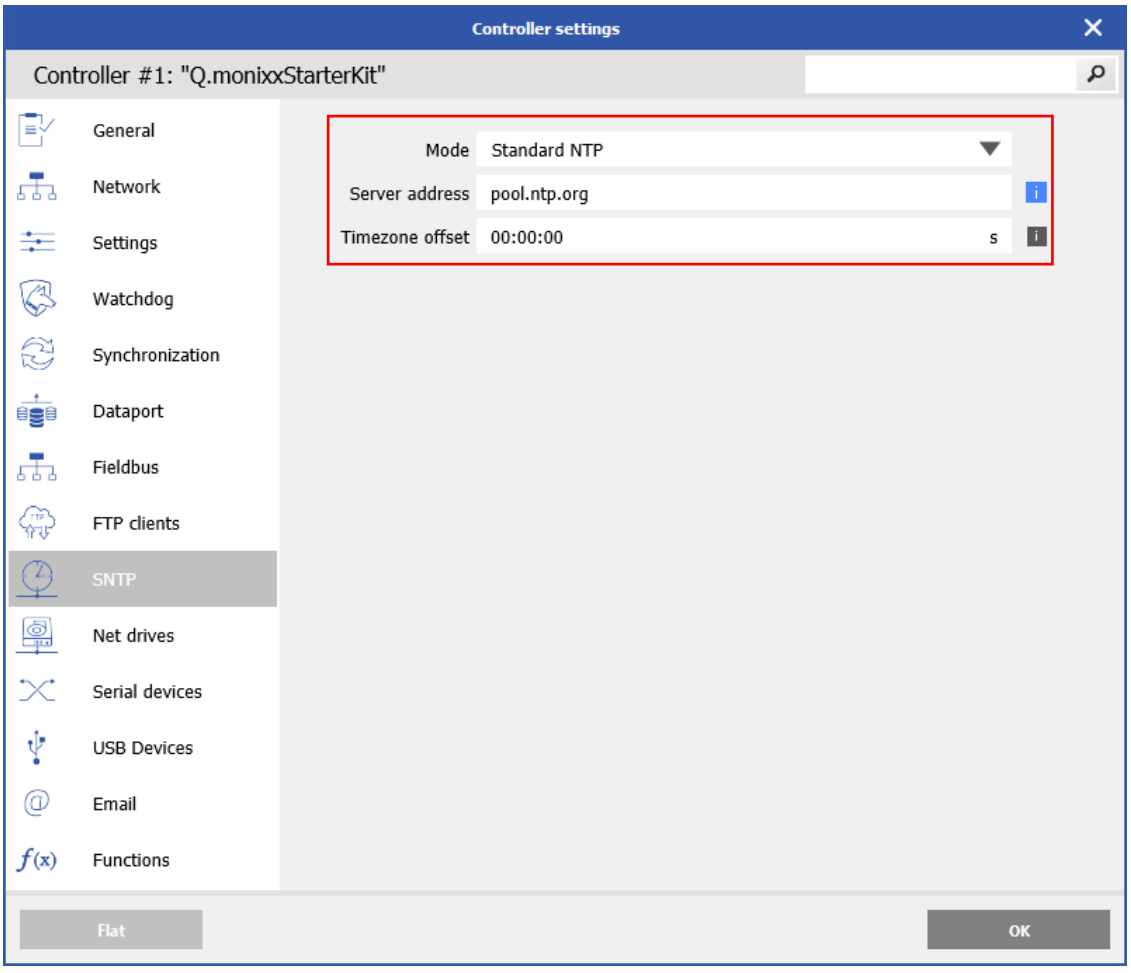
5.1.6. SNTP (Simple Network Time Protocol)

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html#sntp

Under *SNTP*, you can configure an SNTP Server for system time synchronization.

Note: The proper Network settings are required (e.g., Gateway, DNS).

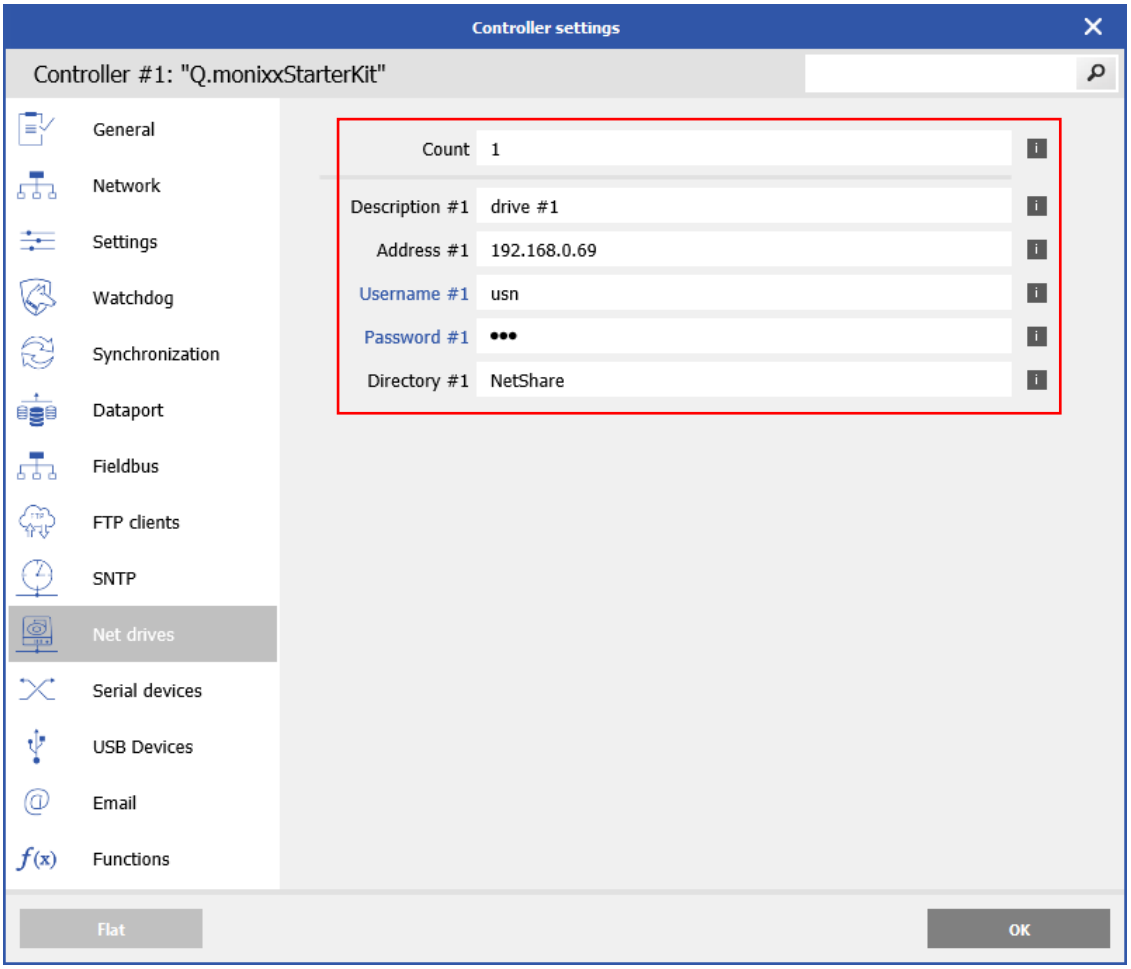


5.1.7. Network Drive

GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html#net-drives

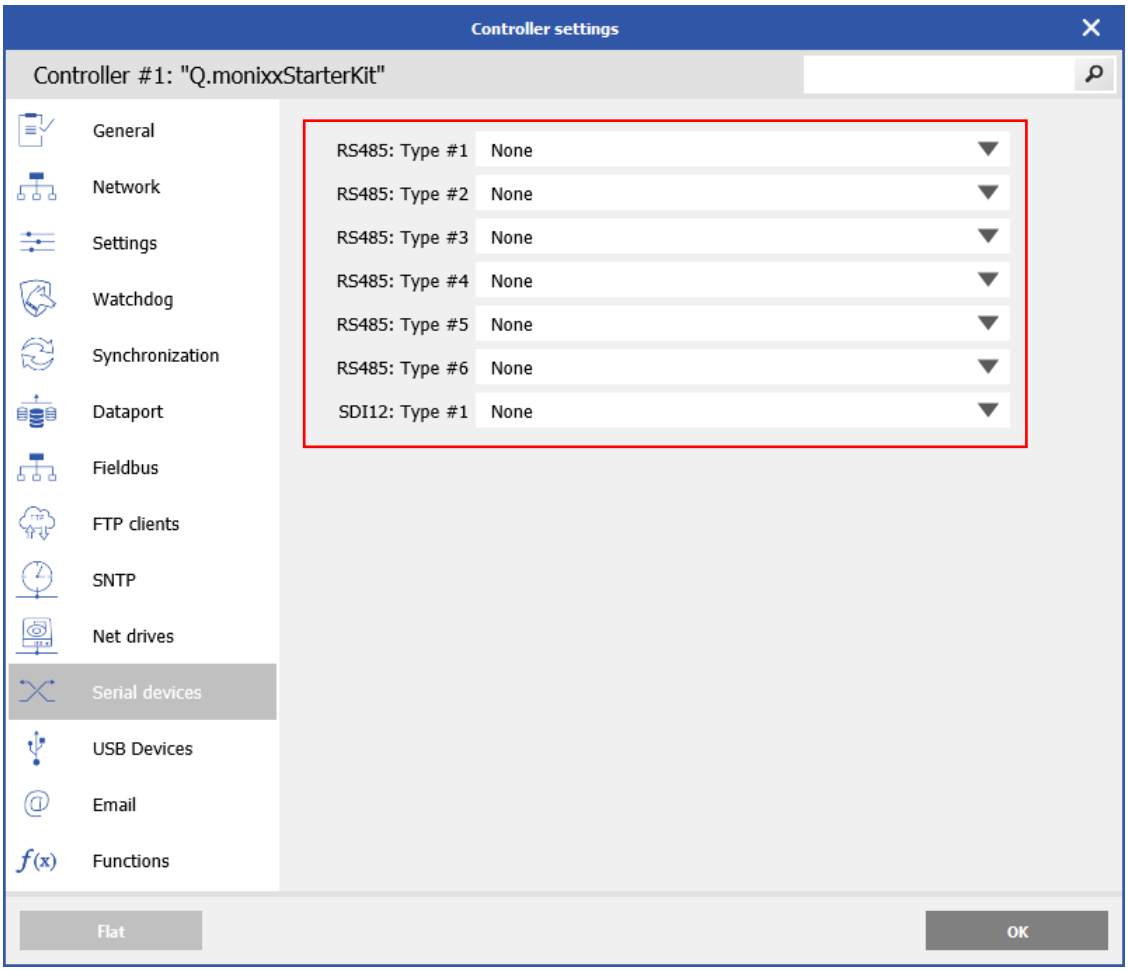
Under Net drives, you can configure a network drive connection by changing the Count. It is possible to write to a specified path.

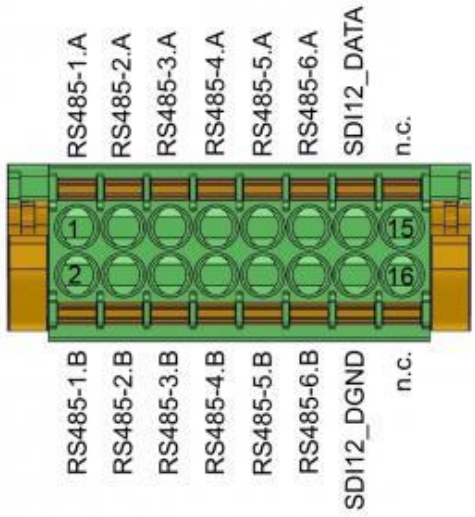


The logger configuration is shown in Chapter 6.

5.1.8. Serial Devices

Under *Serial devices,* you can configure the serial interfaces (RS485 #1 - #6 and SDI12 #1) on the Q.monixx connection block X5 (see diagram below).





5.2. Sensor Configuration

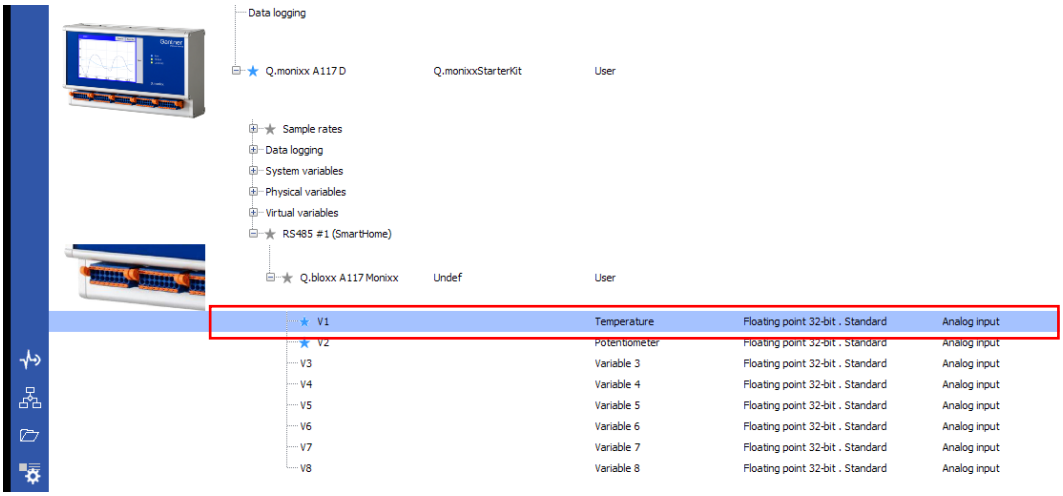
5.2.1. Definition of Channels

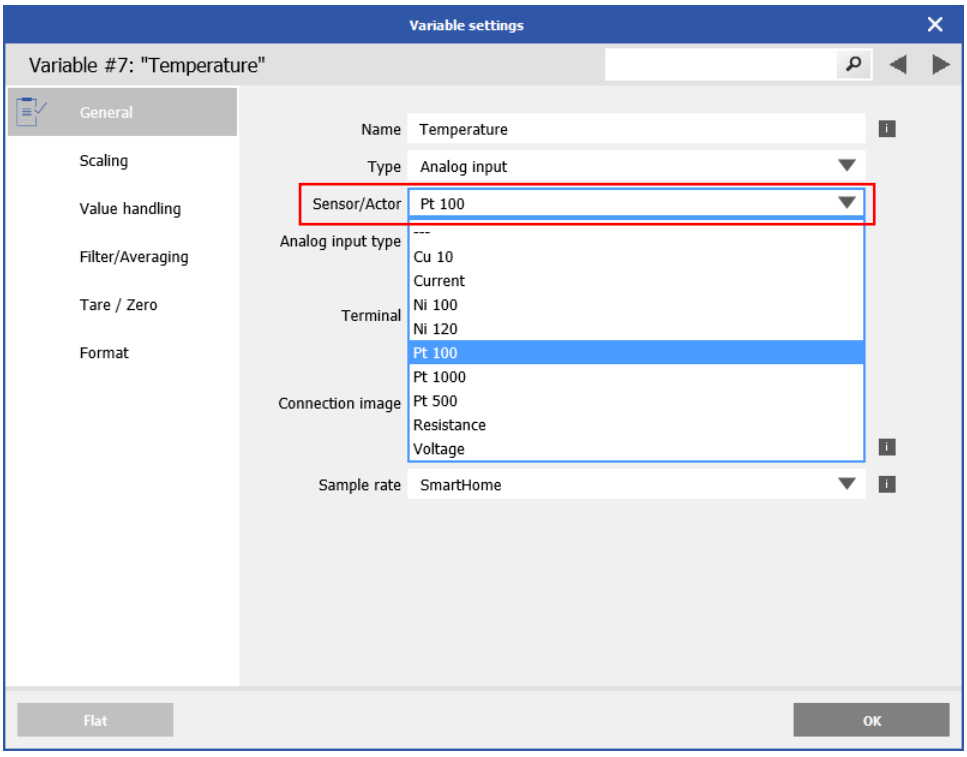
GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Variable.html#

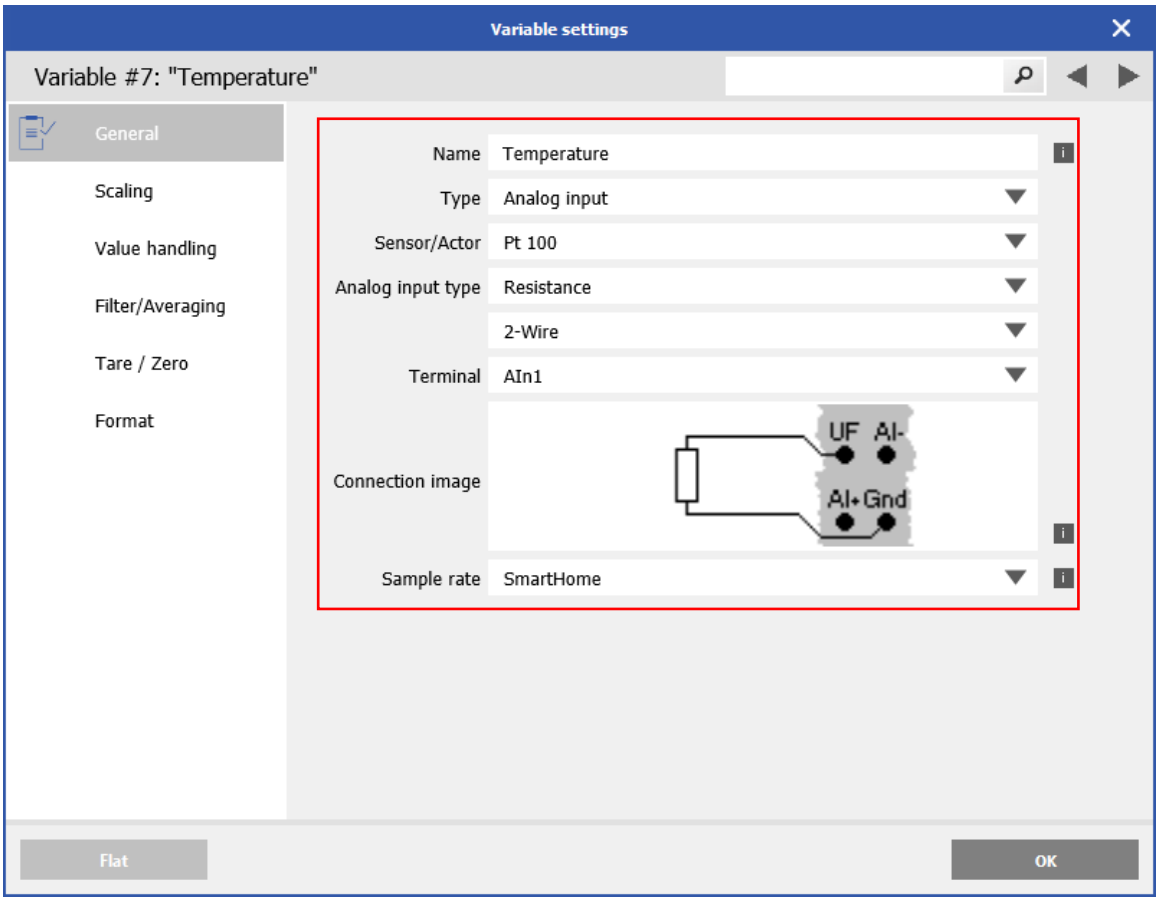
The Q.monixx has 8 multifunctional analog inputs. You can measure voltage, current, resistance, and temperature with RTD (e.g., Pt100 or Pt1000).

1. Double-click on V1 in the project tree to configure the Sensor/Actor as Pt100.



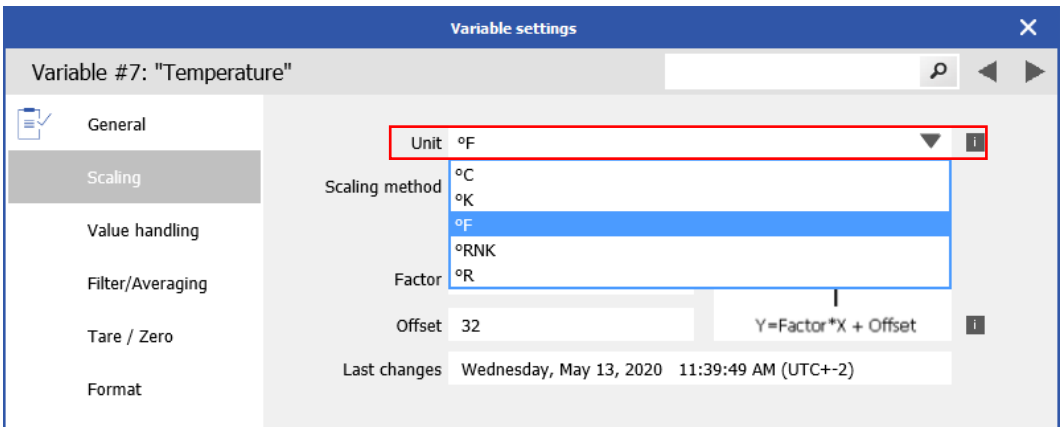


2. Change the additional variables settings under *General*. See the setting descriptions below.

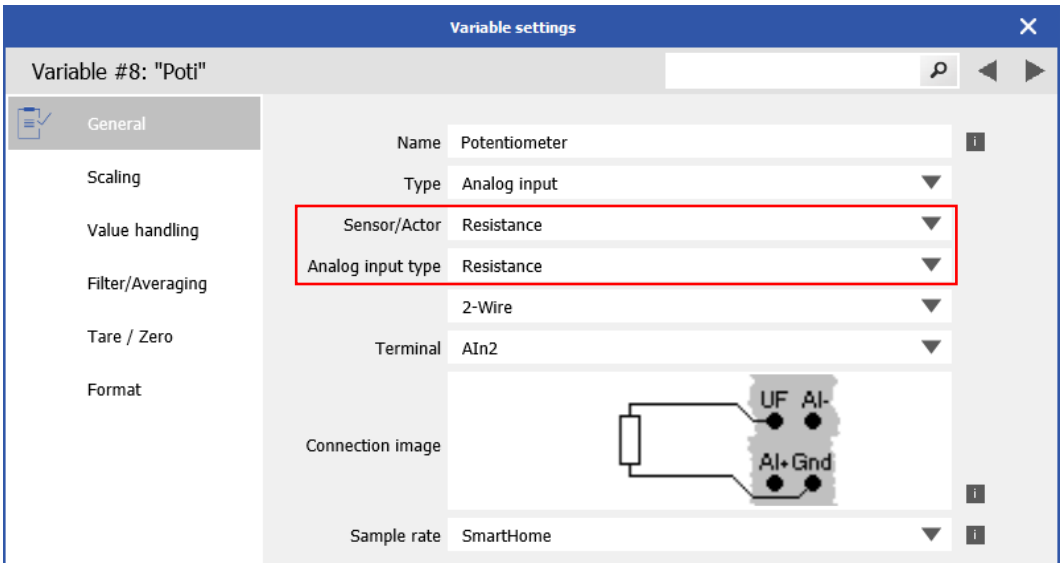


Name: Variable name
Type: You can choose between *None, Analog input, Arithmetic* – Analog input (defined in Step 1)
Sensor/Actor: Pt100 (defined in Step 1)
Analog Input Type (Line 1): Resistance (choosing Pt100 in Step 1 changed this automatically)
Analog Input Type (Line 2): Choose between 2-Wire or 4-Wire RTD
Terminal: Choose on which terminal the sensor is connected – Ain1 (see Chapter 3.2)
Connection Image: Preview of the terminal wiring assignments
Sample Rate: The Sample rate for your Q.monixx is configured (see Chapter 5.1.4)

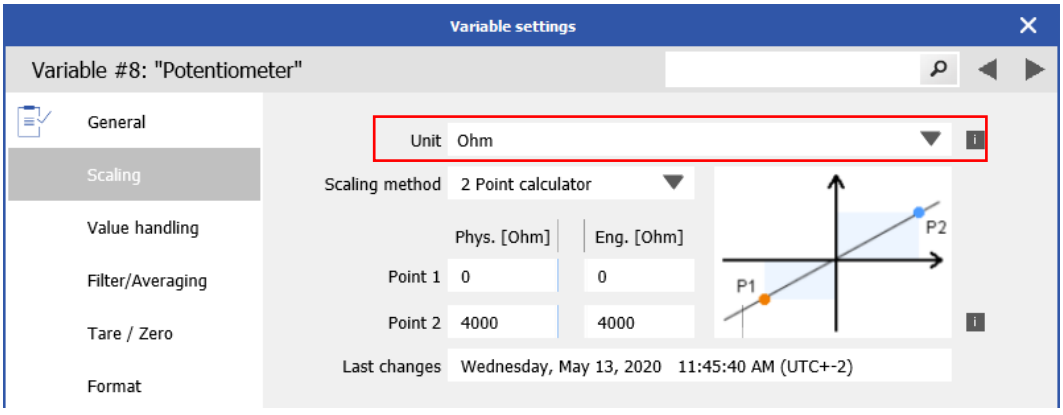
3. By default, the Pt100 Unit is configured to Celsius (°C). You can edit to Fahrenheit (°F) in *Scaling* by selecting it from the list of pre-configured units.



4. For other resistance sensors, e.g., potentiometers, Sensor/Actor has to be set to Resistance. You can configure the variable Name to indicate that the channel is for a potentiometer.



5. The resistance Unit is ohms (kOhm). You can edit the unit in *Scaling* by selecting from the list.



5.3. Adding Additional Modules to the Q.monixx

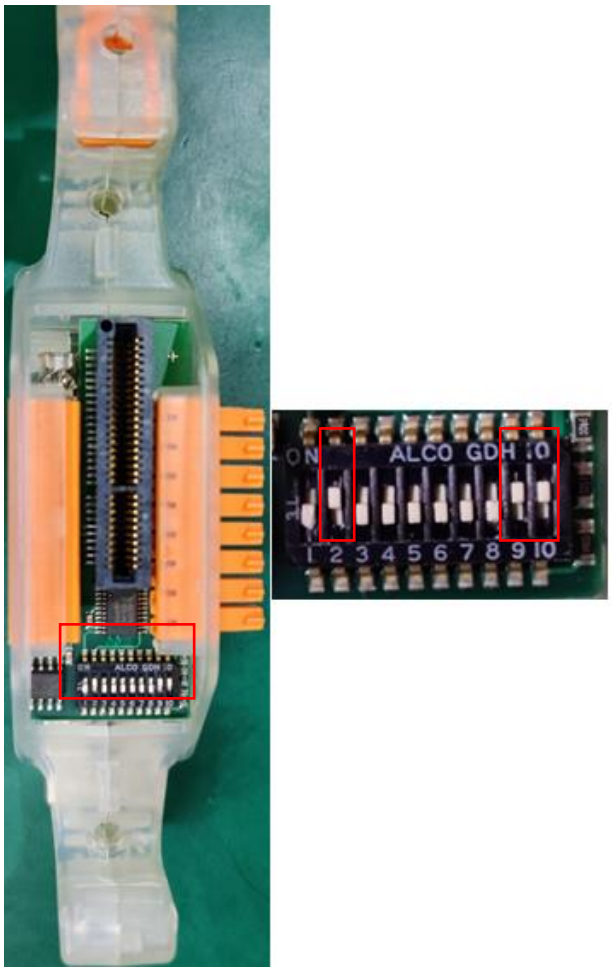
For any of the following configurations, disconnect the Q.monixx from its power supply. Wait until all LEDs are powered off before proceeding. A maximum of 4 Q.series modules can be added.

5.3.1. Preparing the Module Sockets

To add additional modules to the Q.monixx, you must first prepare the modules and their sockets.
You have to assign an address to each module on UART #1. With the Q.monixx A117, address 1 is already assigned to the internal module (Q.bloxx A117). Any additional modules must start with address 2 and continue so on. The last socket must have the terminating resistor DIP switches set.

5.3.1.1. Q.bloxx Classic Modules

For the Q.bloxx Socket (Art. Nr. 757486), you must adjust the DIP Switches to assign the module addresses (pins 1 - 8) or activate the terminating resistor (pins 9 + 10). You must assign an address to each module on UART #1. Added measurement modules must be assigned addresses starting with address 2 (since the A117 module of the Q.monixx is address 1 already).

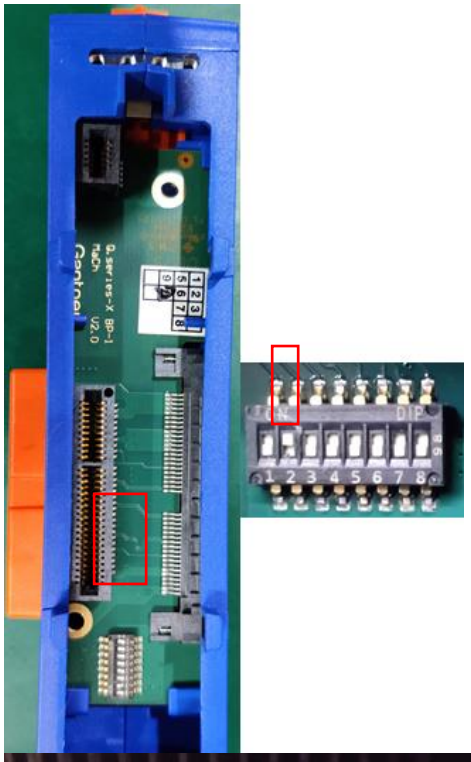


Note: Starting with the first module added, set DIP switch position 2 to ON (UP) on the Q.bloxx Classic socket. Do not forget that the last module added must have the DIP switch positions 9 and 10 set to ON (UP) to activate the UART terminating resistor. Similar to binary, the next module in series, address 3, would have pins 1 and 2 ON (UP), and after, address 4 would have only pin 3 ON (UP).

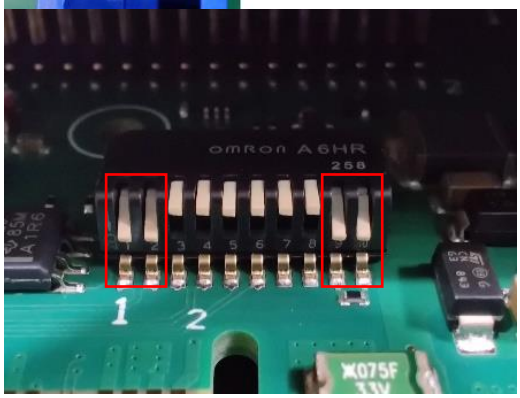
5.3.1.2. Modules for Q.series X

To add Q.series X modules, you have to configure two DIP switch blocks. One DIP switch block is on the socket, and the other is on the processor board.

On the socket, you set the module address via the DIP switch block. On the processor board, you set the UART and the terminating resistor (on the last module added).



Note: Starting with the first module added, set DIP switch position 2 to ON (UP) on the Q.bloxx X socket. Similar to binary, the next module in series, address 3, would have pins 1 and 2 ON (UP), and after, address 4 would have only pin 3 ON (UP).

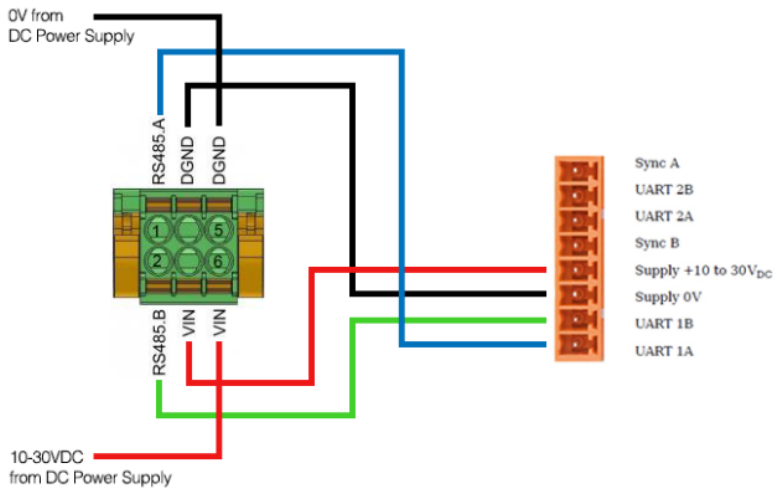


Note: Do not forget that the last Q.series X module added must have the DIP switch positions 9 and 10 set ON (DOWN) to activate the terminating resistor. Also, you must have the DIP switch positions 1 and 2 set ON (DOWN) due to being added to UART #1.

5.3.2. Wiring for Additional Modules

5.3.2.1. Q.bloxx Classic Modules

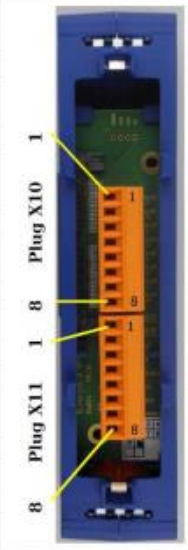
Wire the Power Supply and UART connections, as shown in the diagram below. UART connections are for adding additional modules to UART #1 of the Q.monixx (there is only one UART available).



5.3.2.2. Q.series X Modules

To connect Q.series X modules, you need the Q.bloxx X Extension Socket (QXES Art. Nr.544021 (left) or 544122 (right)).

Connector X10			
1		RS485 1 P	Communication UART 1
2		RS485 1 N	
3		RS485 2 P	Communication UART 2
4		RS485 2 N	
5		RS485 3 P	Communication UART 3
6		RS485 3 N	
7		RS485 4 P	Communication UART 4
8		RS485 4 N	
Connector X11			
1		RS485 ACYCL P	Communication Service Interface
2		RS485 ACYCL N	
3		DIG slot	Not used
4		VSI	Sensor excitation V+
5		VS_GND	Sensor excitation Ground
6		VIN	Power supply 10 – 30 VDC
7		DGND	Power supply Ground
8		Chassi	Chassi



Note: Connect VIN (Q.monixx) to VIN on QXES (X11-6). Connect DGND to DGND (X11-7). Connect RS485.A to RS458 1 P (X10-1) and RS485.B to RS485 2 N (X10-2).

After connecting the QXES, connect the Q.series X module(s) to the QXES and start the Q.monixx.

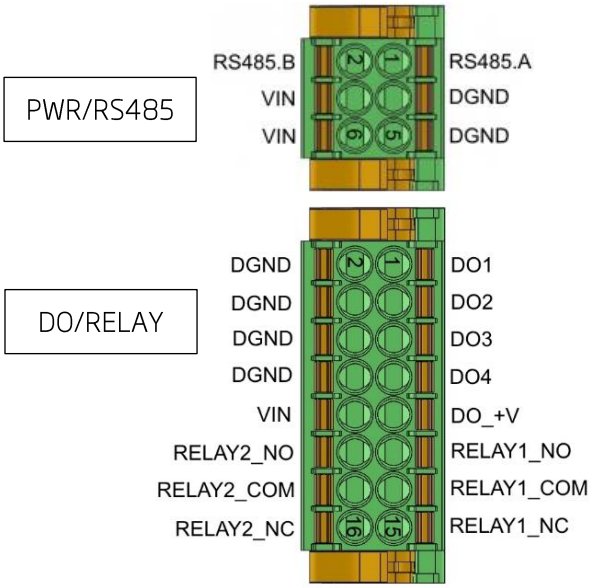
5.4. Connecting Relays

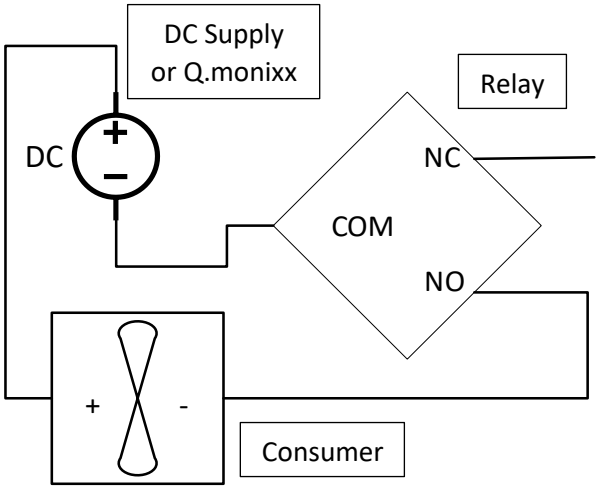
On Q.monixx connector X4, you can connect up to 4 Digital Outputs. This connector is also used to connect up to 2 relays.

- Switching Voltage: <60 VDC
- Switching Current: <1 A
- Switching Power: <60W

5.4.1. Wiring Relays

You can use the Q.monixx Power/RS485 connector as a power source, e.g., for a fan (where the voltage is dependent on the power supply). In the circuit diagram below, DC + would be VIN on the Q.monixx Power/RS485 connector, and DC – would be DGND, respectively.



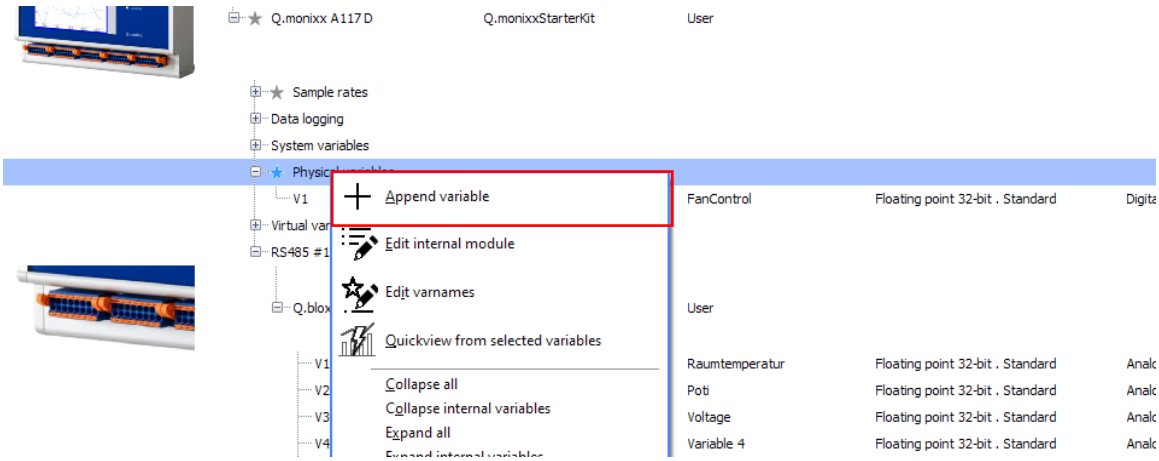


The table below defines the connections in the circuit diagram above (for a consumer and relay). The right column describes when using the Q.monixx Power/RS485 connector as a power source.

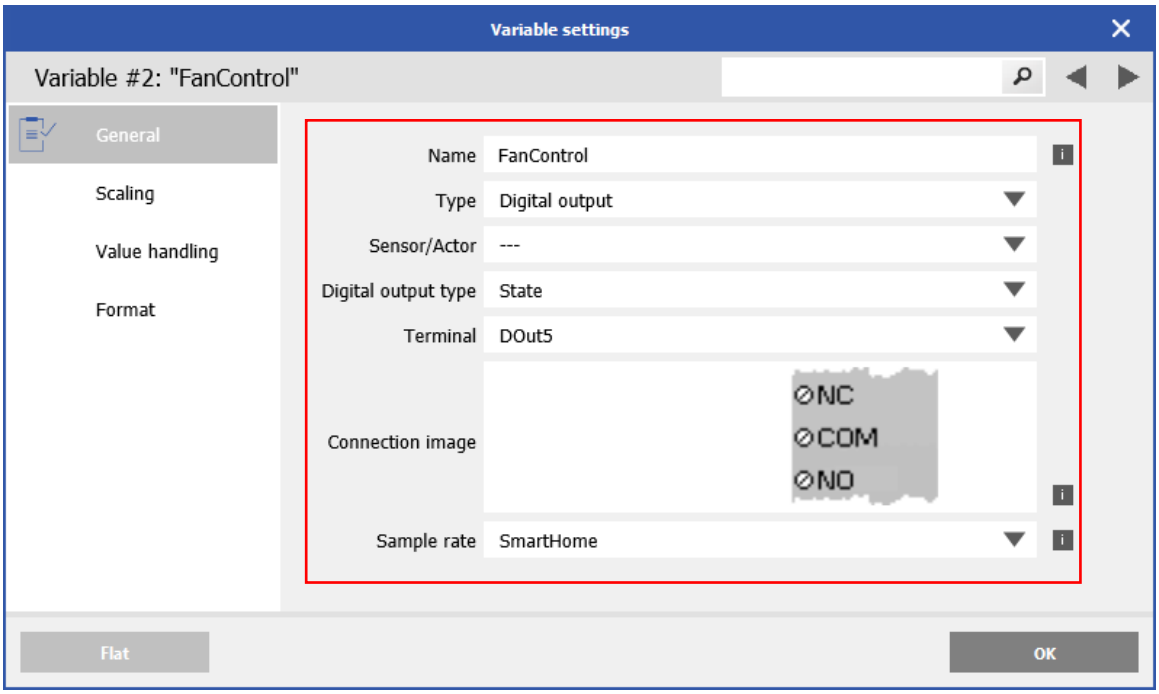
DC Power Supply +	Consumer +	VIN (Q.monixx)	Pin 4 (PWR/RS485)
DC Power Supply -	Ground on Relay	DGND (Q.monixx) to RELAY1_COM	Pin 3 (PWR/RS485) to Pin 13 (DO/RELAY)
Normal Open Contact	Consumer -	RELAY1_NO	Pin 11 (DO/RELAY)
Normal Closed Contact	Consumer -	RELAY1_NC	Pin 15 (DO/RELAY)

5.5. GI.bench Configuration for Relays

1. Digital I/O and Relay channels are added to GI.bench projects as Physical Variables. Right-click on *Physical variables* in the project tree and select Append Variable from the context menu. Define the number of variables desired and push OK.



2. Double click on the newly created physical variable to open the variable settings window.



3. Change the following settings to define the Relay channel fully:
   a. Choose a meaningful Name, e.g., FanControl
   b. Change Type to Digital output (relays are considered Digital Output variable types)
   c. Change Terminal to DOut5 for Relay 1 or DOut6 for Relay 2 and confirm with OK

4. Write the project by clicking Write in GI.bench to update the settings of the Q.monixx.

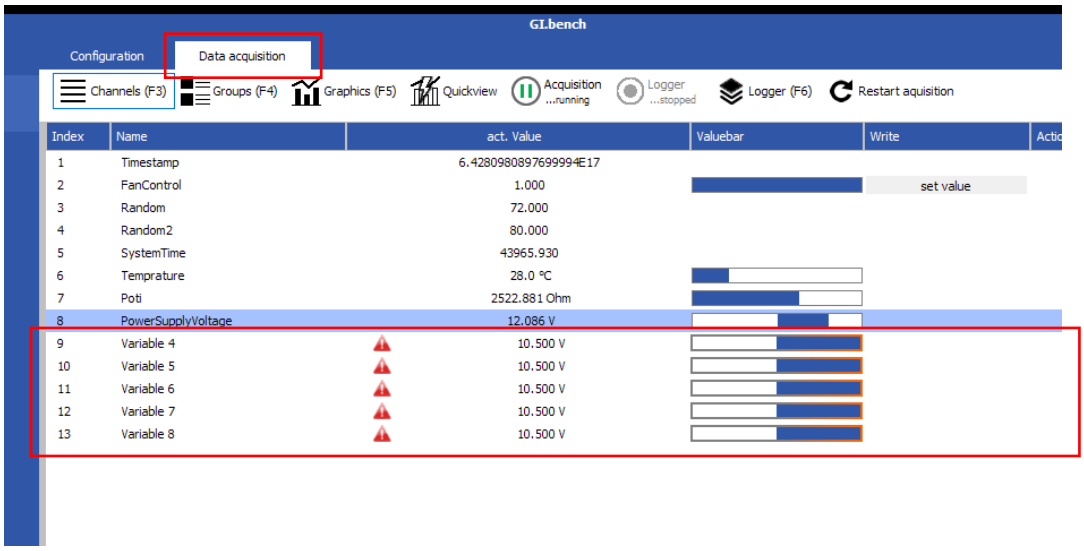
5.5.1. Visualization

GI.bench must be online before clicking the following link. Please start GI.bench first.

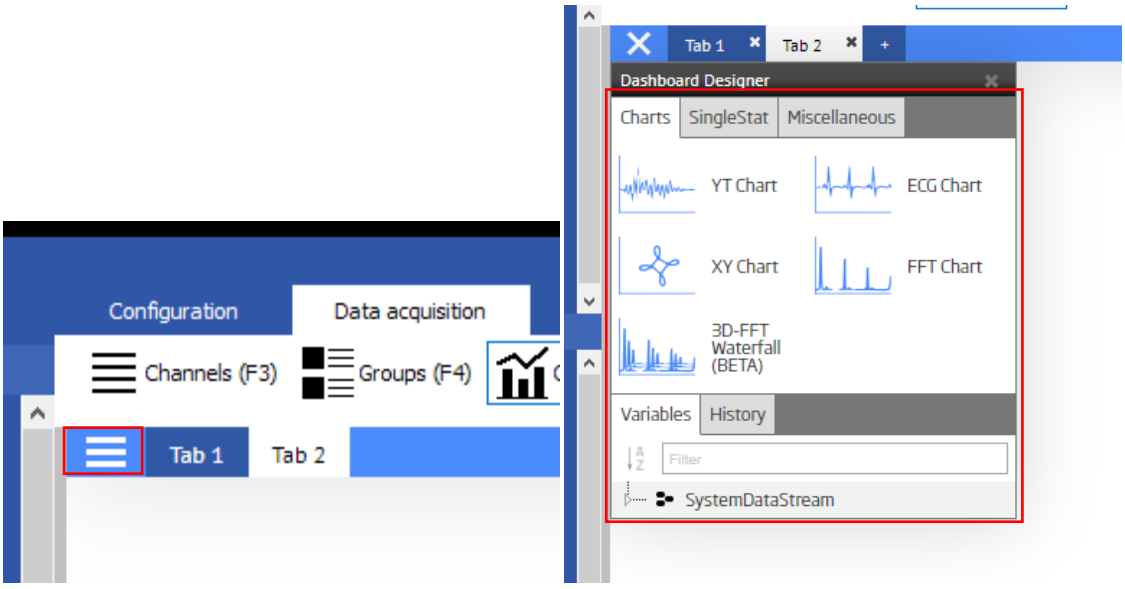
Help: http://127.0.0.1:8090/sphinx/html/dashboard_designer.html

1. After successfully writing the project to the Q.monixx, go to the Data acquisition tab in GI.bench.

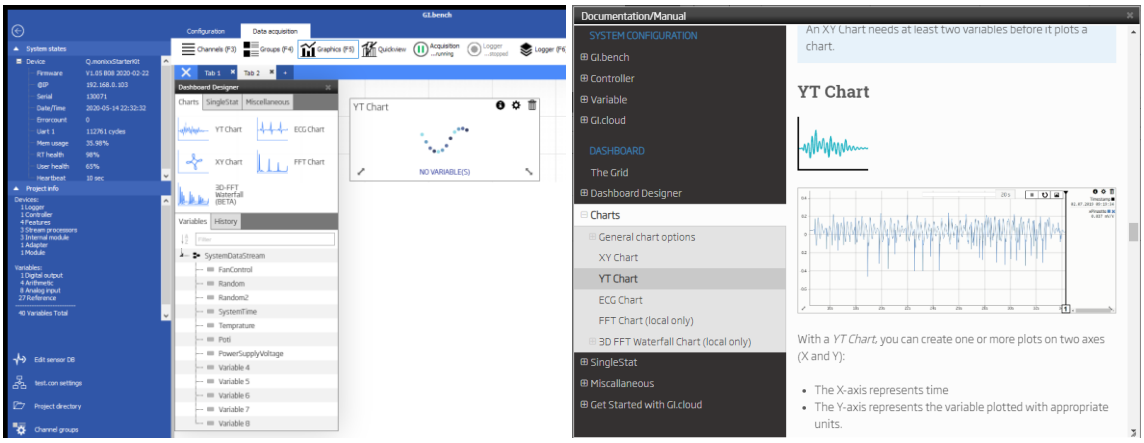
   Note: Check for errors, which are indications of whether the sensors are set up correctly. The 5 errors seen below are the result of variables where there is no sensor signal detected. The actual values show the channels at 10.500 V because that is the maximum value used for error reporting. There must be no errors on a channel for data visualization of that channel to be possible.



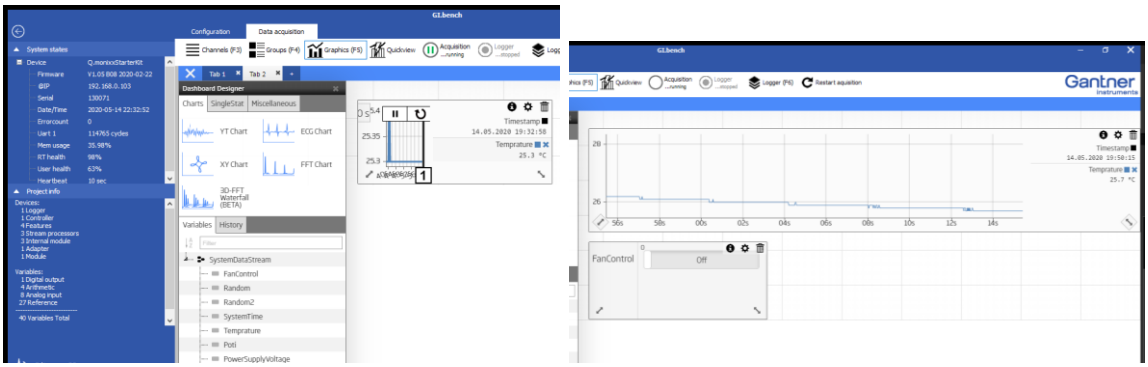
2. If there are no errors for the configured variables, click on the Graphics (F5) button in the toolbar. Click on the "sandwich" symbol to open the dashboard editing mode for the Dashboard Designer.



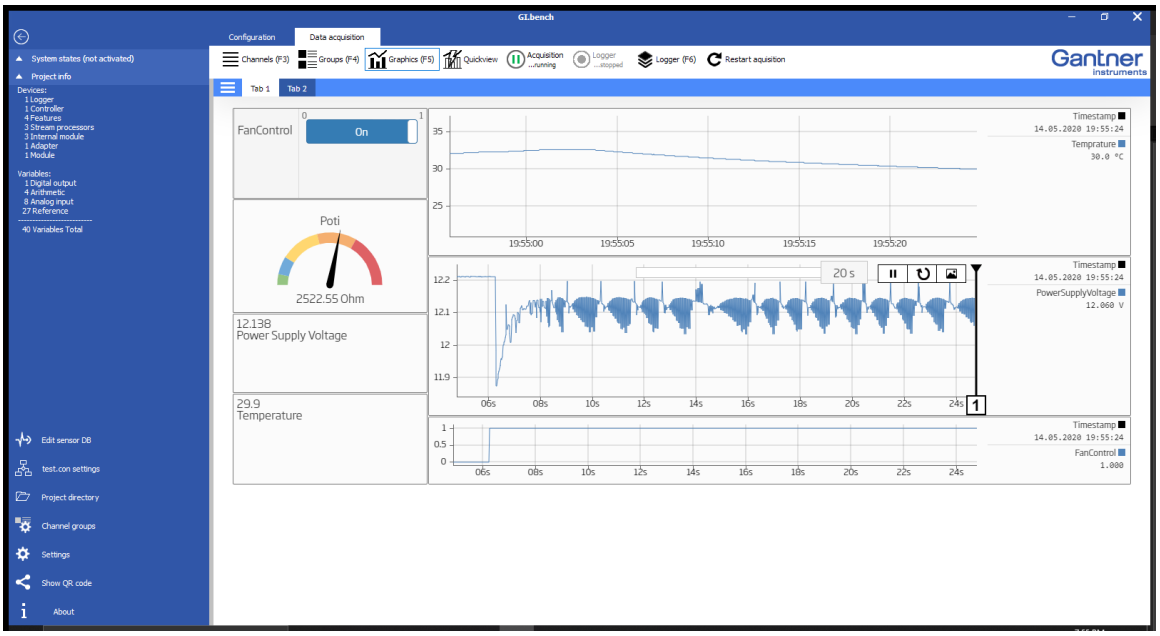
3. Add a Chart to the dashboard by using the drag & drop method from the Dashboard Designer.



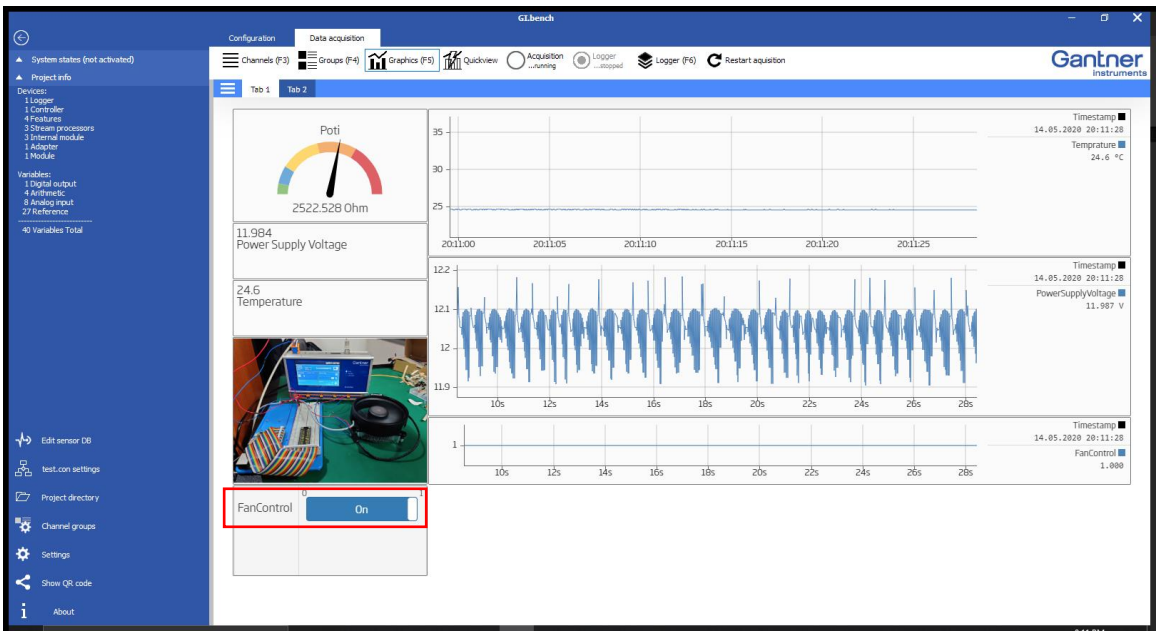
4. By clicking the information button, you can reference the chart type in GI.bench Online Help.



5. Drag & drop the desired variables from the Dashboard Designer into the Chart. You can adjust the Chart size and location on the dashboard as needed. Design your dashboard as desired.



6. In this example, the fan control is assigned to a Switch element from the Dashboard Designer. The relay is activated, and the fan runs when the switch is turned ON from the dashboard.



6. Data Logging

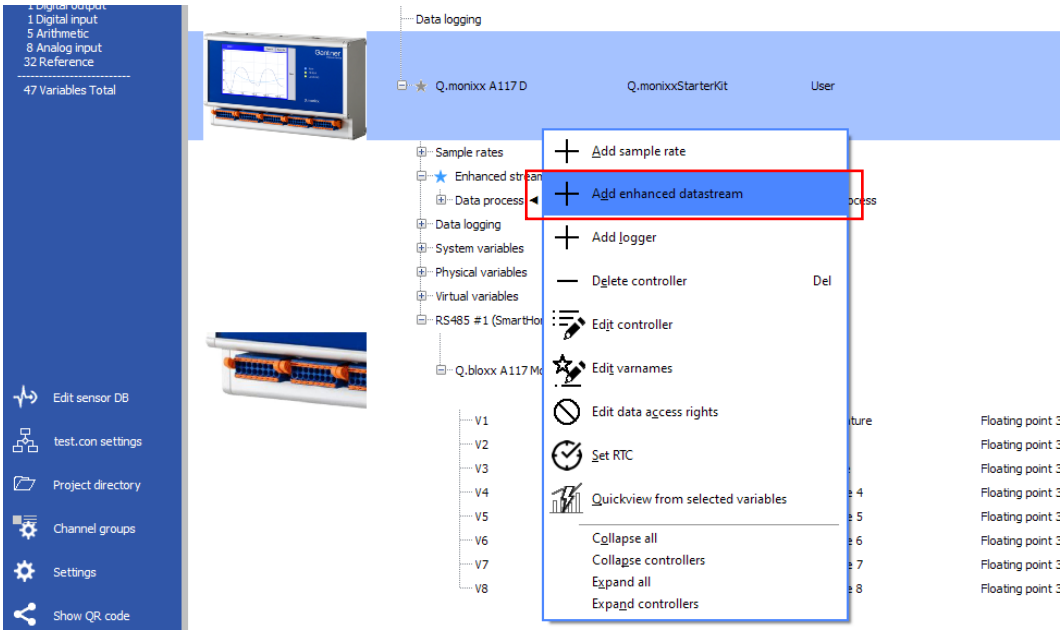
GI.bench must be online before clicking the following link. Please start GI.bench first.

Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html?highlight=logger#data-logging

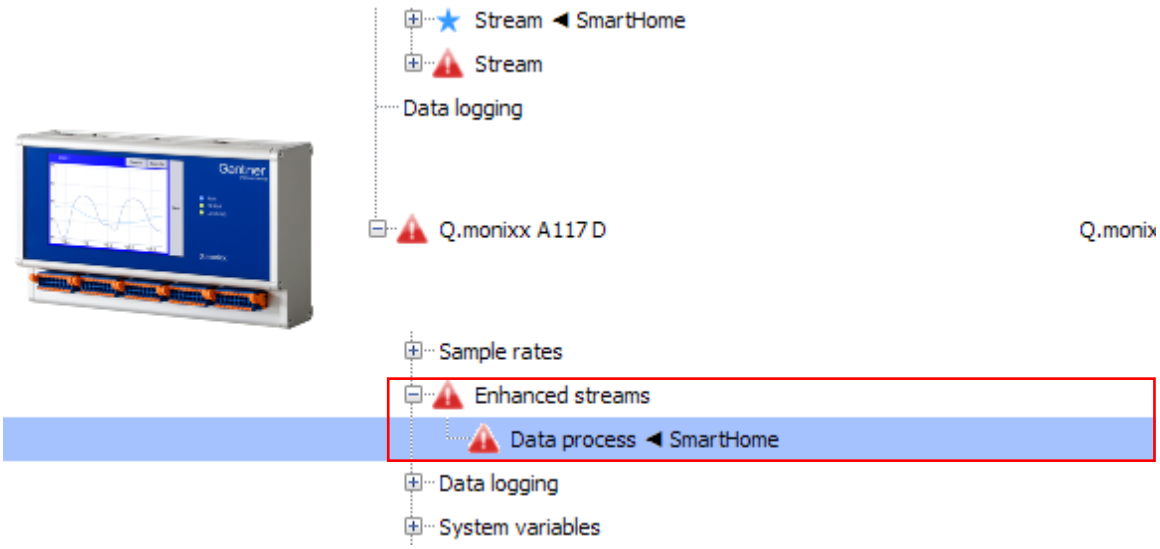
6.1. Enhanced Datastreams

In GI.bench, the data logging rate is best defined for the Q.monixx as an enhanced data stream.

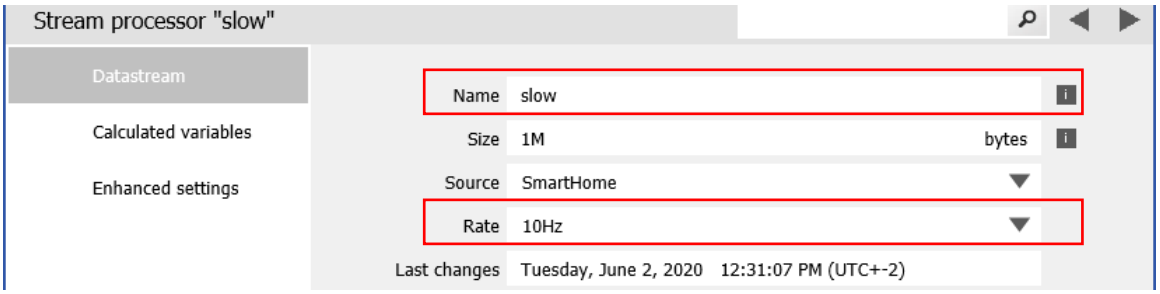
1. Right-click on the Q.monixx in the project tree and select Add enhanced datastream.



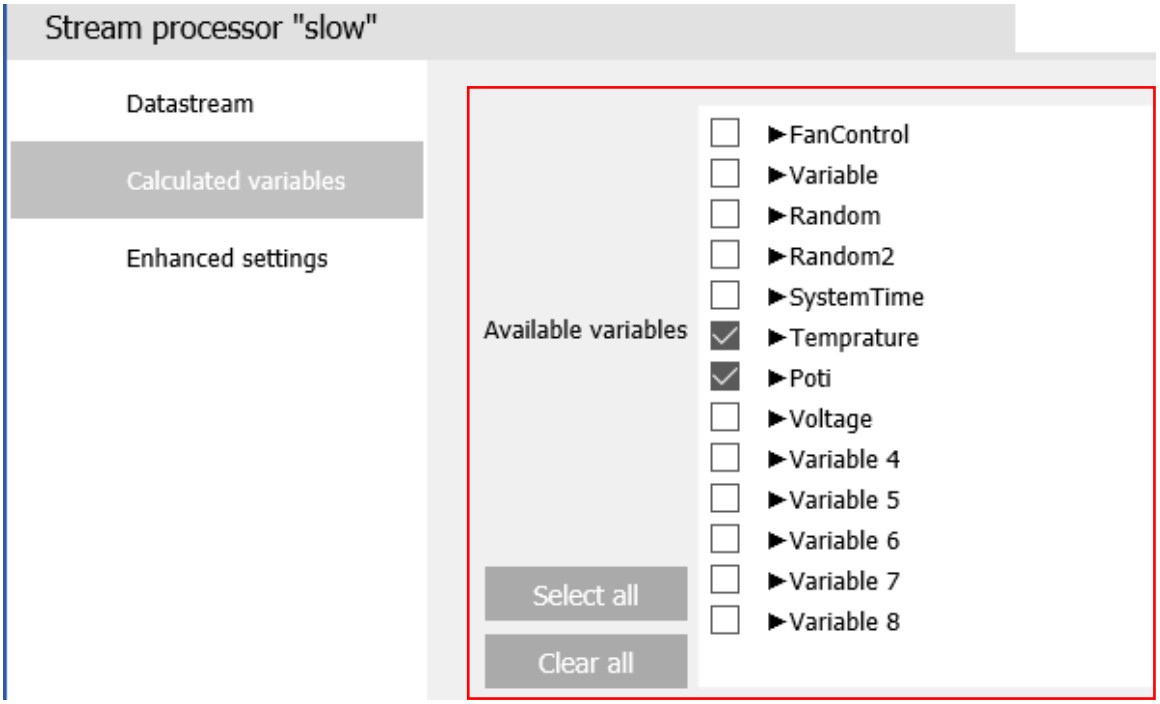
Note: Define as many enhanced datastreams as needed for your logger configuration.



2. Double-click on the enhanced stream (Data process) to configure the data processor settings. You can enter a Name, e.g., "slow." Make sure also to select a Rate (cycle frequency), e.g., 10Hz.



3. Next, click on the Calculated variables tab, and select the variables to include in the datastream.

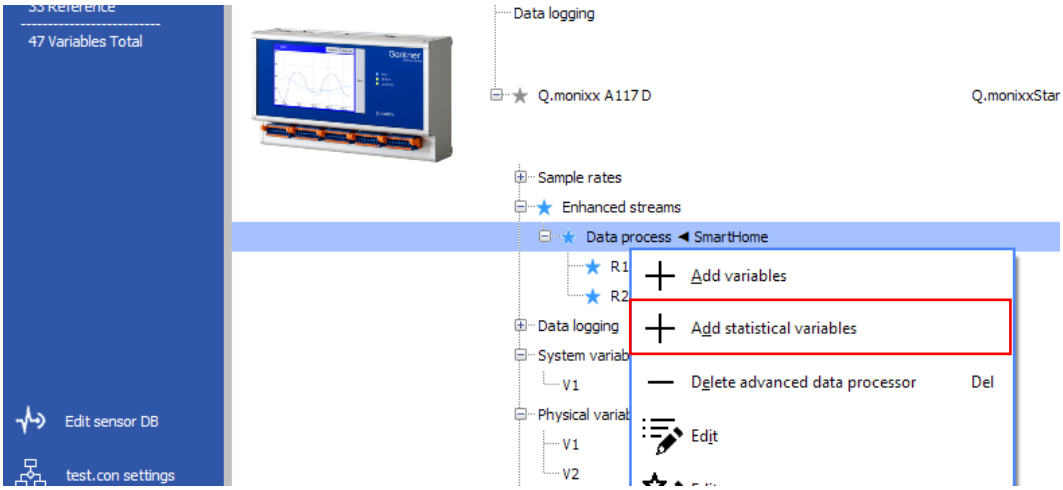


4. Click OK to close the enhanced datastream settings and update the datastream.

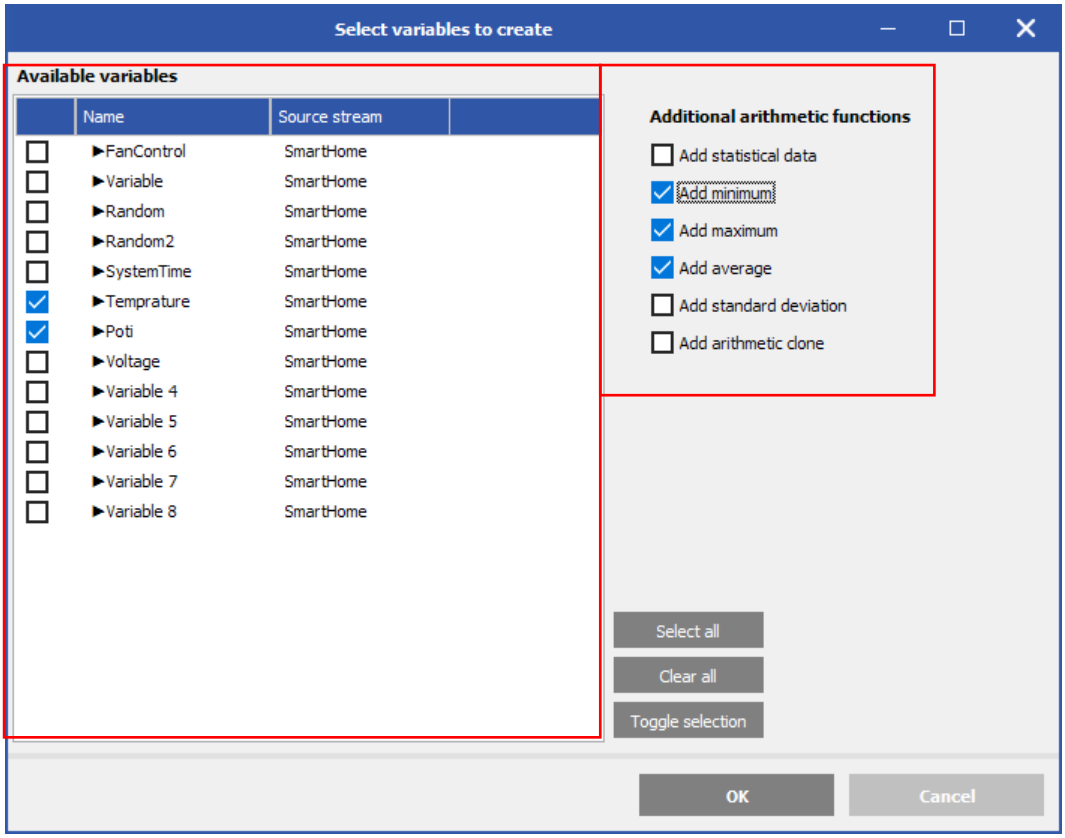
6.2. Arithmetic Variables (Statistical Variables)

Once you define your enhanced stream(s), you can add arithmetic variables, e.g., for statistical analysis of the data (min, max, average, standard deviation).

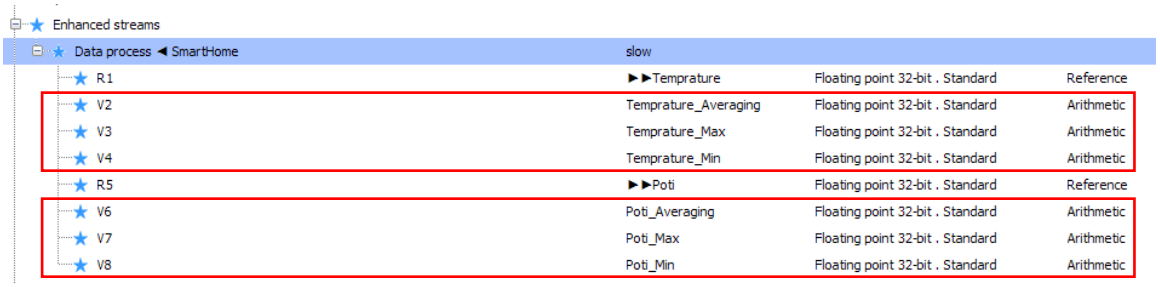
1. Right-click on the enhanced stream and select Add statistical variables.



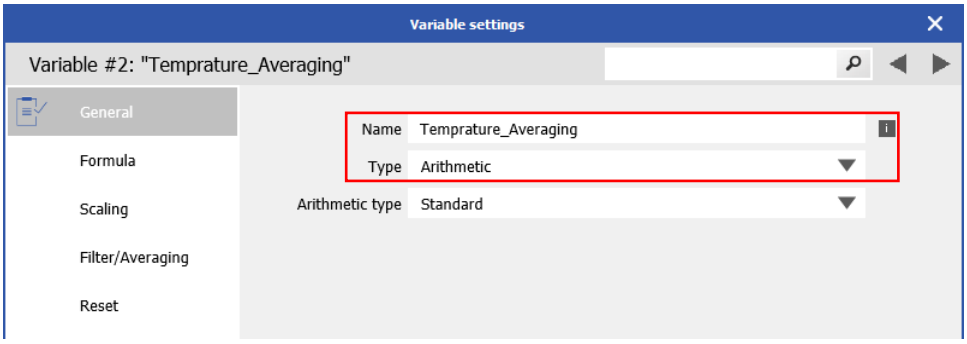
2. On the left side, choose the variables which to add arithmetic functions. On the right side, you choose which arithmetic functions you want to add.



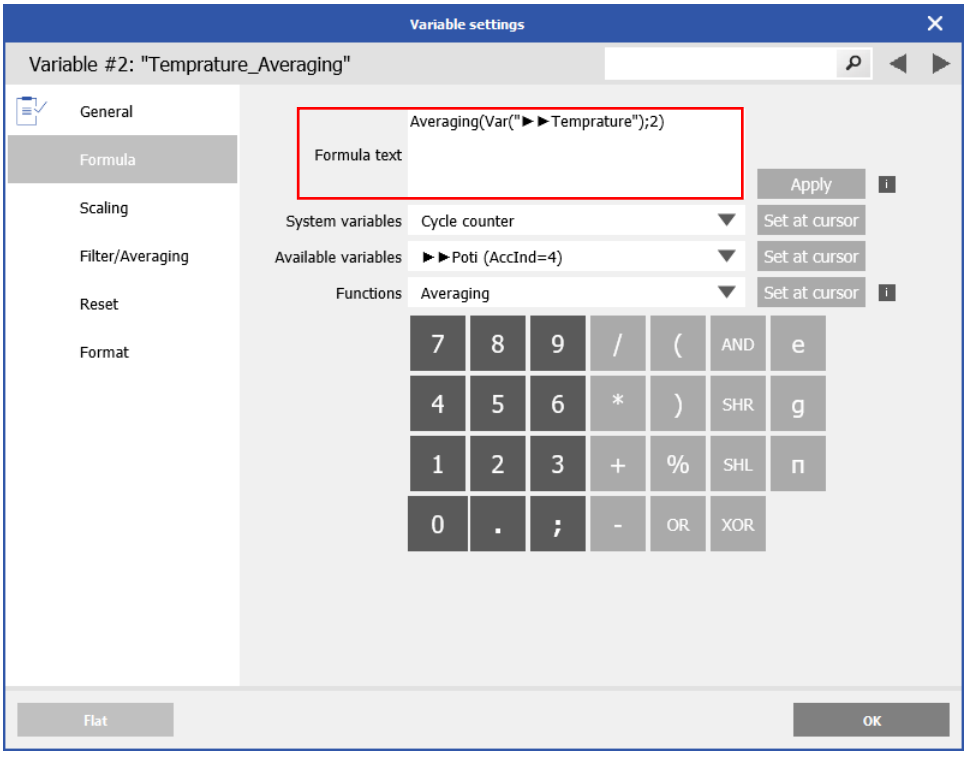
3. Confirm your selections by clicking OK. GI.bench then automatically creates the necessary arithmetic variables with their corresponding formula.



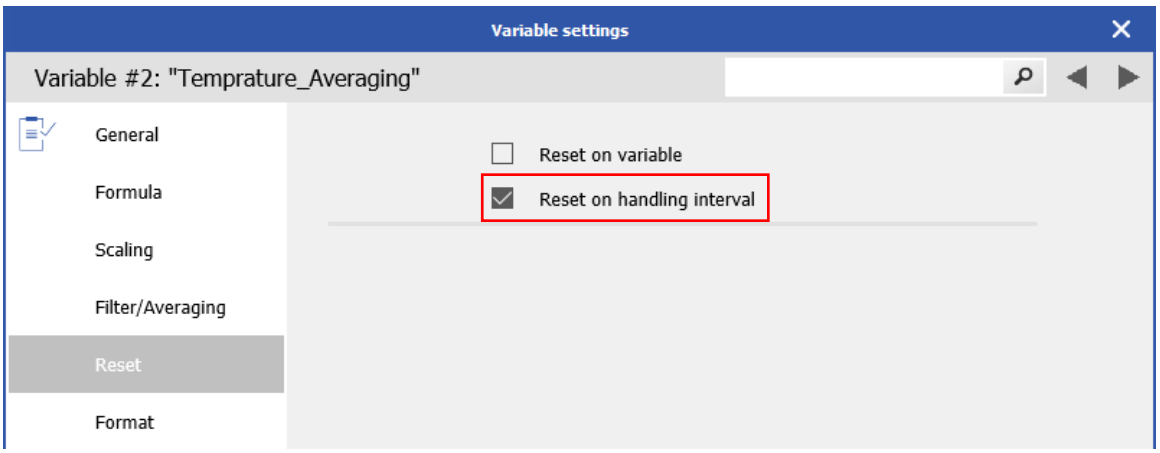
4. Double-click on an arithmetic variable to enter its settings. In the General tab, you can change the Name and Type of the variable.



5. Click on the Formula tab to edit the arithmetic formula if needed.

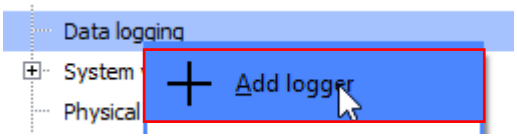


6. In the Reset tab, check the box next to Reset on handling interval to reset min, max, and average calculations on the logging interval (e.g., 1 min).

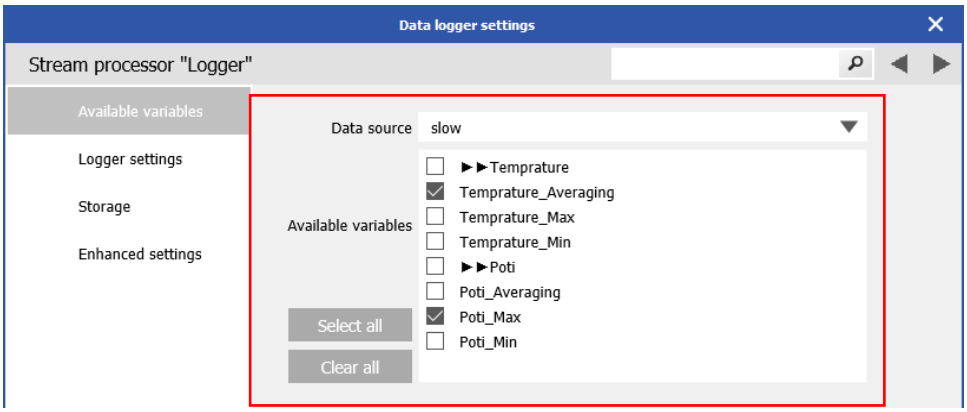


6.3. Defining a Data Logger

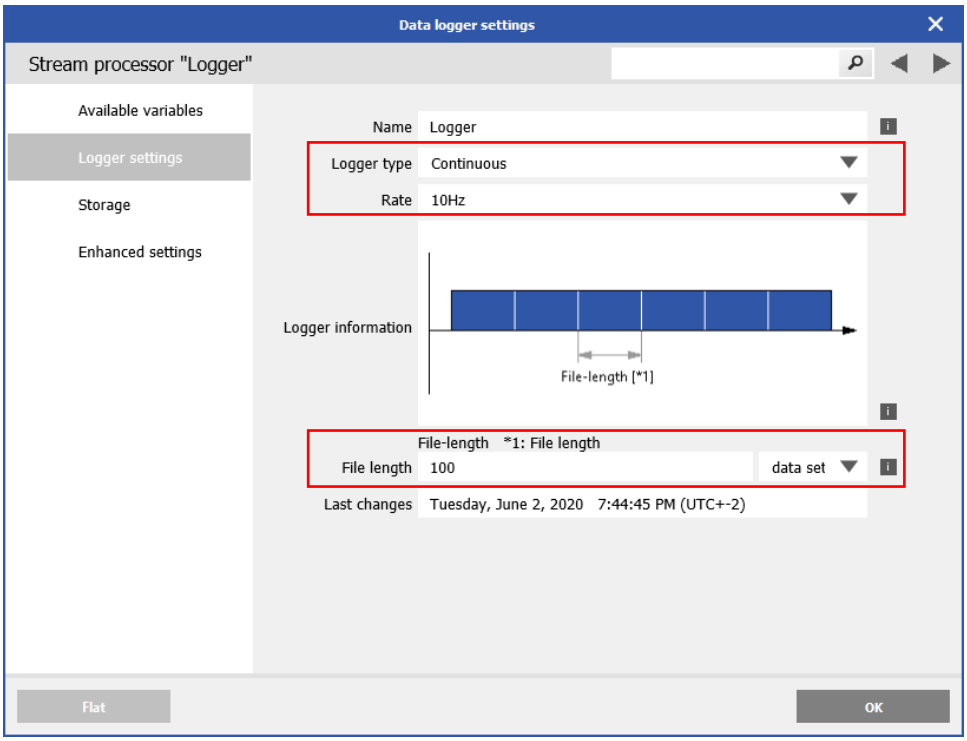
1. Right-click on Data logging, listed under the Q.monixx in the project tree and select Add logger.



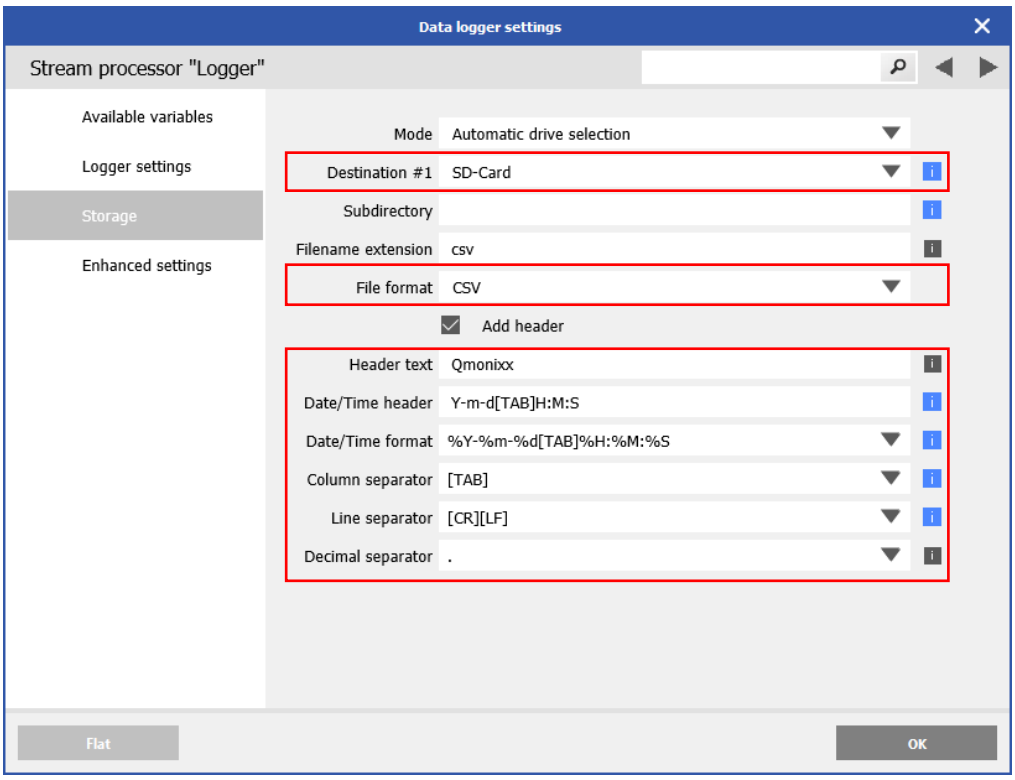
2. Double-click on the newly created logger to open its settings and select the Data source (the previously defined enhanced streams are selectable data sources, e.g., "slow"). Make sure to select the variables you want to log from the Available variables list.



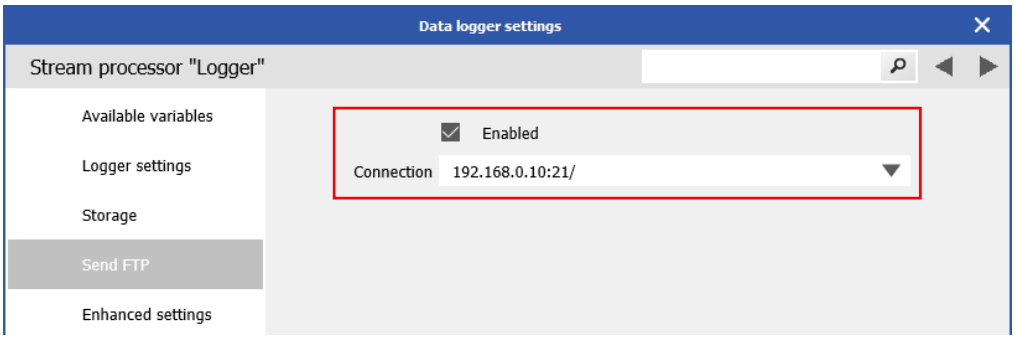
3. Go to *Logger settings* and define the Logger type, Rate, and File length of the logged files. E.g., this logger generates files with 100 data sets each, logging data 10 times a second continuously.



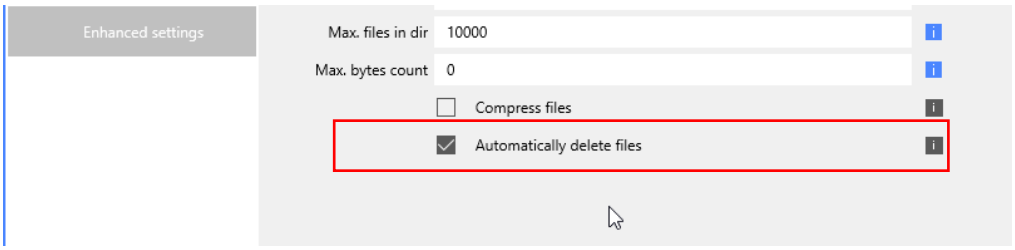
4. Go to *Storage* and change the Destination to SD-Card, USB, or Network-Drive (if configured). This logger creates CSV files (File format) with a defined Header text and Date/Time header.



5. If an FTP connection was defined in Q.monixx settings, you could send files to the server. Click the checkbox for Enabled and select a Connection from the drop list.



6. To delete files after FTP transfer automatically, then select Automatically delete files.

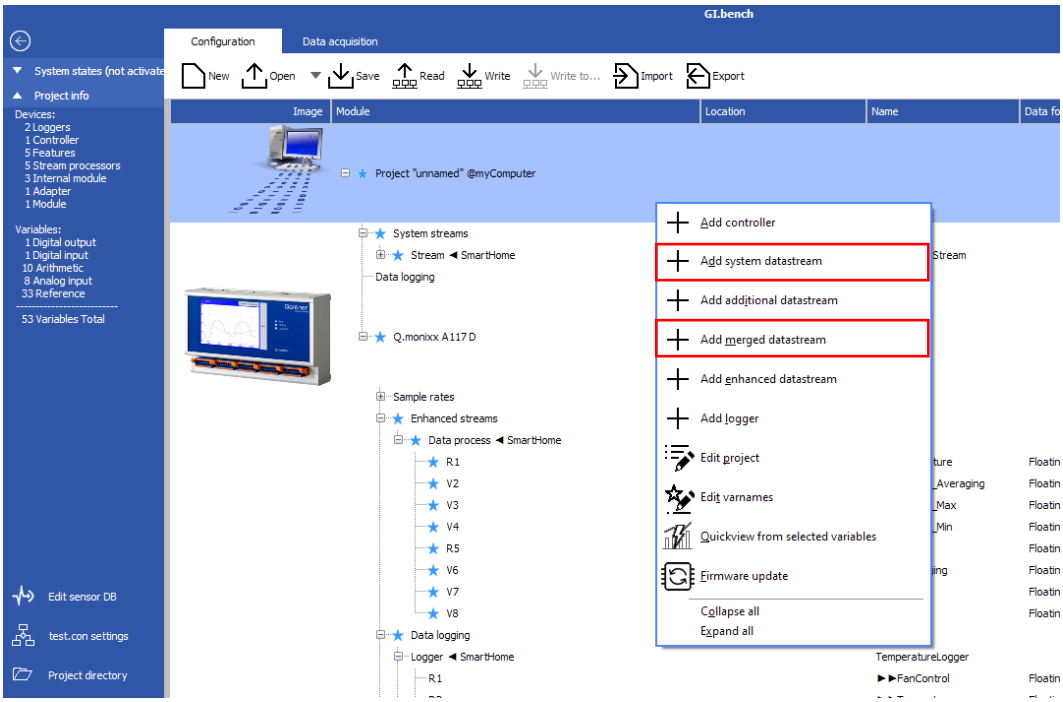


7. GI.bench Visualization

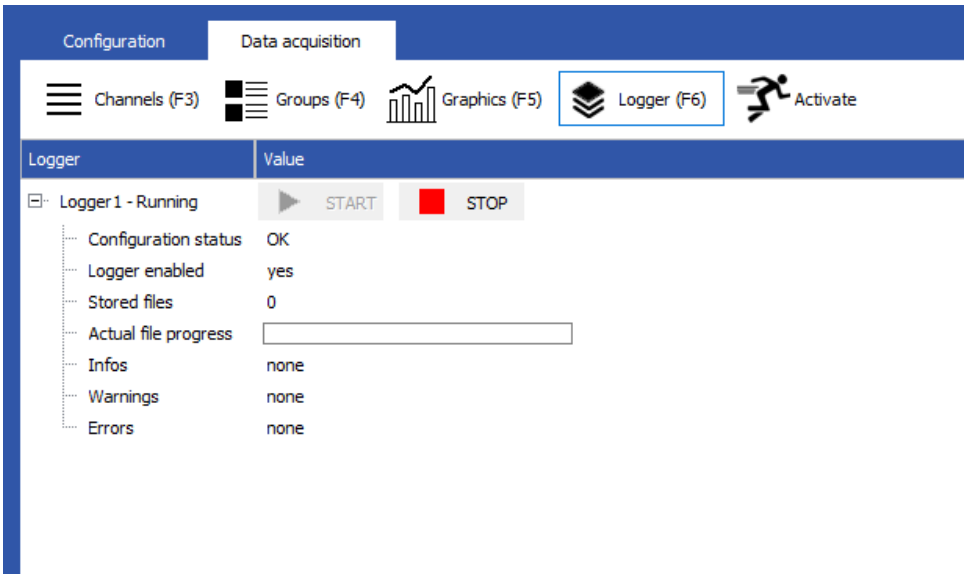
7.1. Datastreams

GI.data facilitates data visualization (PC level) through *System streams*.

Right-click on the PC element in the project tree and click Add system datastream to create a stream or Add merged datastream to combine synchronous data logged at many sampling rates.

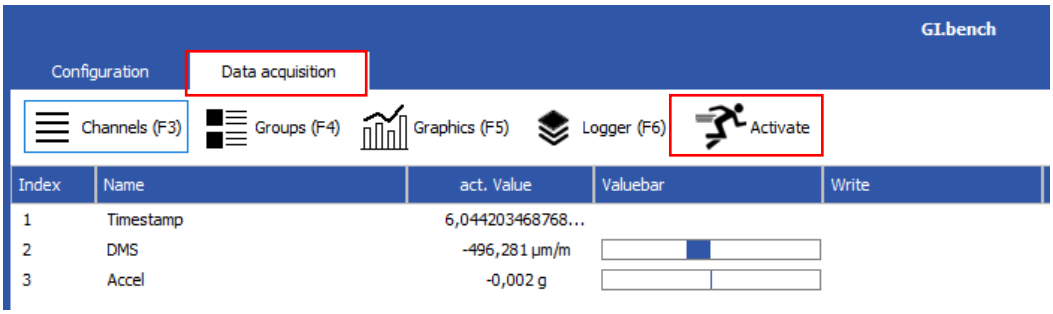


A local (PC level) logger can also log files locally to the PC using System streams (as a Data source).



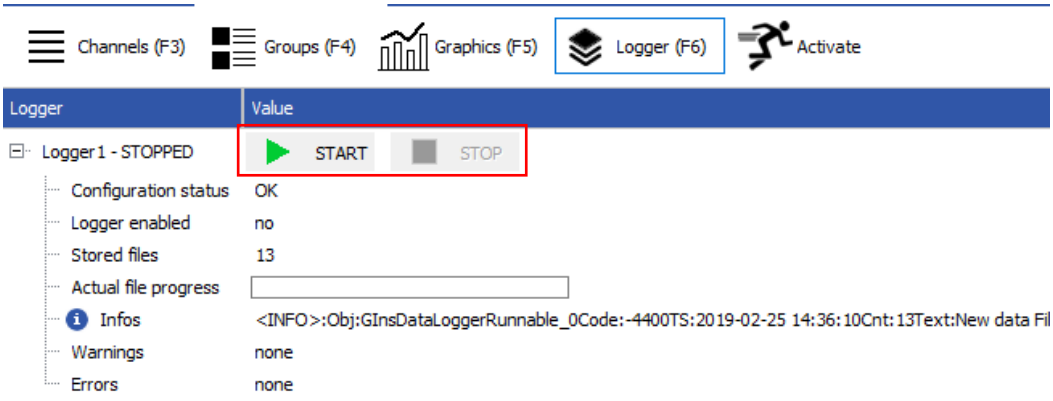
7.1.1. Online Data

To enable online visualization, click Activate in the Data acquisition tab.

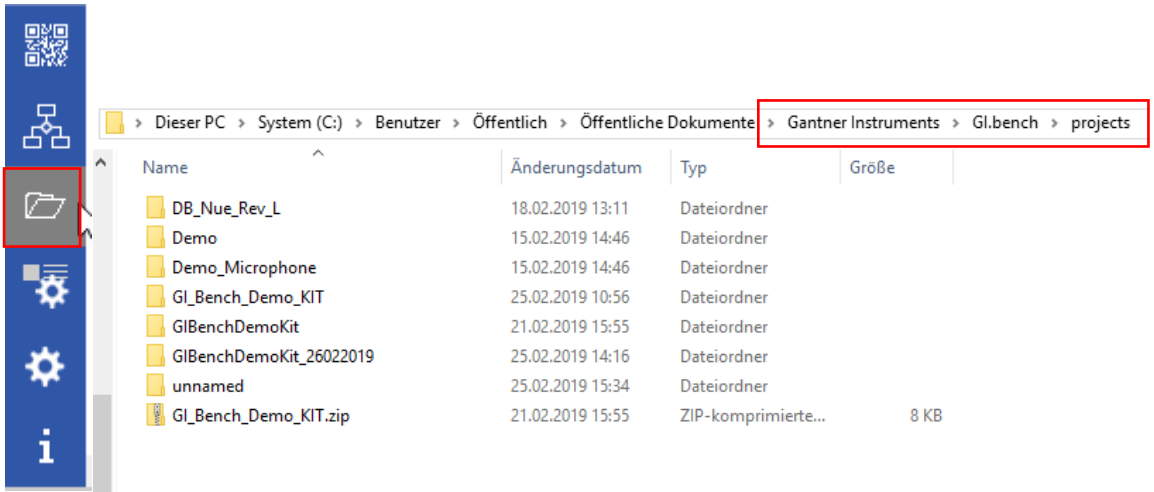


7.1.2. Local Logger (PC level)

Access the local logger by clicking Logger (F6). If a local logger is configured, you can click START and STOP to control it from this section. You must Activate the project to access a local logger.



Note: Access logged files on your PC by clicking the Project folder on the lower left of GI.bench. Then from this directory, navigate to GI.bench → data → archives to access your local logger.



8. LED Alarm Sequence

Blue (OFF) + Yellow (ON): FPGA is not loaded
Blue (ON) + Yellow (ON): System is powered on but not running
Blue (ON) + Yellow (OFF): System is running without mistakes
Blue (Blinking): communication with controller active
Yellow (Blinking): Mistake or warnings

9. Firmware Update

GI.bench must be online before clicking the following link. Please start GI.bench first.

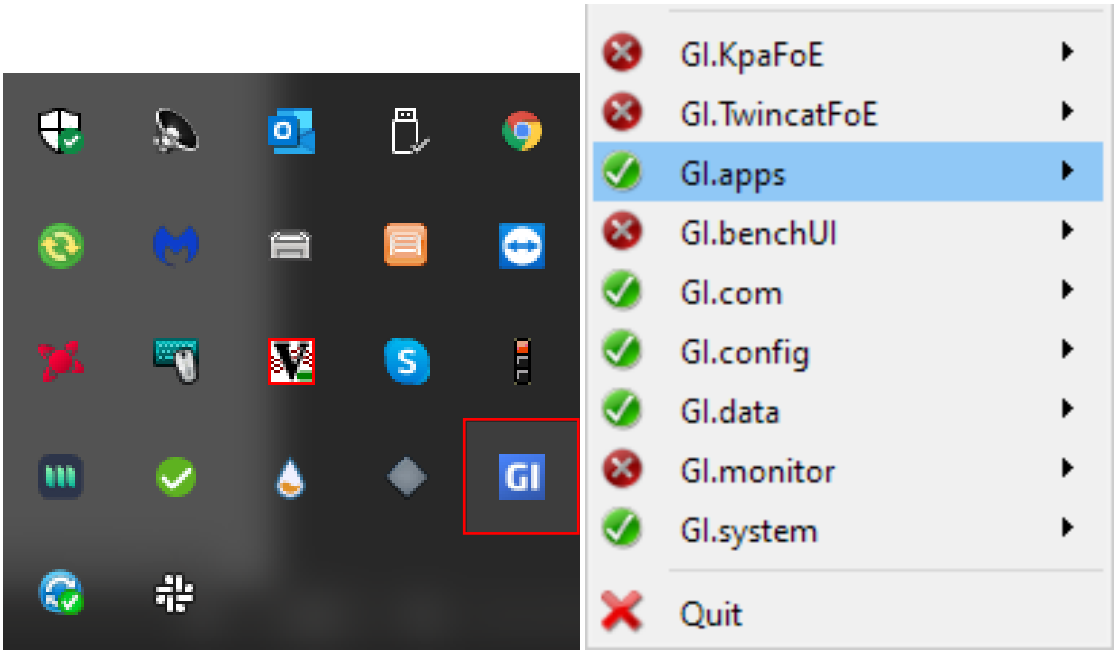
Help: http://127.0.0.1:8090/sphinx/html/gi.bench/Controller.html?highlight=firmware#firmware-update

9.1. Update Q.monixx Firmware via Firmware Manager

9.1.1. Starting GI Service

To be able to use Device Scan in Firmware Manager, GI.service must be running. Simply re-/starting GI.bench brings GI.service online.

You can check a successful start by right-clicking on the blue GI Icon in the Windows system taskbar (or hidden icons). The context menu shows all the running subsystems of GI.bench.



9.1.2. Get Firmware Manager and Firmware

9.1.2.1. Download Firmware Manager

You can download the Firmware Manager from Gantner Development Software Page.

User: support
Password: gins

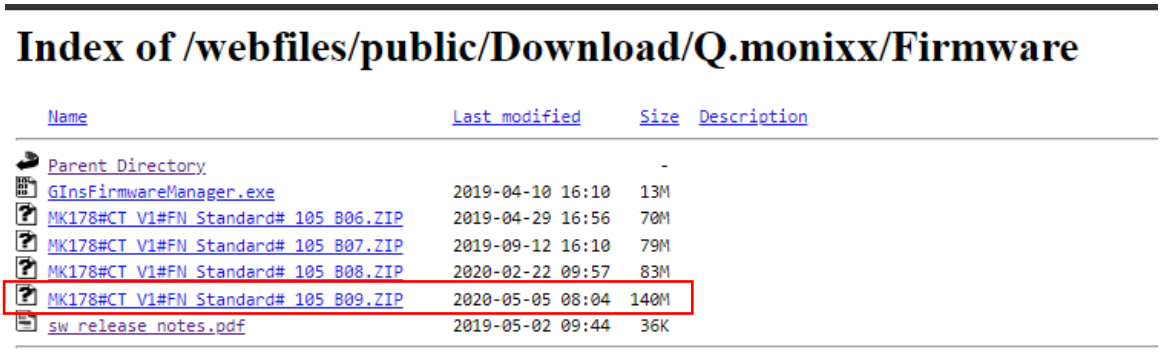
Link: Download Firmware Manager

9.1.2.2. Download the latest Q.monixx Firmware

The firmware for the Q.monixx can be downloaded from the link (same user and same password).

User: support
Password: gins

Link: Download Q.monixx Firmware



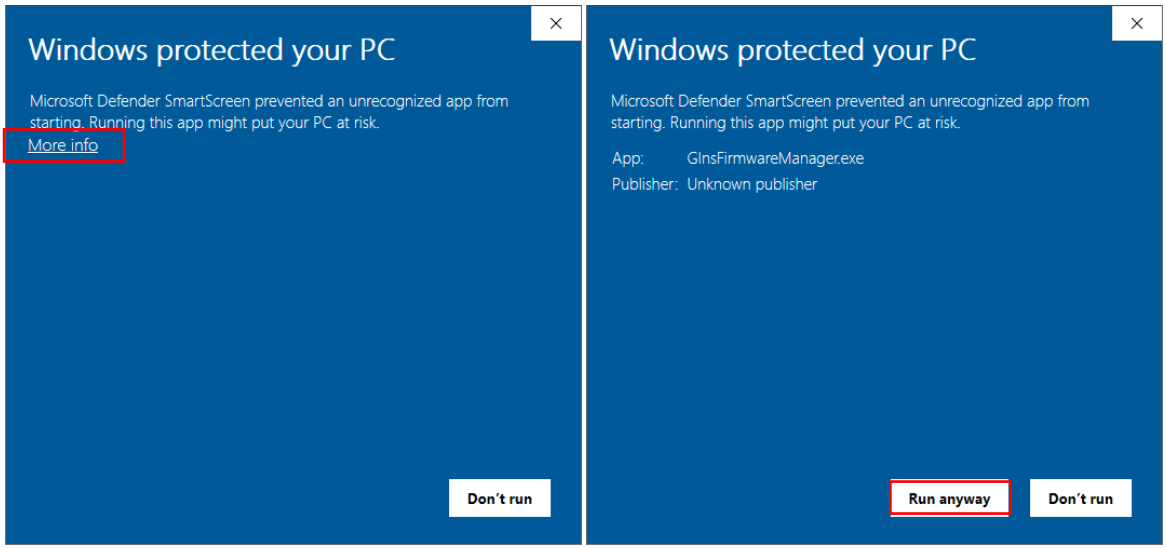
Index of /webfiles/public/Download/Q.monixx/Firmware

Name	Last modified	Size	Description
Parent Directory		-	
GInsFirmwareManager.exe	2019-04-10 16:10	13M	
MK178#CT_V1#FN_Standard#_105_B06.ZIP	2019-04-29 16:56	70M	
MK178#CT_V1#FN_Standard#_105_B07.ZIP	2019-09-12 16:10	79M	
MK178#CT_V1#FN_Standard#_105_B08.ZIP	2020-02-22 09:57	83M	
MK178#CT_V1#FN_Standard#_105_B09.ZIP	2020-05-05 08:04	140M	
sw_release_notes.pdf	2019-05-02 09:44	36K	

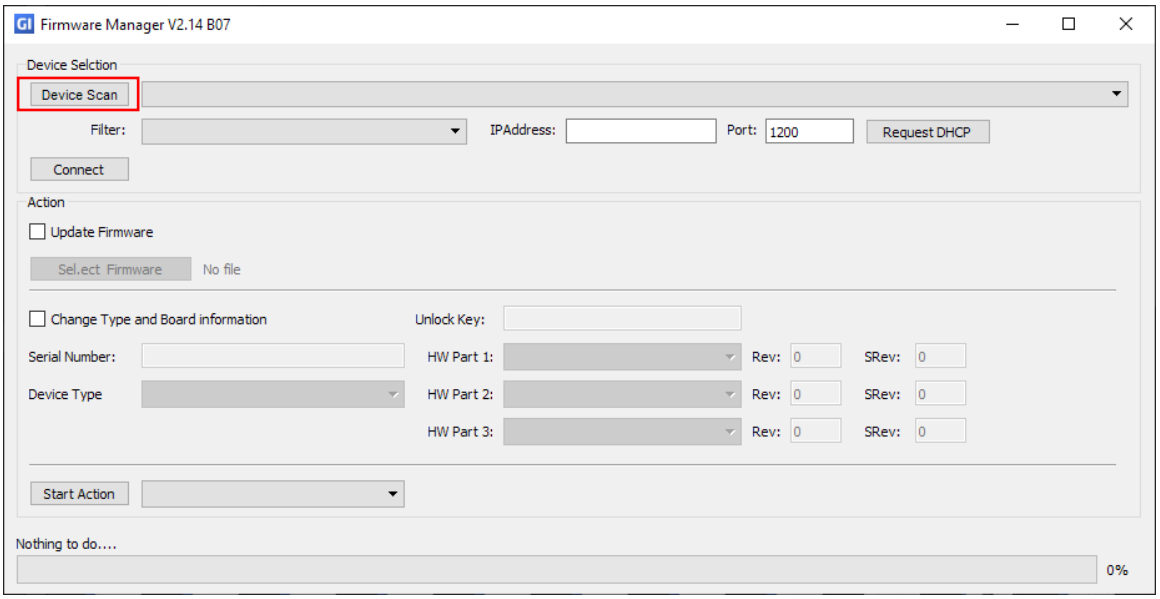
Download the latest Firmware ZIP file listed. In the example above, the latest firmware version is *MK178#CT_V1#FN_Standard_105_B09.ZIP*, which means Firmware Version 105 Build 09.

9.1.3. Install Firmware

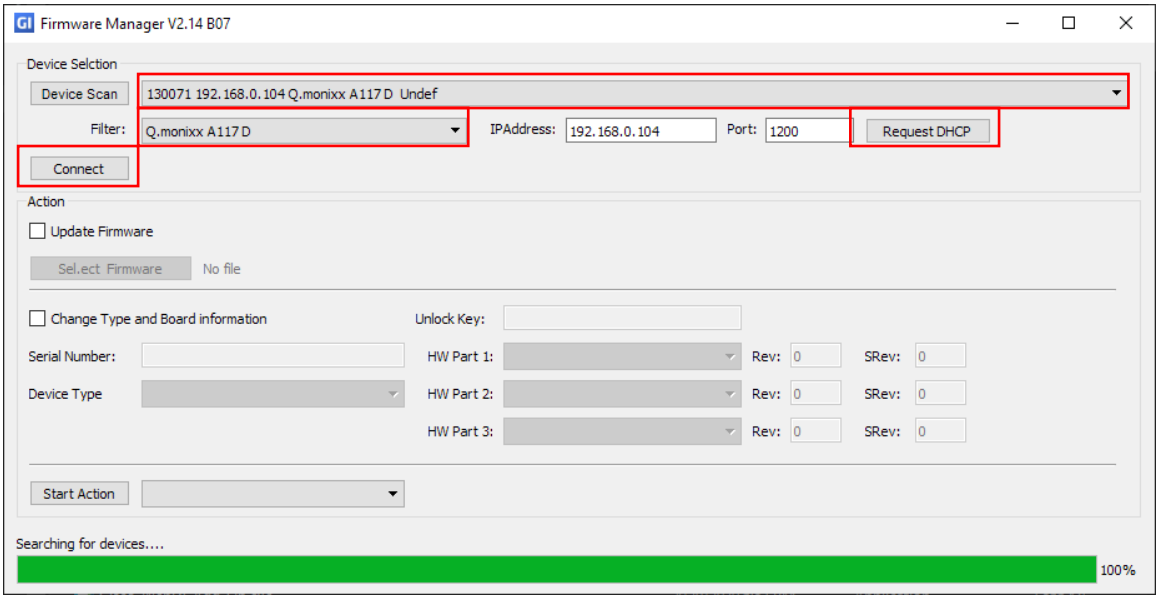
1. Open the downloaded *Firmware Manager*. On Windows 10, click on More info if the "**Windows protected your PC**" warning appears. Click on Run anyway to continue.



2. Click on Device Scan to find all available Q.monixx devices on the network.

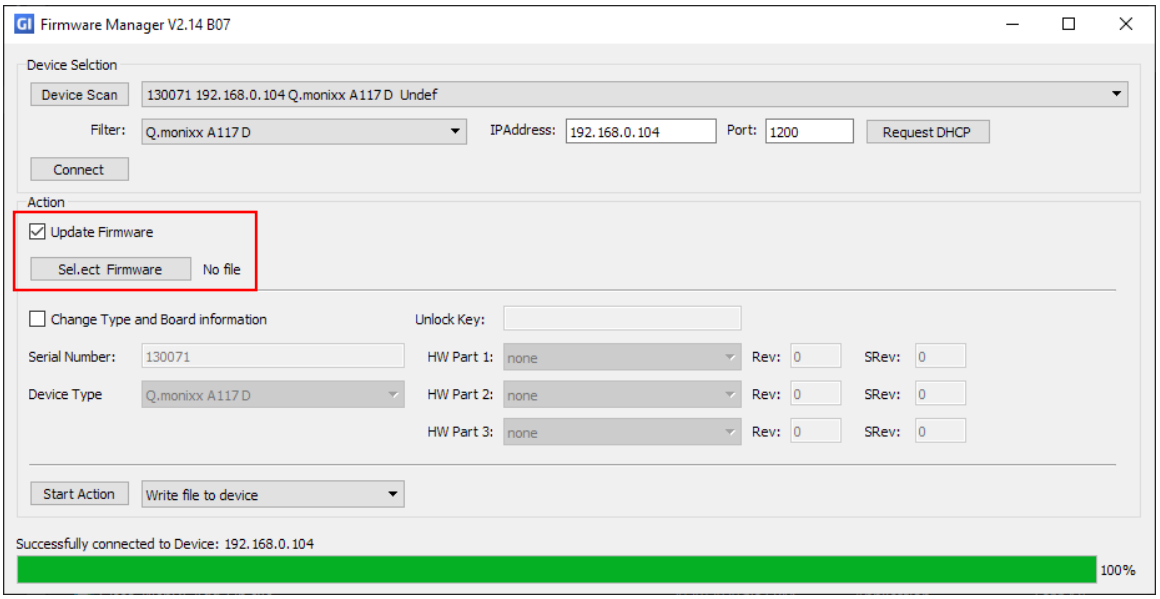


3. If other test controllers are connected to the network, make sure to select the desired device. You can use the Filter to help choose the correct device (e.g., 130071 = serial number). To ensure the Q.monixx connects with the right IP Address, you can click on Request DHCP.

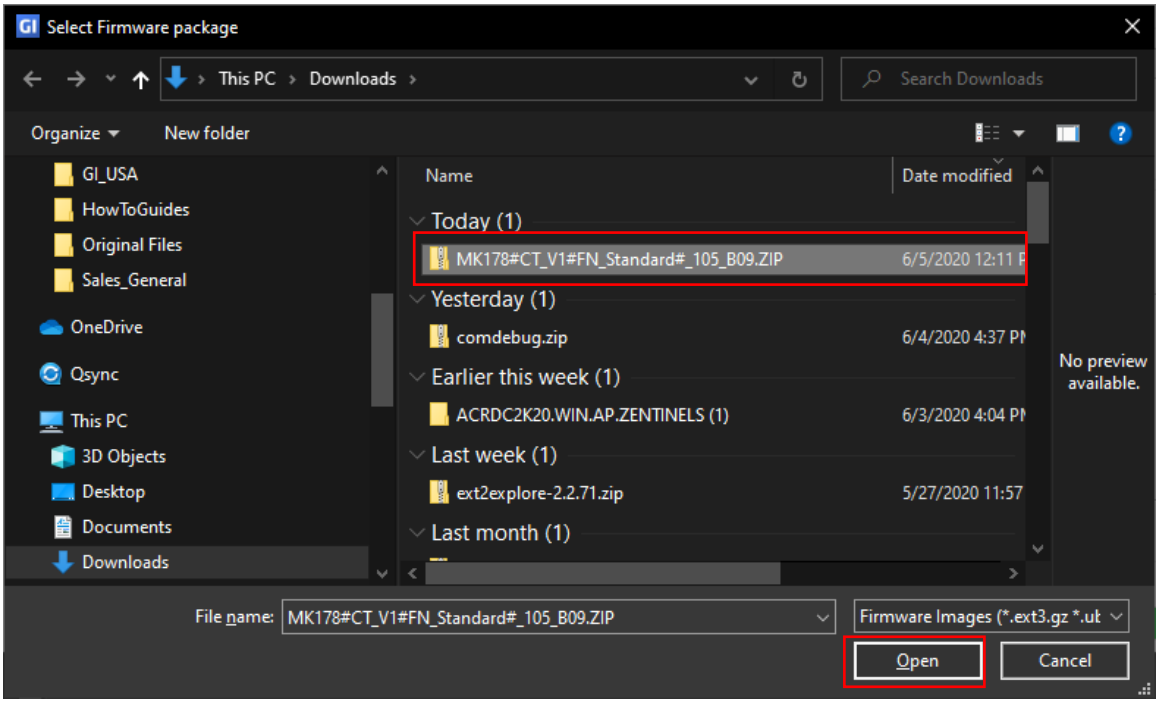


Click on Connect to establish a connection with the Q.monixx. A message at the bottom of the Firmware Manager appears confirming a successful connection.

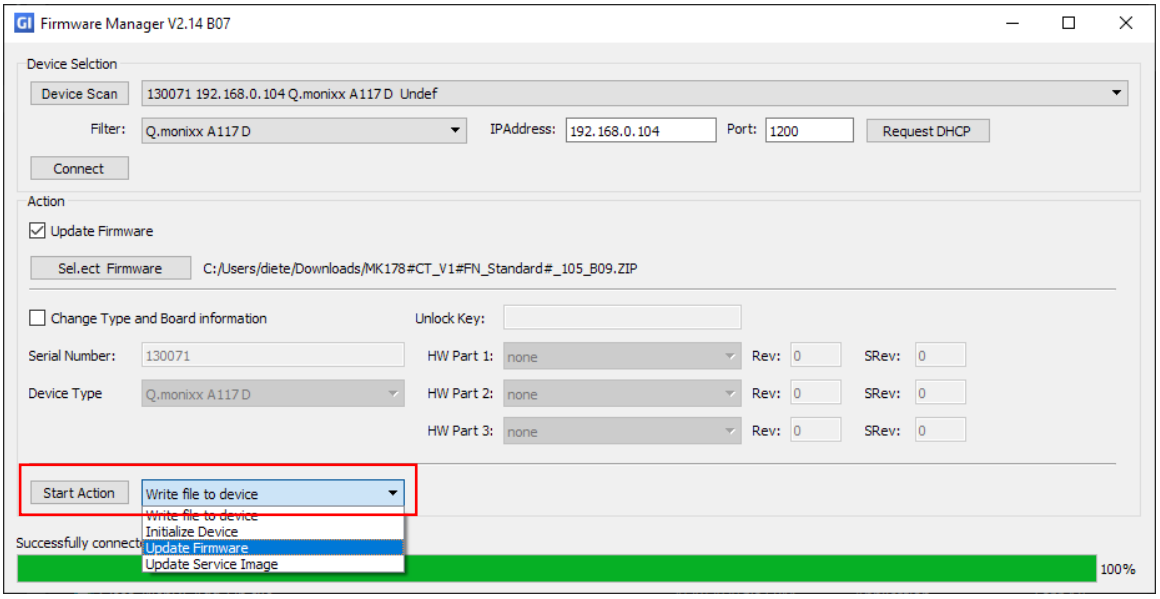
4. Click on the checkbox for Update Firmware and click on Select Firmware.



5. Navigate to the downloaded Q.monixx firmware .zip file, select it, and click Open.



6. Select Update Firmware from the drop-down menu at the bottom of the Firmware Manager and click on Start Action. The Q.monixx then immediately updates and restarts.



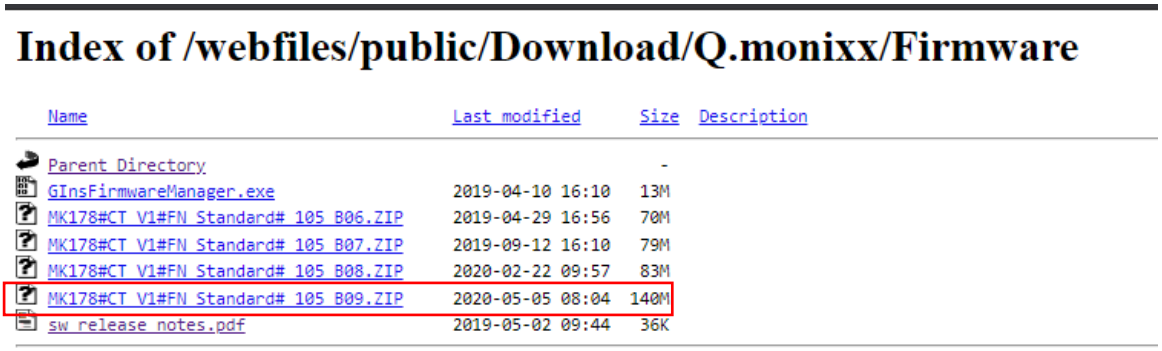
6.1 Update Q.monixx Firmware via GI.bench *(Recommended)*

9.1.4. Download Q.monixx Firmware

The firmware for the Q.monixx can be downloaded from the link (same user and same password).

User: support
Password: gins

Link: Download Q.monixx Firmware



Index of /webfiles/public/Download/Q.monixx/Firmware

Name	Last modified	Size	Description
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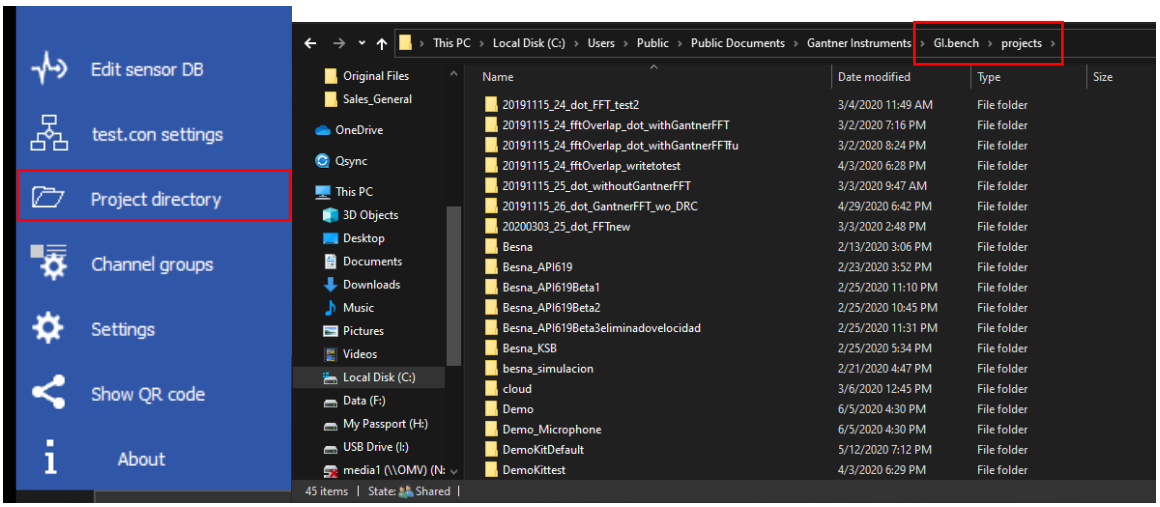
MK178#CT_V1#FN_Standard#_105_B06.ZIP	2019-04-29 16:56	70M	
MK178#CT_V1#FN_Standard#_105_B07.ZIP	2019-09-12 16:10	79M	
MK178#CT_V1#FN_Standard#_105_B08.ZIP	2020-02-22 09:57	83M	
MK178#CT_V1#FN_Standard#_105_B09.ZIP	2020-05-05 08:04	140M	
sw_release_notes.pdf	2019-05-02 09:44	36K	

Download the latest Firmware ZIP file listed. In the example above, the latest firmware version is *MK178#CT_V1#FN_Standard_105_B09.ZIP*, which means Firmware Version 105 Build 09.

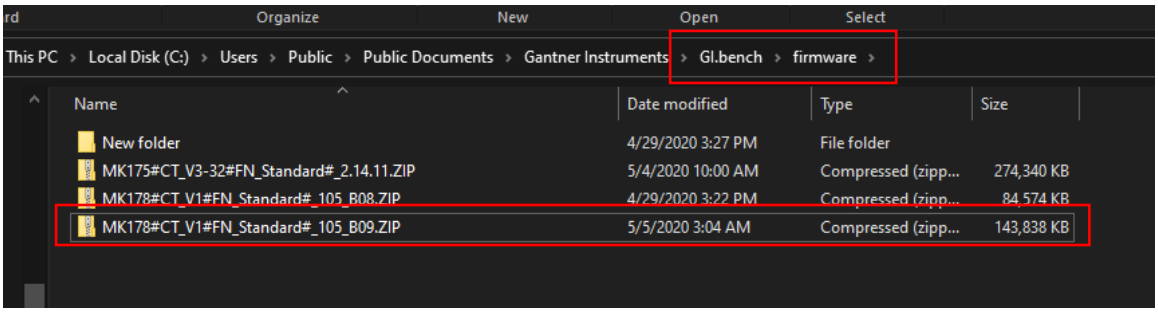
9.1.5. Install Firmware

Copy the downloaded Q.monixx firmware into the GI.bench Firmware Folder.

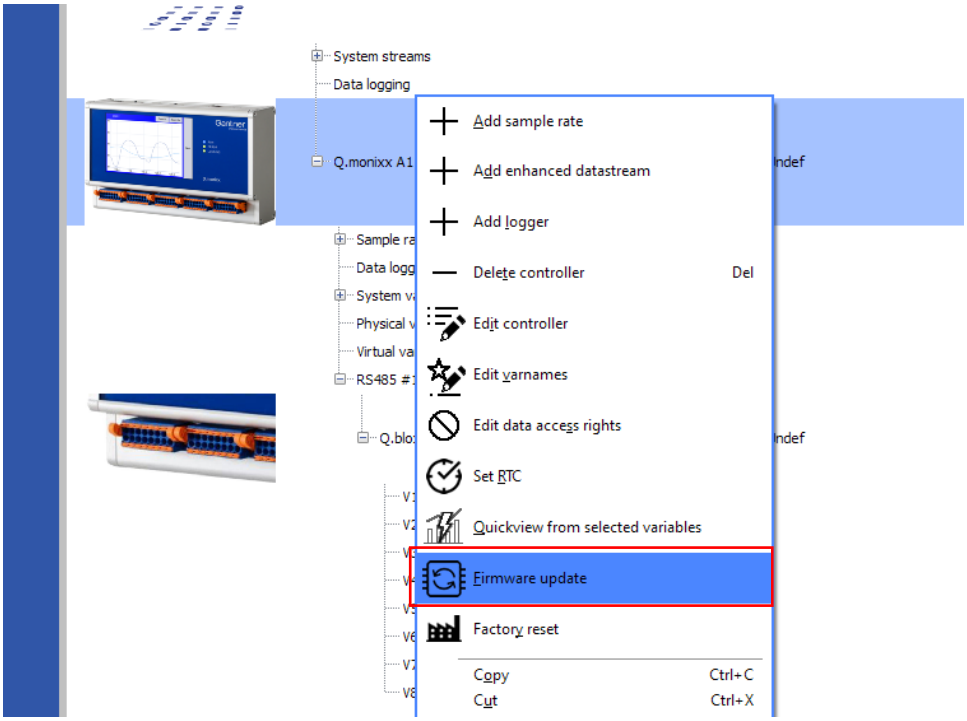
1. Open GI.bench and click on Project directory and navigate from *projects* ➔ *GI.bench* directory.



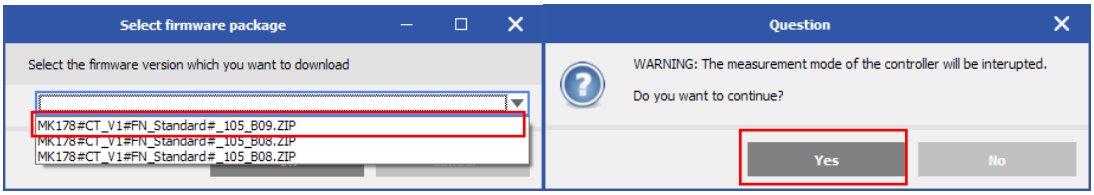
2. Copy the downloaded firmware to the Gantner Instruments > GI.bench > firmware directory.



3. In GI.bench, right-click on the Q.monixx in the project tree and select Firmware update.



4. Choose the downloaded firmware from the list and click Yes when asked if you want to continue.



5. Wait for the Q.monixx to install the new firmware and fully restart after the firmware is installed.

10. Useful Links

Gantner DocuWiki Page
https://dev.gantner-instruments.com/dokuwiki/doku.php

GI.bench Information and Download
https://www.gantner-instruments.com/products/software/gi-bench/

GI.bench Online Help
Note: GI.bench must be online before clicking the following link. Please start GI.bench first.
http://127.0.0.1:8090/sphinx/html/index.html

Q.monixx – test.con
http://testcon.info/q-monixx-app1-8492.html

Gantner Homepage Resources, Download, and Support tools
https://www.gantner-instruments.com/resources/downloads-and-support-tools/

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