USER MANUAL SDLC MODULE

TRAFFIC MANAGEMENT ACCESSORY

SDLC MODULE

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CONTENT

1 REFERENCE DOCUMENTS

No.	Document Name	SVN-ID	Notes
[1]	TMIB2 User Manual.pdf		
[2]	COM HUB Sync PLC User Manual.pdf		
[3]			
[4]			
[5]			

Table 1: Reference documents

2 SDLC WEB INTERFACE

2.1 CONFIGURATION WITH FIRMWARE V2.1.63 AND OLDER

The SDLC Module has the default IP 10.0.0.215. The PC has to be in the same Ethernet subnet with an IP address which is different to 10.0.0.215.

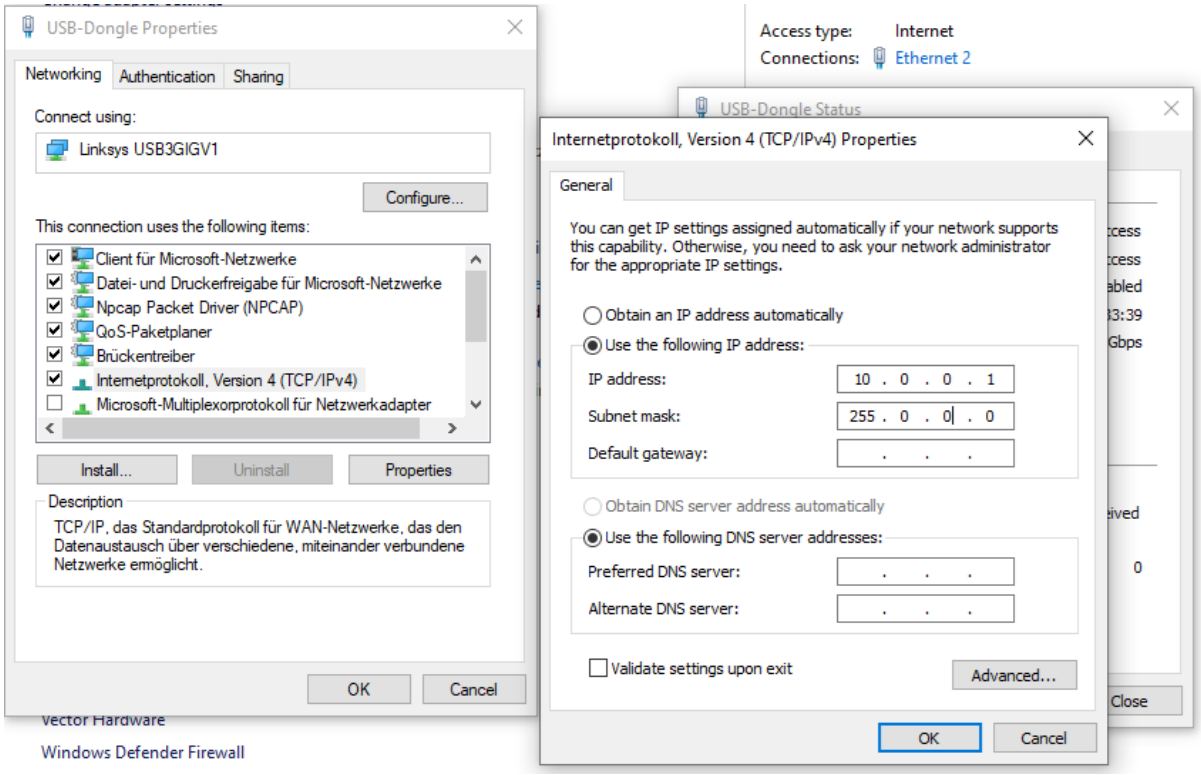


Figure 2-1 Changing IP Address of PC

The Traffic Web UI of the SDLC Module is the reachable with 10.0.0.215.

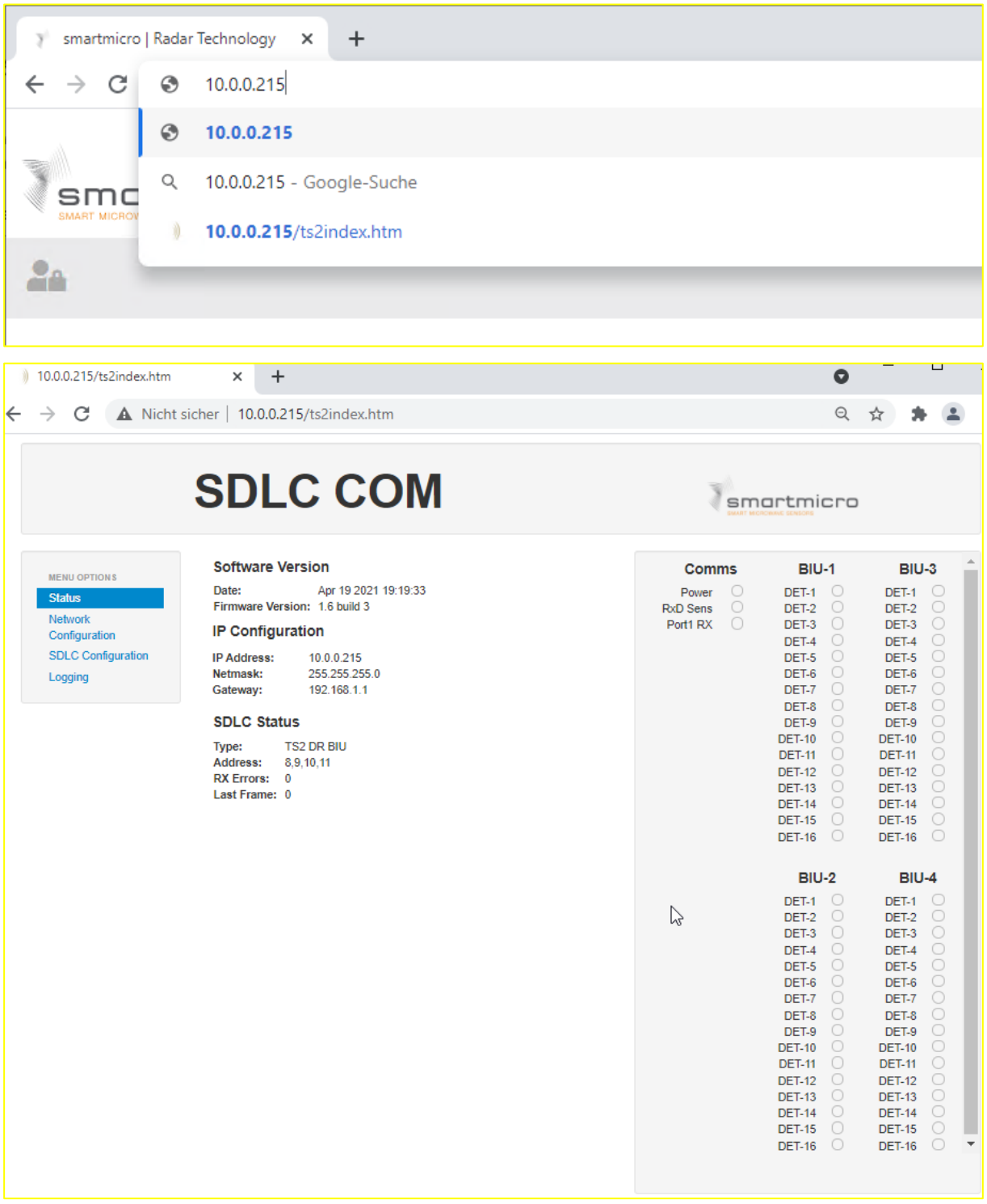


Figure 2-2 Main status screen

2.2 CONFIGURATION WITH FIRMWARE V2.3 AND NEWER

Since the SDLC Module can be used with the COM HUB Sync PLC the default IP is 192.168.11.3. The PC has to be in the same Ethernet subnet with an IP address which is different to 192.168.11.3.

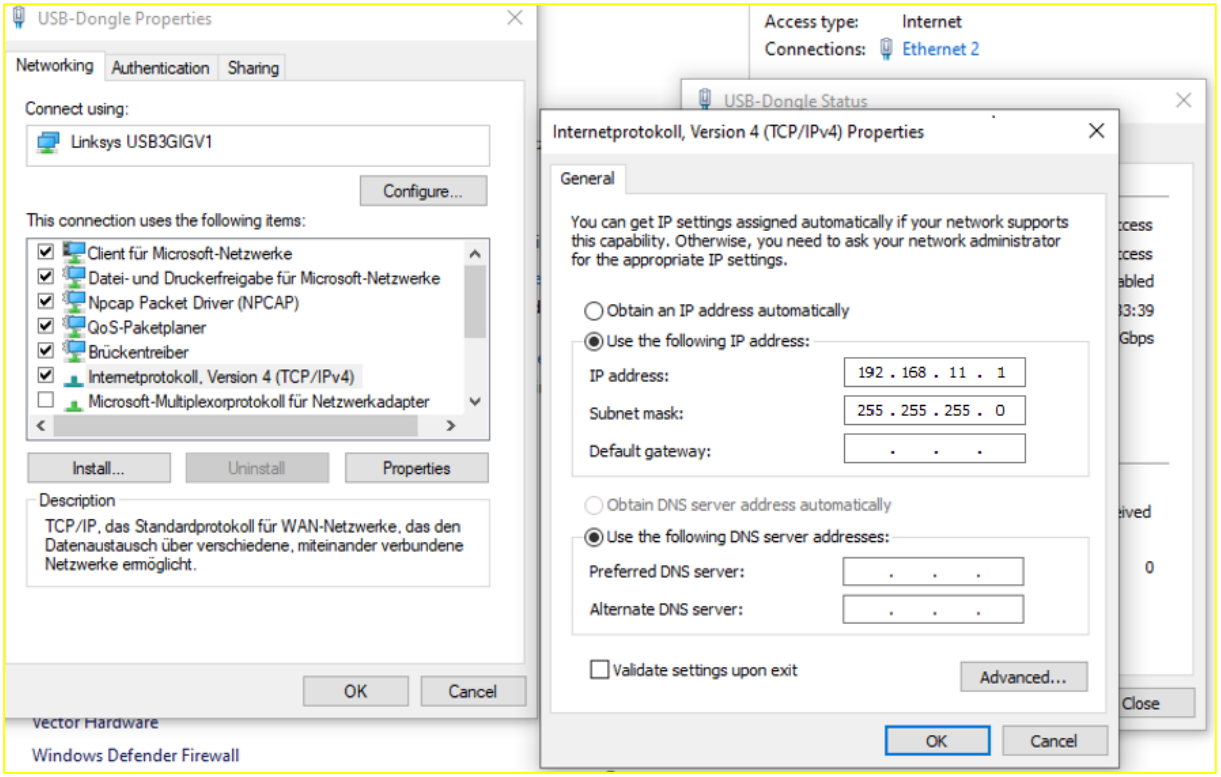
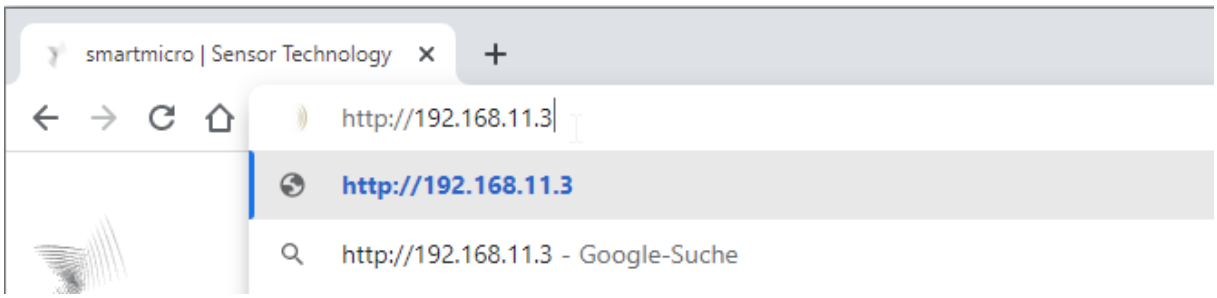


Figure 2-3 Changing IP Address of PC

The Traffic Web UI of the SDLC Module is the reachable with 10.0.0.215.



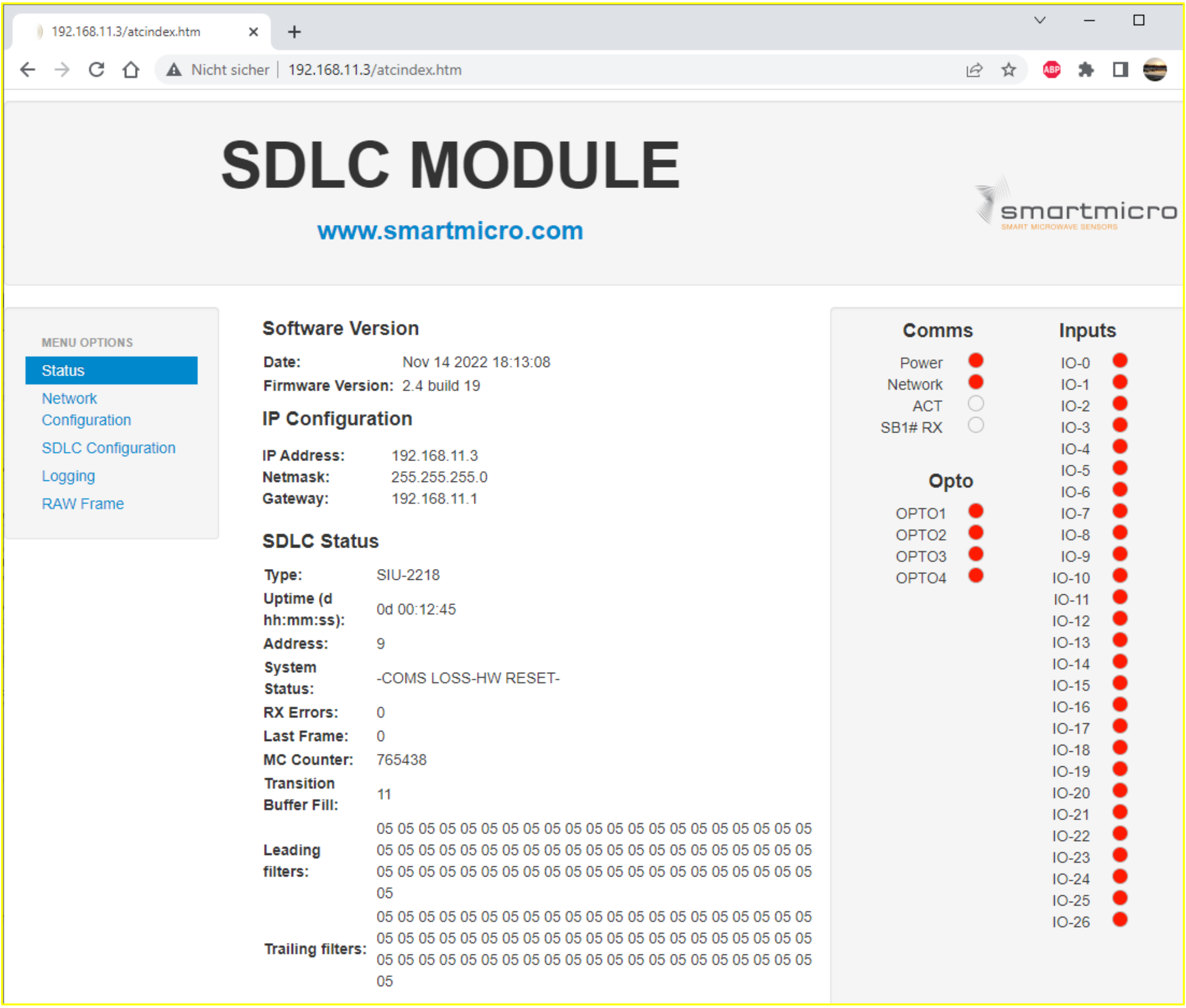


Figure 2-4 Main status screen

The Traffic Web UI of the SDLC Module is the reachable with 192.168.11.3.

2.3 MAIN SCREEN

Figure 2-5 Main screen in SIU ATC mode

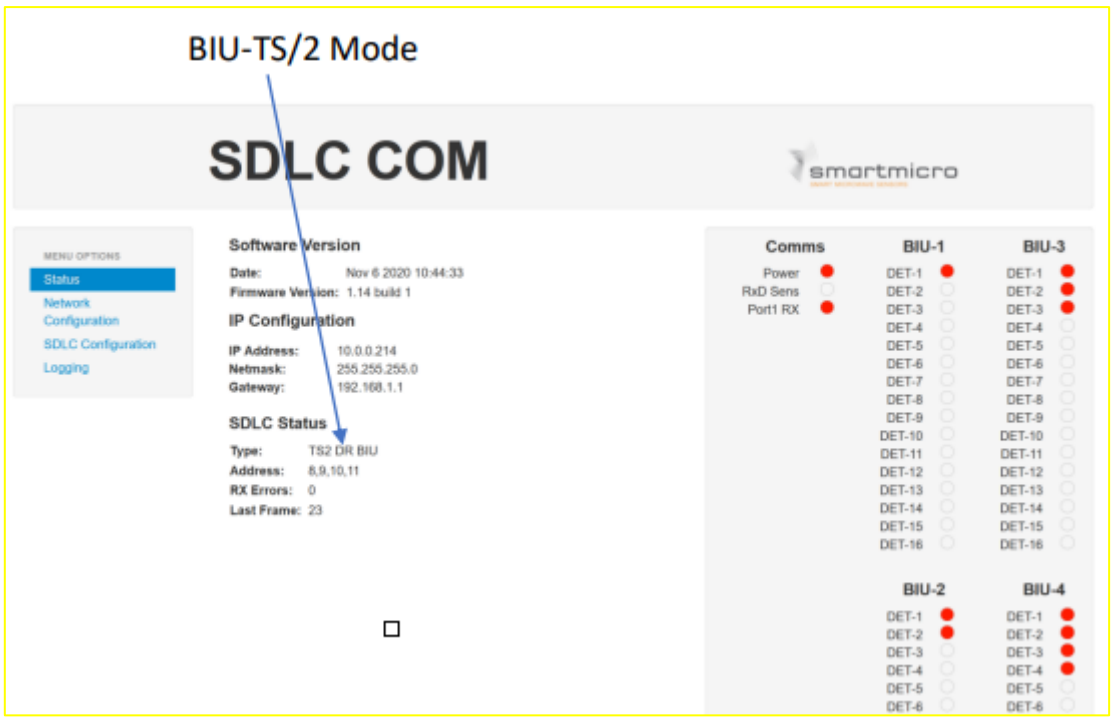


Figure 2-6 Main screen in TS/2 mode

2.4 NETWORK CONFIGURATION

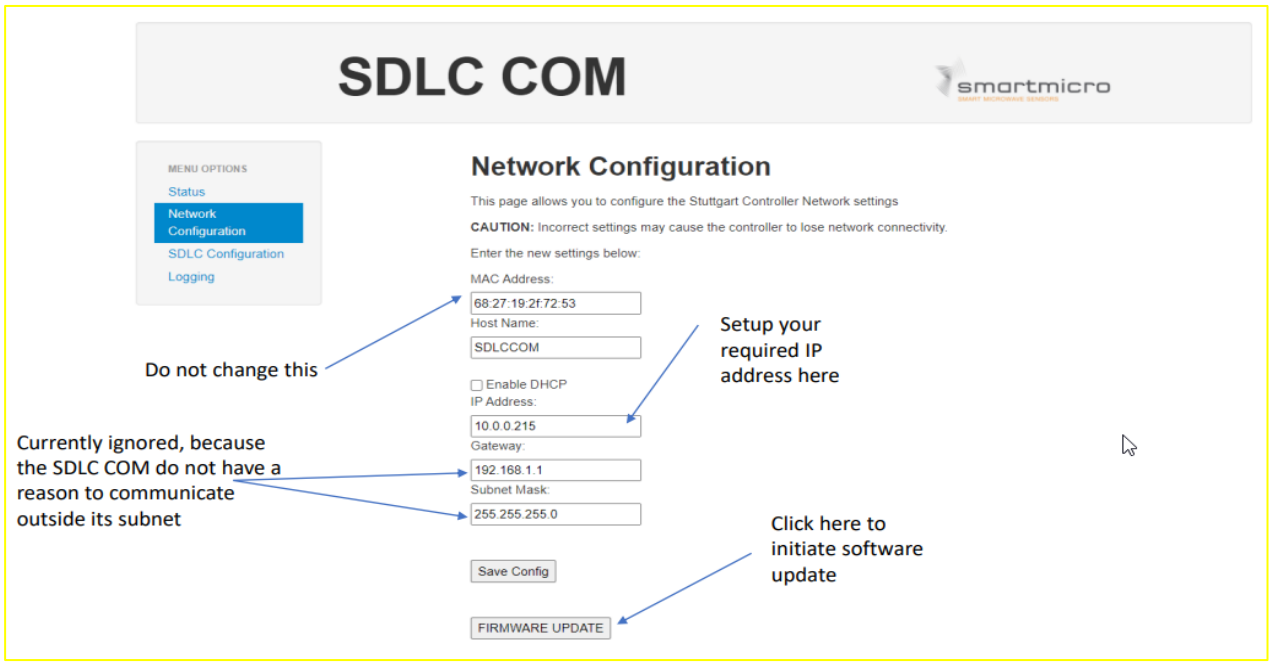


Figure 2-7 Network view screen

2.5 SDLC PORT CONFIGURATION

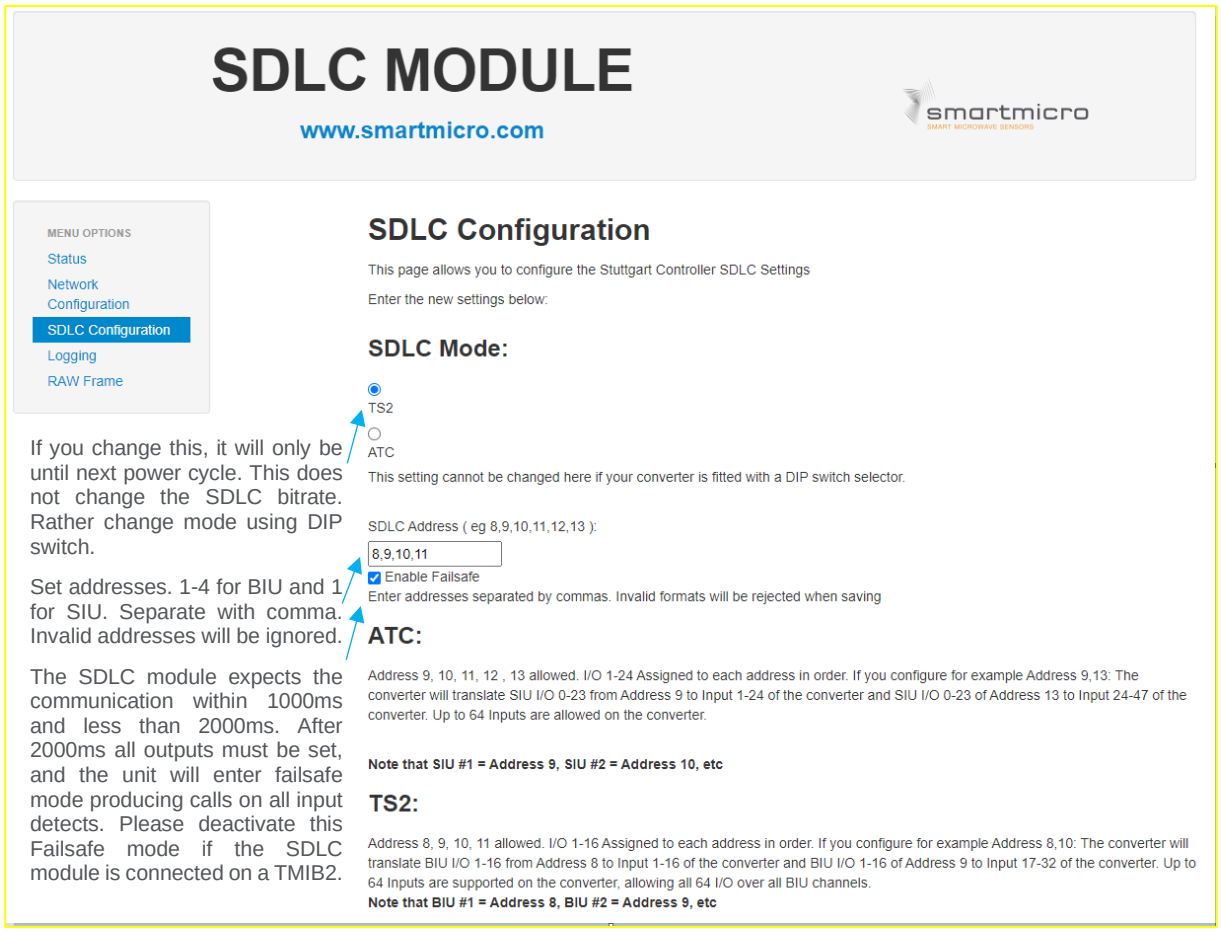
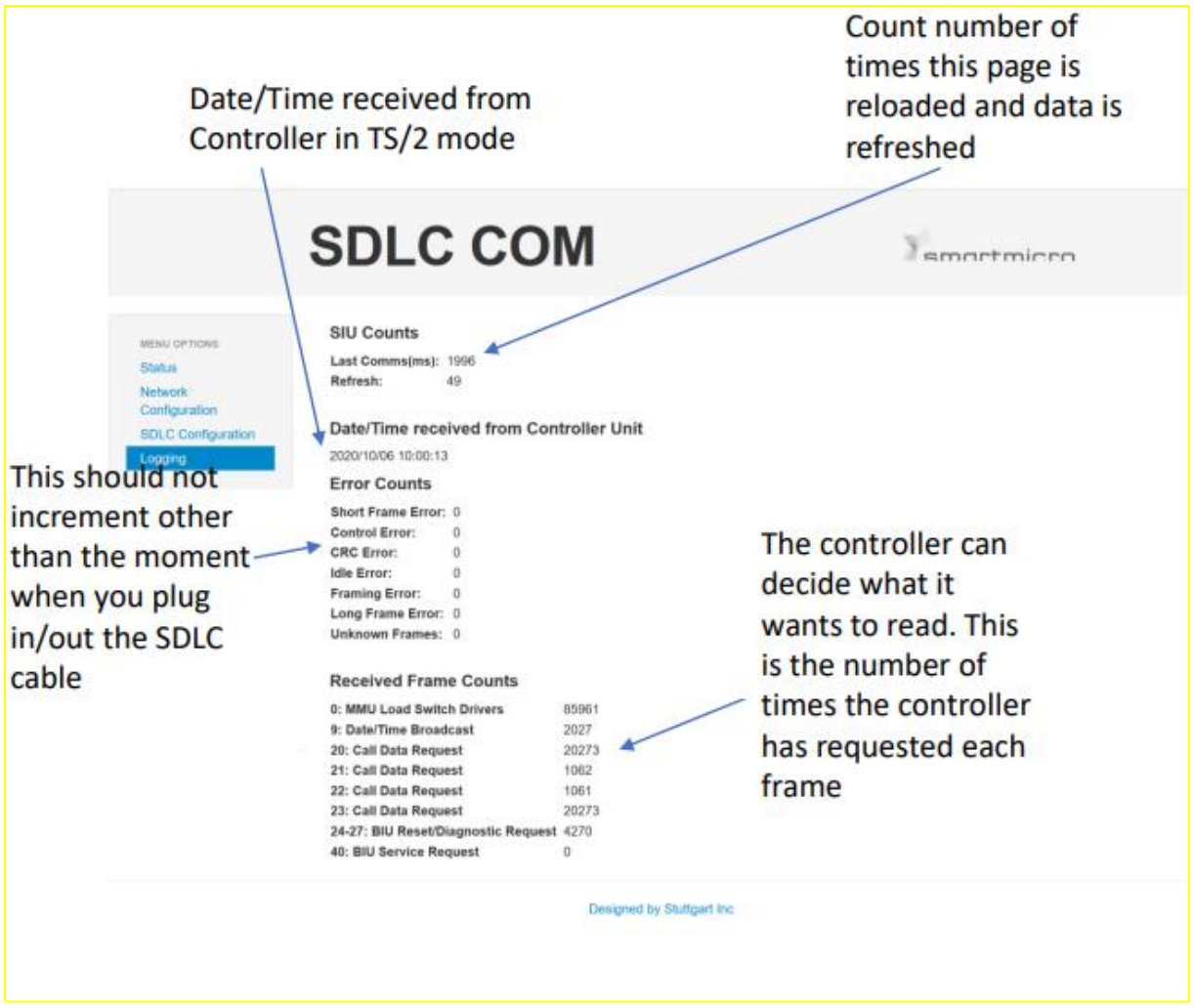


Figure 2-8 SDLC configuration screen

2.6 LOGGING AND DIAGNOSTIC



3 MULTI-SENSOR CONNECTION WITH TMIB2

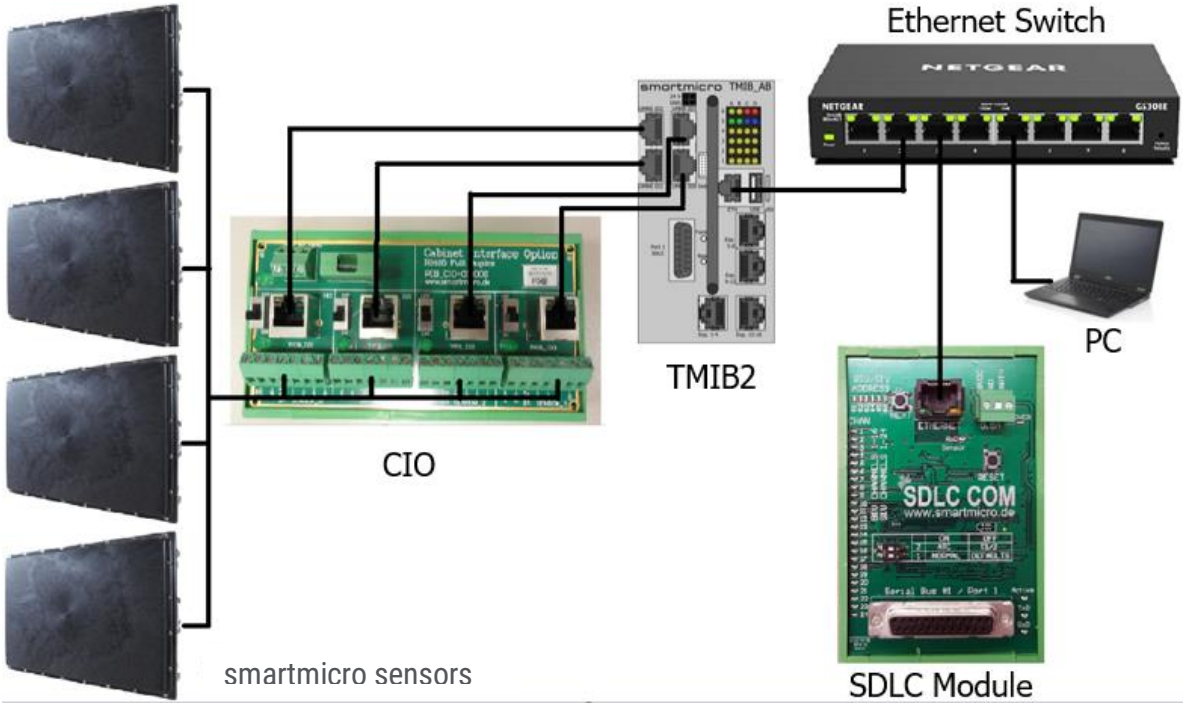


Figure 3-1 Connection with four sensors and TMIB2

A typical smartmicro sensor system consists of up to 4 sensors, which are usually connected to a Cabinet Interface Option (CIO). The CIO Module is directly connected to the TMIB2. The SDLC Module together with an additional user PC are connected to the TMIB2 over an Ethernet switch.

3.1.1 TMIB2 CONFIGURATION

The used TMIB2 have to have firmware version v1354 or higher.

The TMIB2 is reachable over the private IP address area 192.168.11.2 or since v1354 via 10.0.0.111. The PC which is configured for a connection with the SDLC Module is then also able to reach the TIMB2. (see 2 SDLC Web Interface, regarding IP configuration)

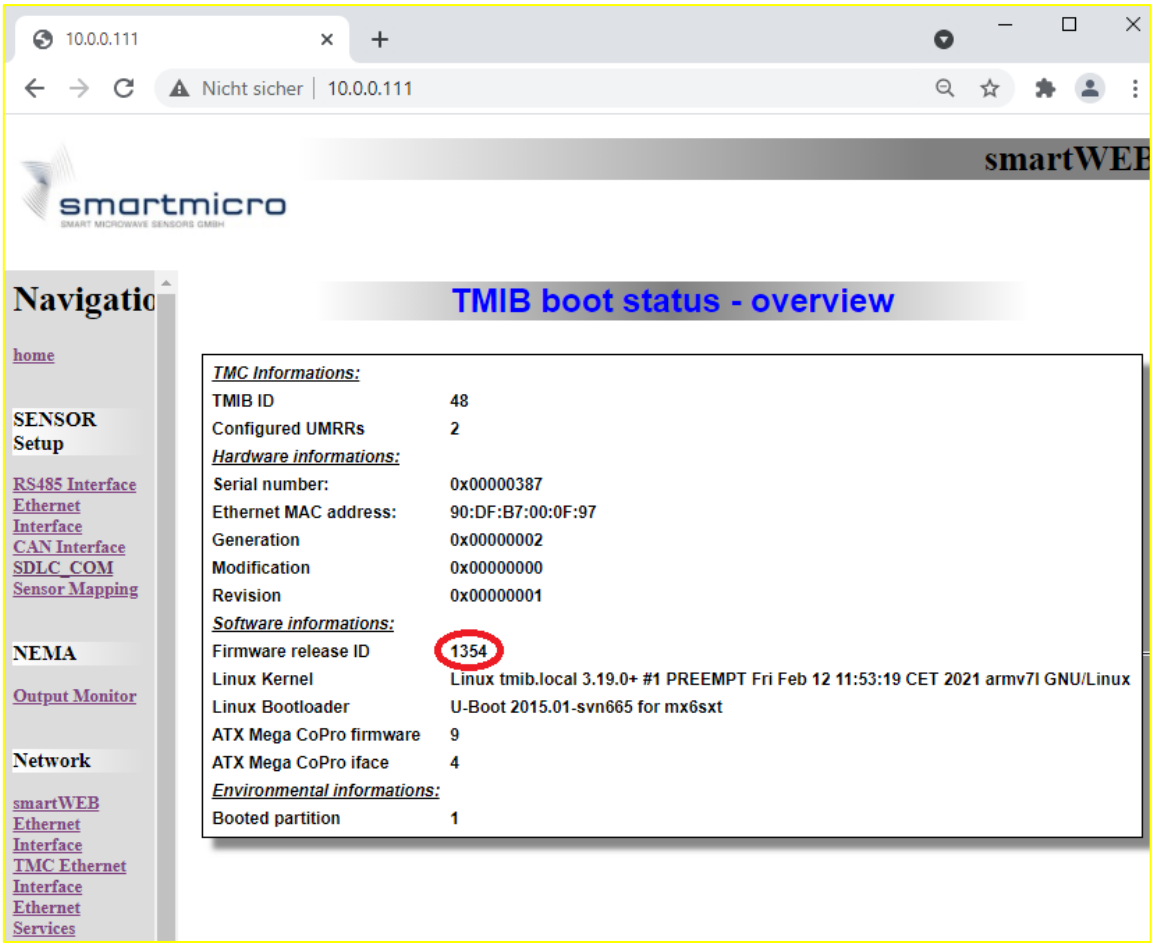


Figure 3-2 Start screen of the TIMB2 Traffic Web UI

If an older version is installed on the TMIB2, please ask the smartmicro support to get the latest version.

Only firmware version 1354 or later can communicate with the SDLC Module.

It has the special Traffic Web UI tab to configure the communication address of the SDLC Module.

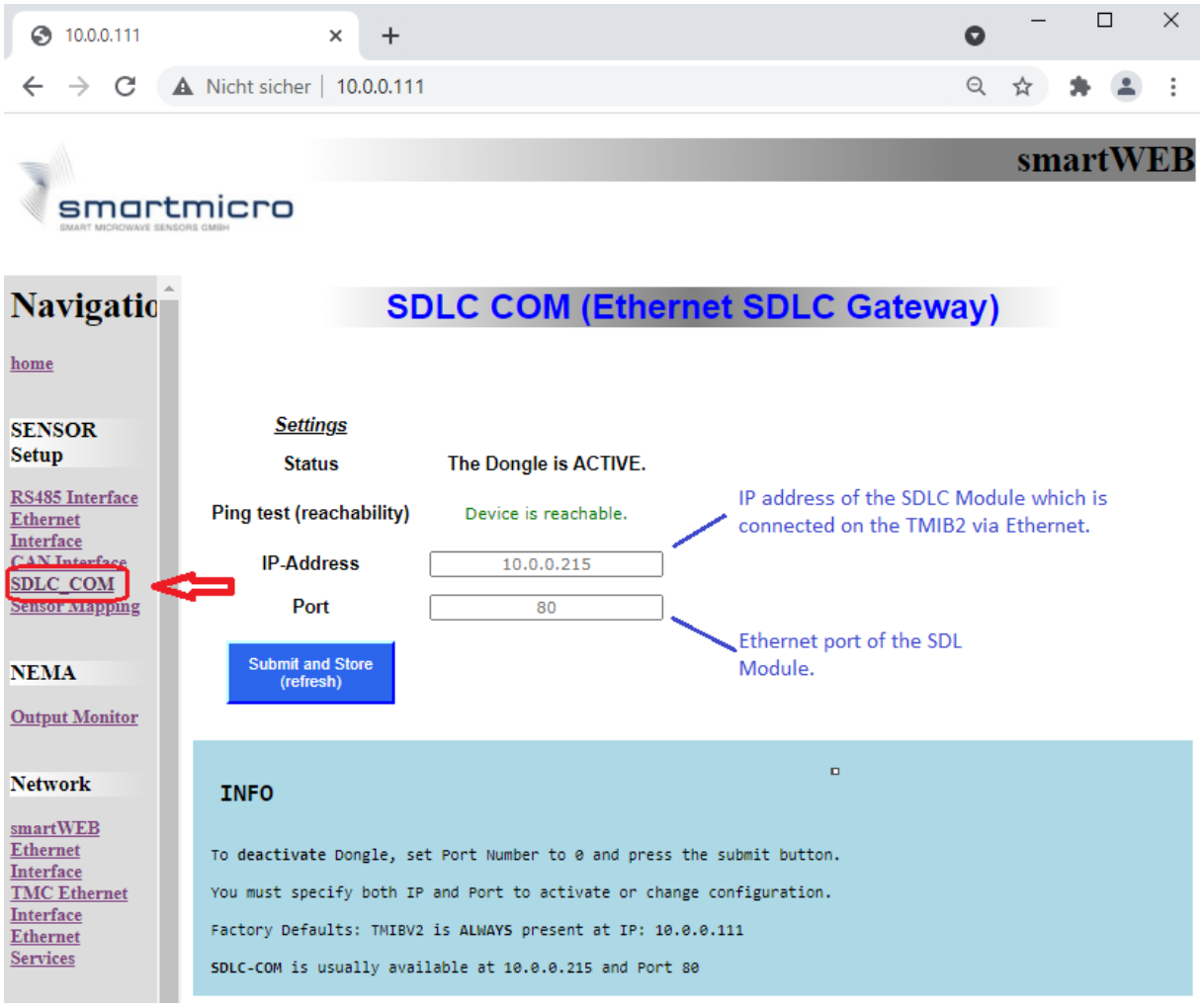


Figure 3-3 SDLC Module configuration in TMIB2

If the “Ping test” fails, please enter the IP address of the SDLC Module and activate the communication with the port number 80. To deactivate the communication between SDLC Module and TMIB2, please enter port number 0.

Further information regarding TMIB2 is described in the documentation[1].

4 MULTI-SENSOR CONNECTION WITH COM HUB SYNC PLC

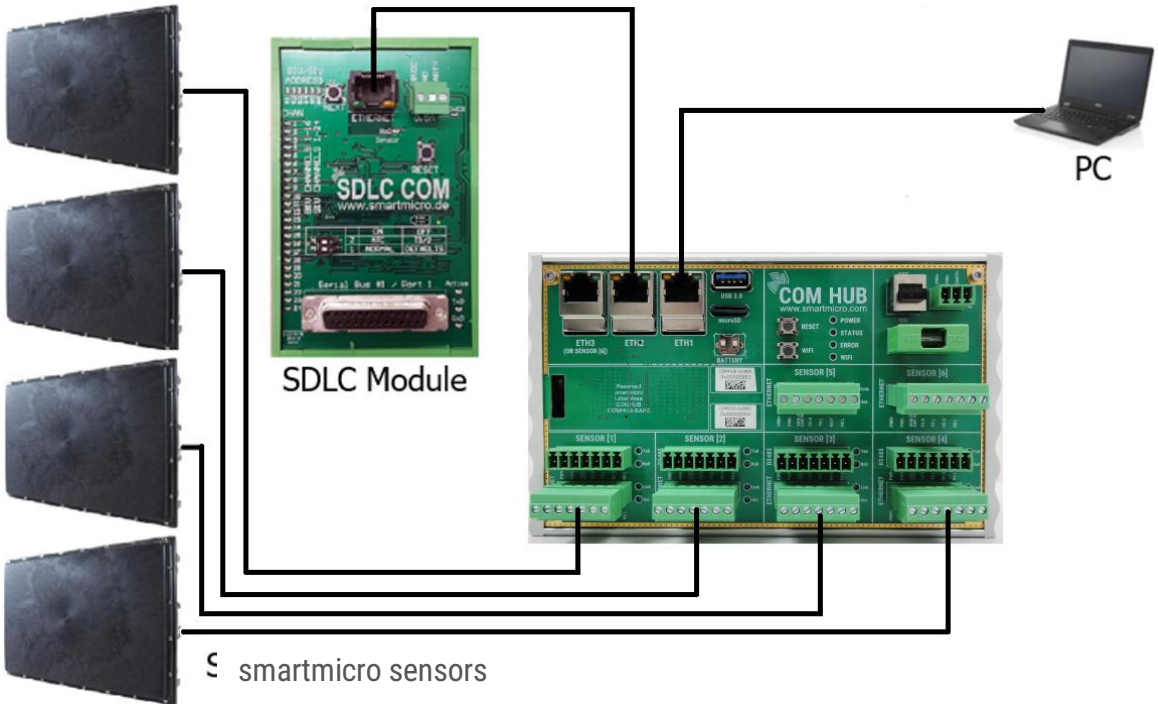


Figure 4-1 Connection with four sensors and COM HUB Sync PLC and SDLC Module

The COM HUB Sync PLC is a central device in the sensor system. All sensors and the SDLC Module are directly connected. The user has its own Ethernet port to connect a PC.

Further information regarding COM HUB Sync PLC is described in the documentation [2].

4.1 FIRMWARE UPDATE

In an update of the SLC Module is available, please load it to the PC and connect it to the Traffic Web UI of the SDLC Module via browser.

On the status screen you can see the firmware version, which is currently installed.

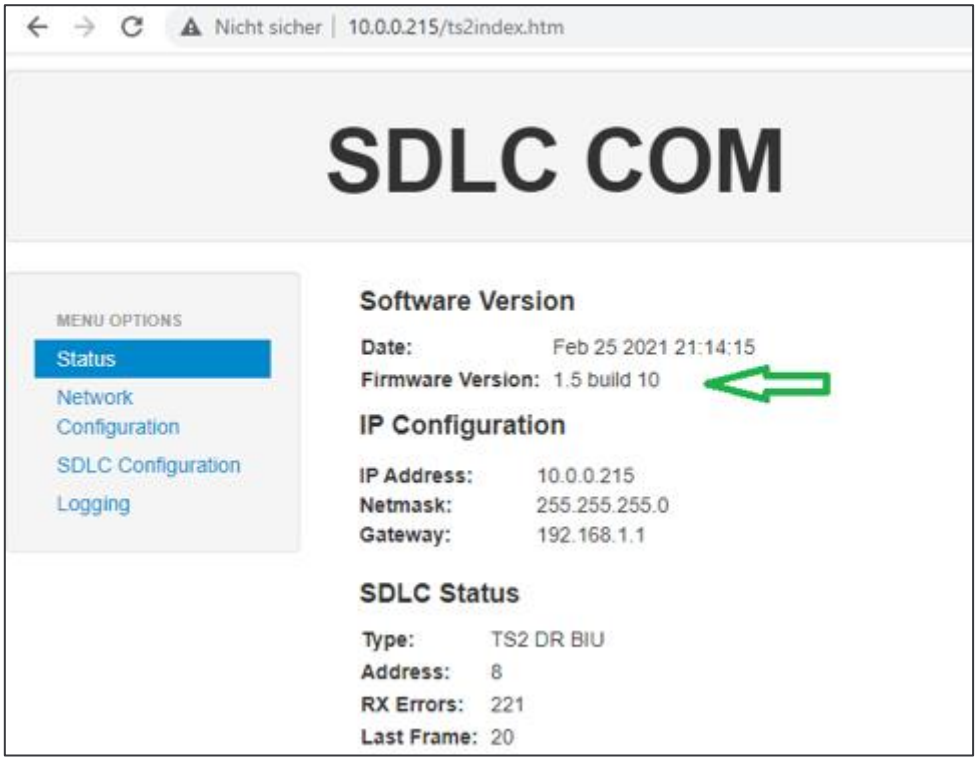


Figure 4-2 Firmware version on the status screen

Now start the programming tool which comes together with the firmware version and load the new firmware.

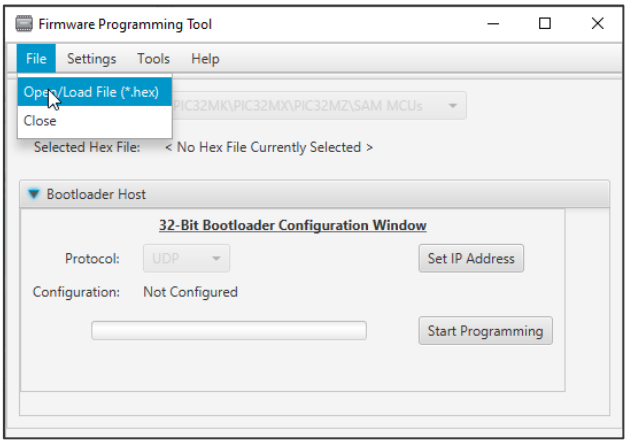


Figure 4-3 Programming Tool

Prepare the tool with the IP address of the Bootloader of the SDLC Module, which is **192.168.11.4.** Click on “Set IP Address” to open the UDP settings.

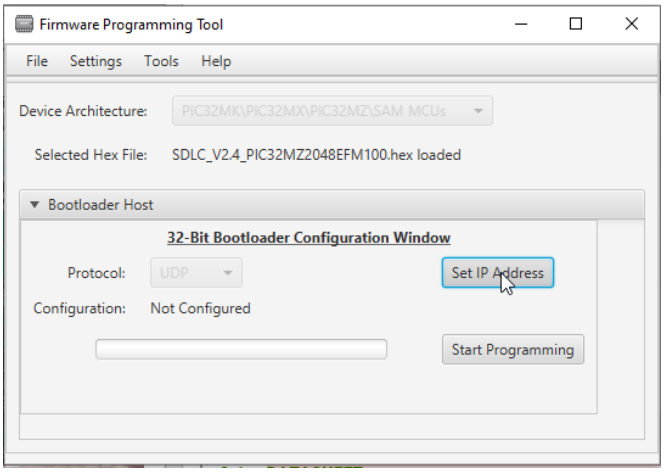


Figure 4-4 IP Addressing for the Bootloader

Enter the 192.168.11.4 as the address. The Port number is 6234 and should not be changed.

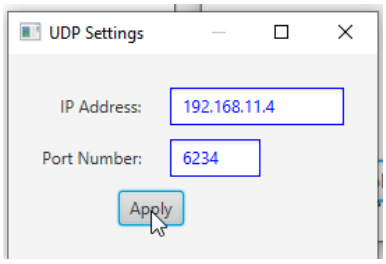


Figure 4-5 UDP Settings

Now go back to the browser to the “Network configuration” tab. There is a button for “Firmware Update”. After clicking this button, the SDLC Module goes into the Bootloader mode. The connection between TMIB2 or Traffic Controller and SDLC Module will be closed.

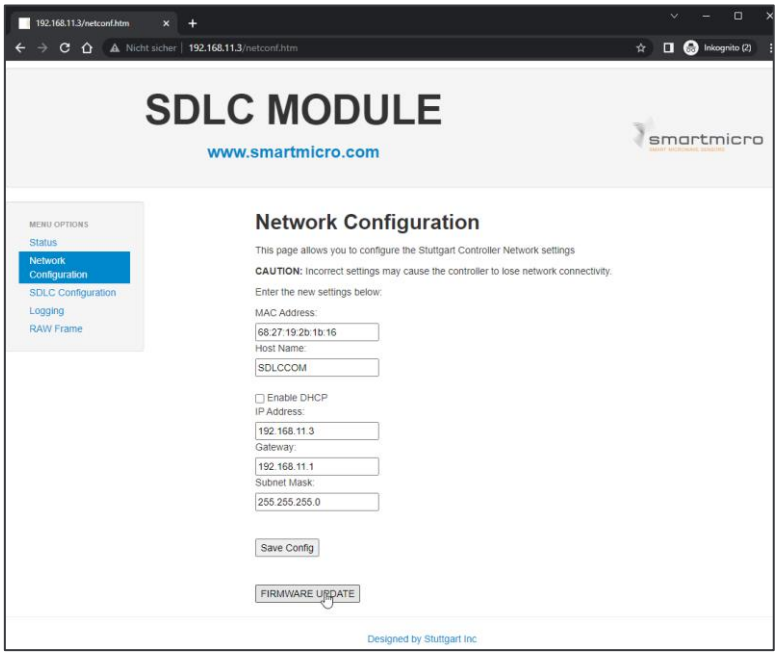


Figure 4-6 Network Configuration with Update Button

With the click on this button, the Bootloader is active. Now please follow the UDP/IP Bootloader instructions.

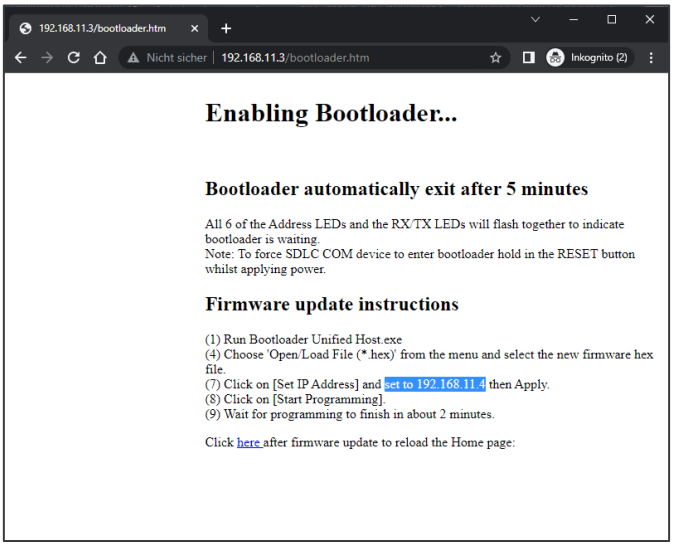


Figure 4-7 Bootloader Mode and Instructions

Go back to the programmer tool and click on “Start Programming”.

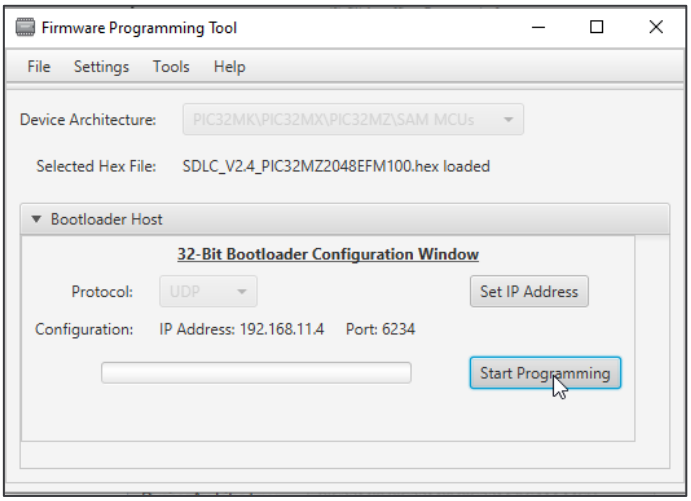


Figure 4-8 Programmer Tool

A new console window should be open, which gives feedback about the update process.

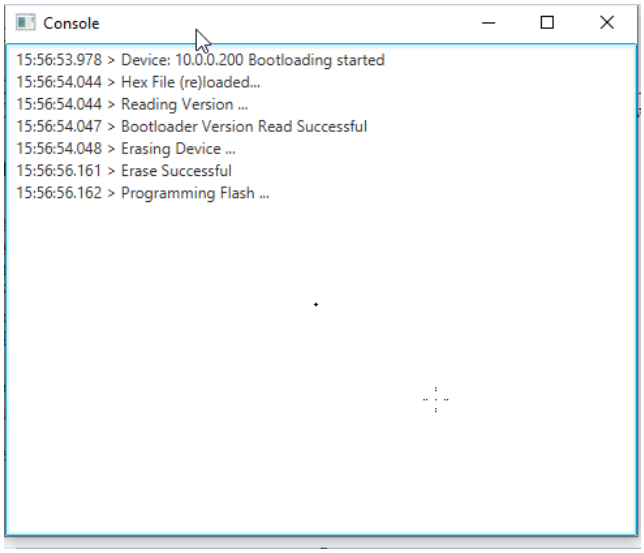


Figure 4-9 Programming of the flash started

Please be careful to not interrupt the power.

If the last information is the programming chain being completed, then the update process is done and the SDLC Module runs with the new firmware after the restart.

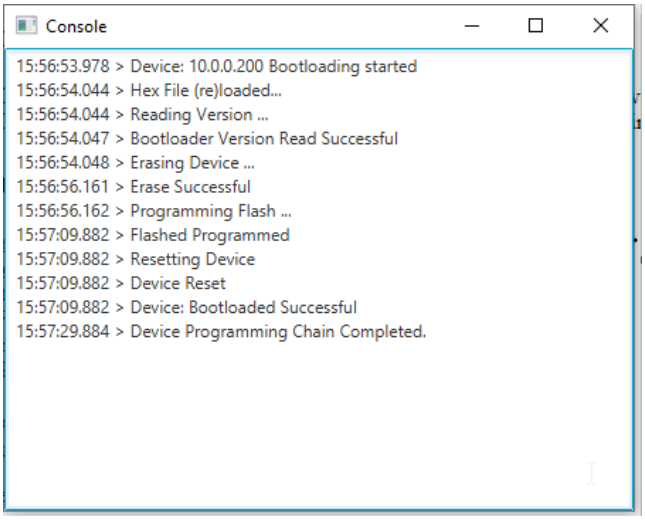


Figure 4-10 Programming chain completed

The status screen should now show the updated firmware version.

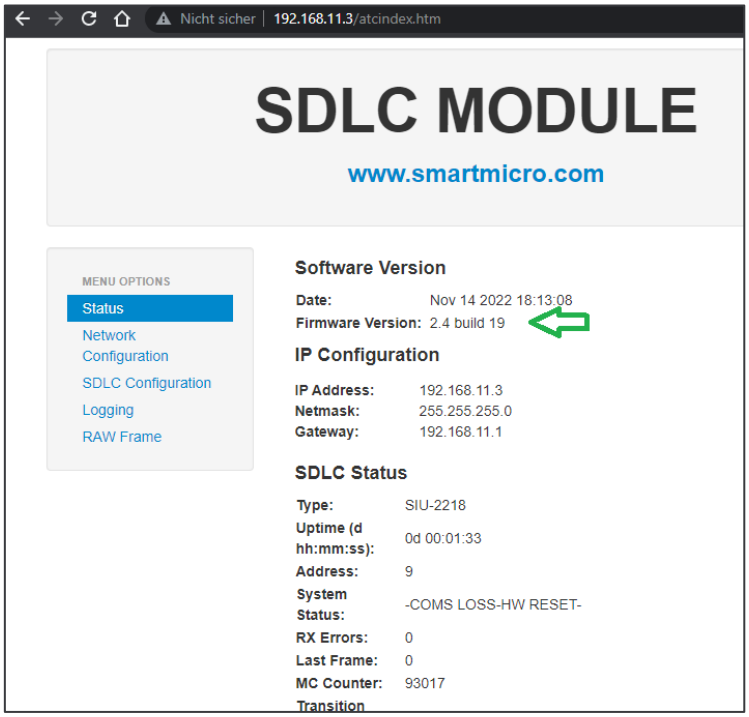


Figure 4-11 Status screen with updated firmware version

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