



VISATRON®

Oil Mist Detector

VN2020

Operating Manual for VN2020 End-User Software

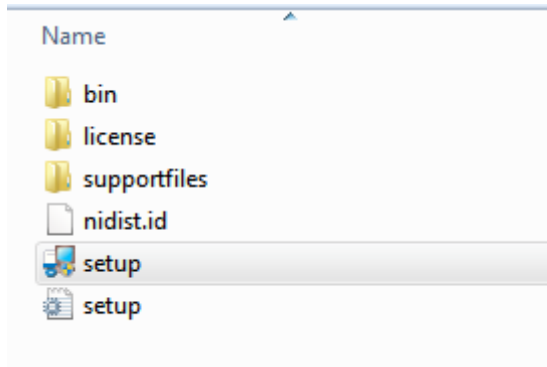
part number 180109



- Configuration Program -

SOFTWARE INSTALLATION

Insert the data carrier containing the installation software into the PC. Open the \Volume subdirectory.

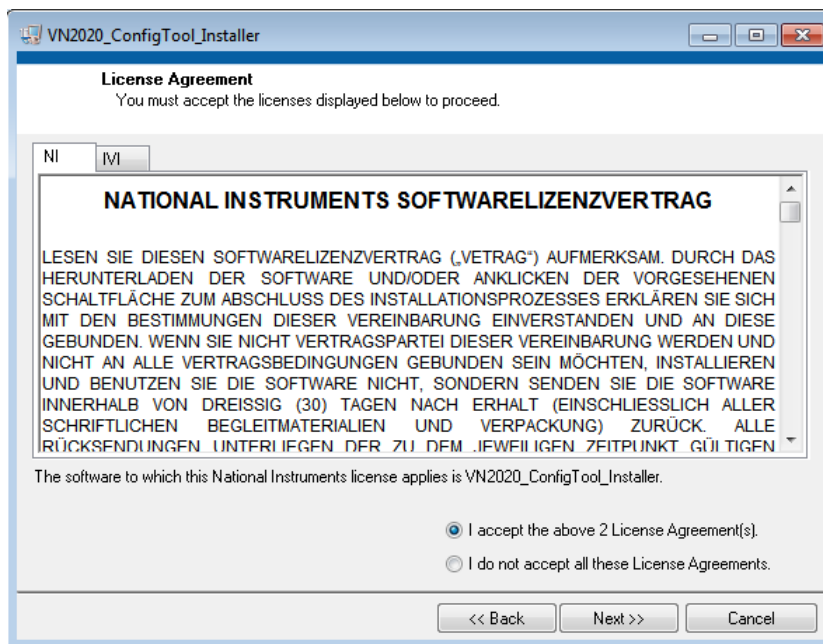


► Installation is started by double-clicking setup.exe with the left mouse button.



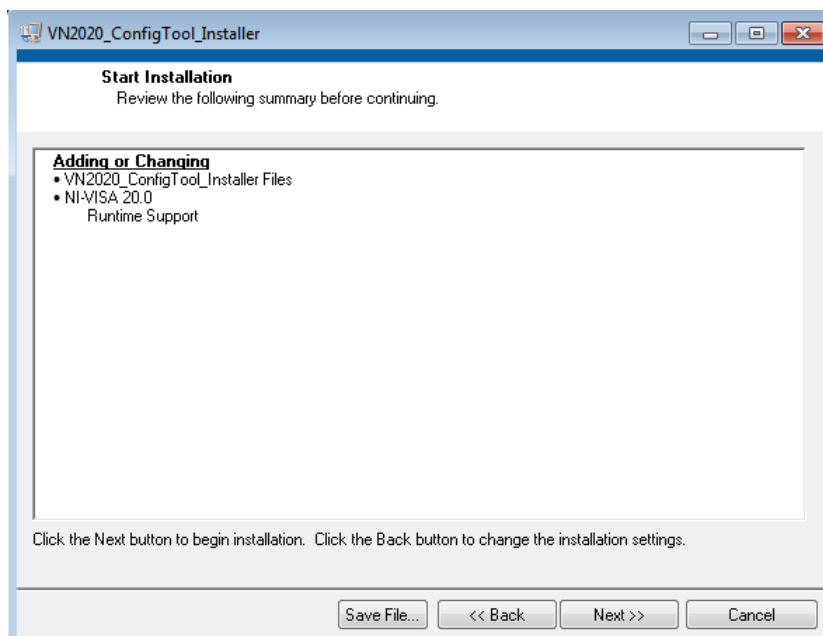
► After installation has started, the following screen appears. Depending on the PC performance, the unpacking of the installation routines takes between several seconds and a few minutes.





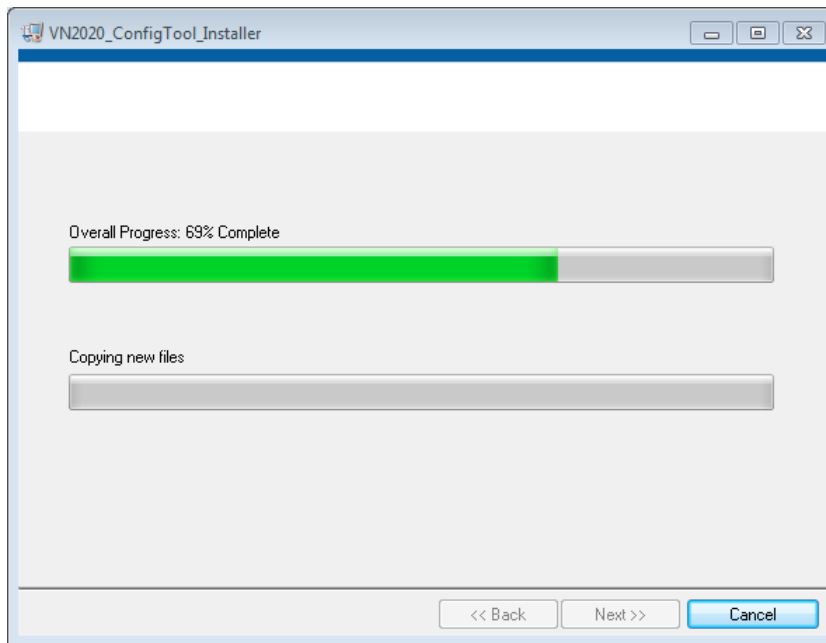
► In the next step, the user confirms the installation of the software.

► Please check the “**I accept the License Agreement**” field.



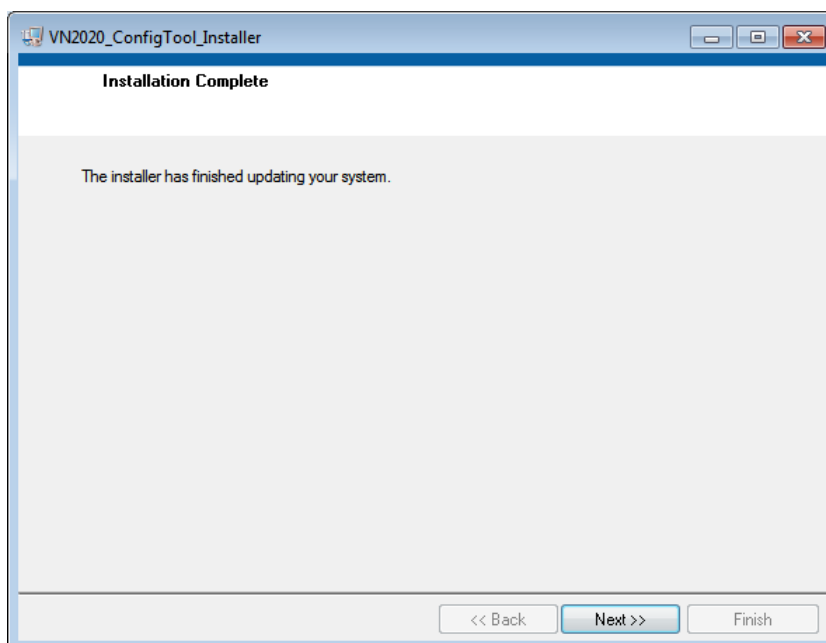
► Installation by pressing the button **Next>>**





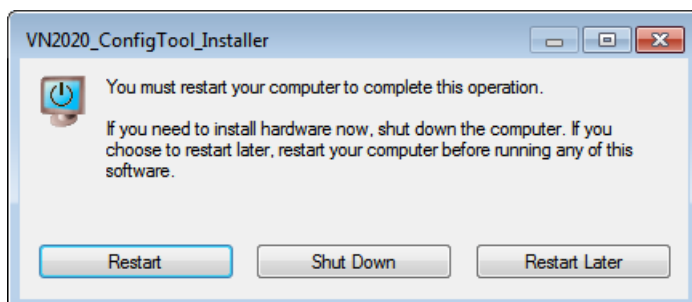
The progress of the installation is displayed during the installation process.

It can take a few minutes depending on the PC's performance.



► Following window appears once installation completed.

Please click the **Next >>** button.

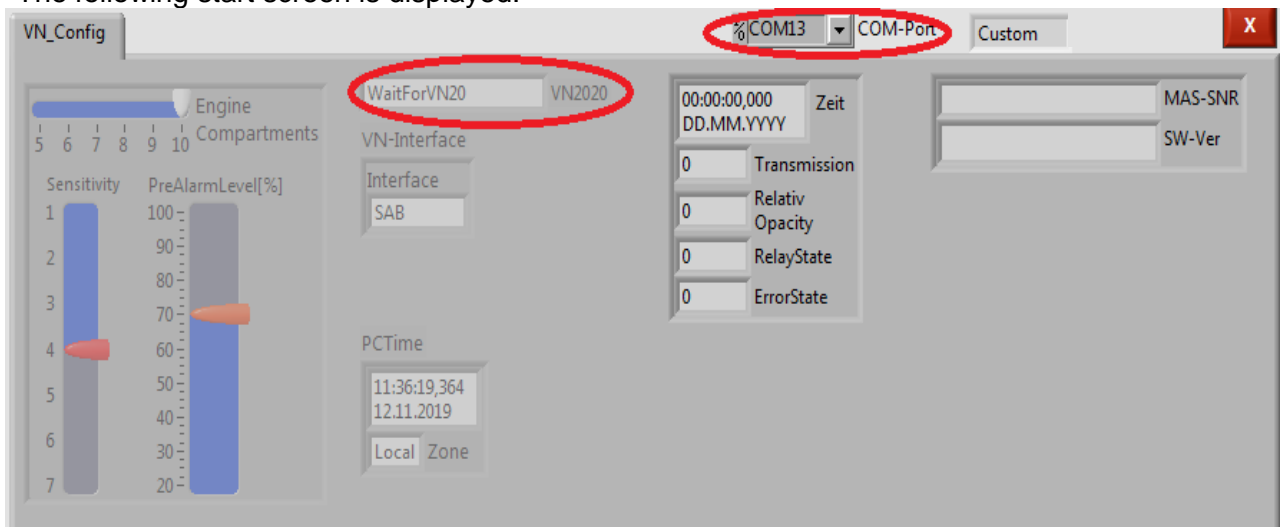


► The PC must be restarted to finish the installation. Please click **'Restart'**



User interface

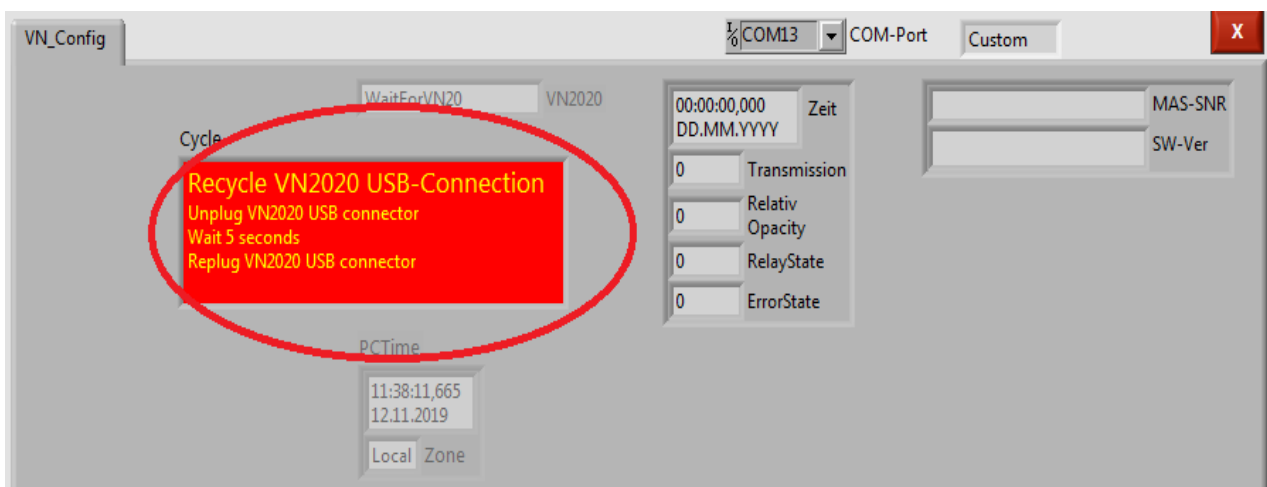
- Connect the VN2020 parameterization interface to the PC.
A USB type A/B cable is required for the connection.
The USB driver is stored in the program directory (driver.inf and vcom.cat).
- Double-click the **VN2020_ConfigTool** icon to start the software.
The following start screen is displayed:



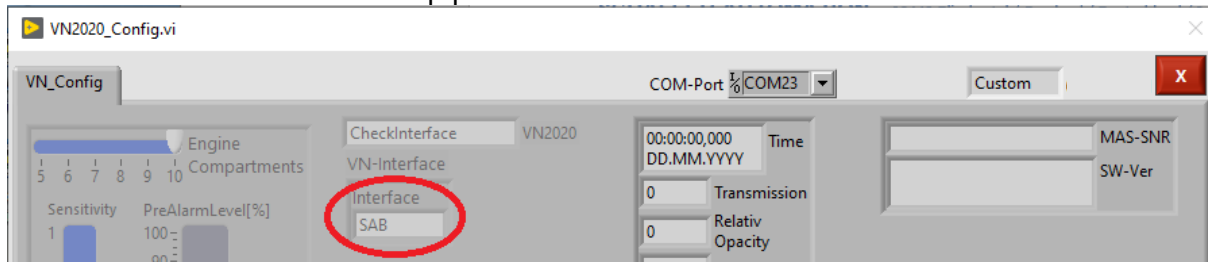
The software expects a message from the VN2020 via the **COM13** interface.

If the VN2020 does not respond within approx. 6 seconds, the software initially assumes that the set COM port is incorrect.

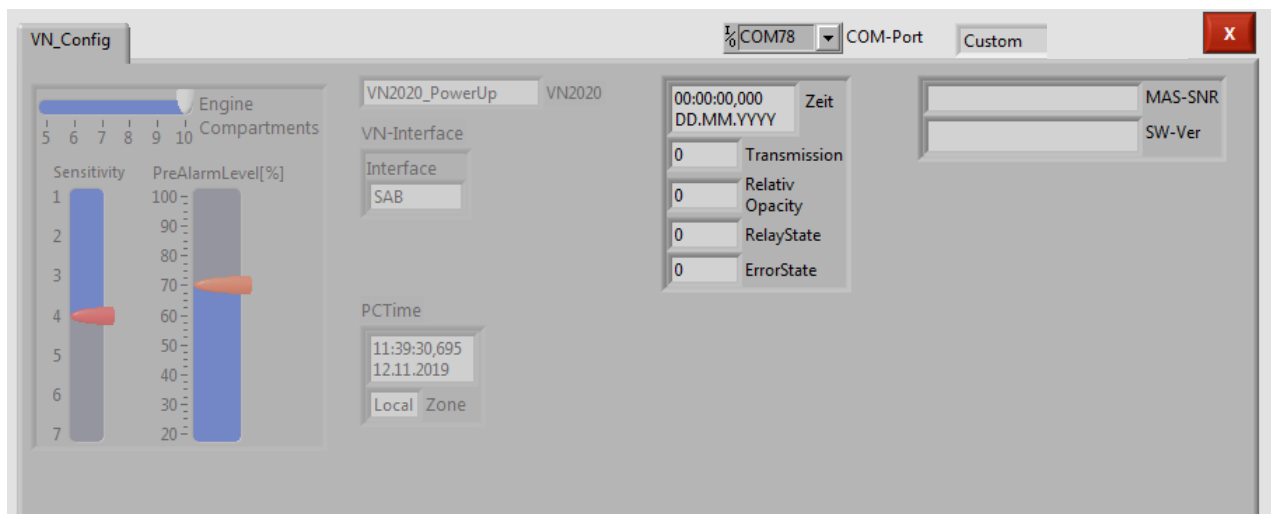
To make it easier for the user to find the correct **COM port**, the software prompts the user to disconnect the PC from the VN2020 (unplug the USB connector from the PC), wait about 5 seconds and then plug the USB connector back in to the PC. A corresponding message is displayed on the screen with instructions for the user.



After plugging in the USB cable, the new **COM port** that is discovered is displayed and used (this requires a correctly installed USB/COM port driver). The software then waits until the VN2020 has finished its PowerUp phase.



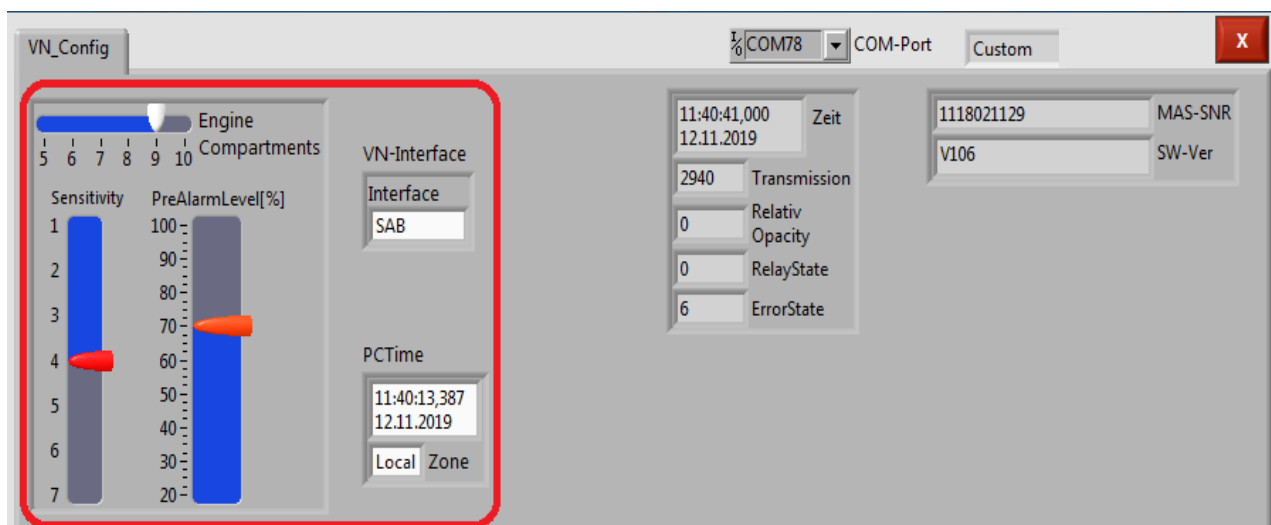
The current chosen interface is displayed below VN-Interface. In order to change the interface please read "VN Interface control box with Interface control field" on page 7.



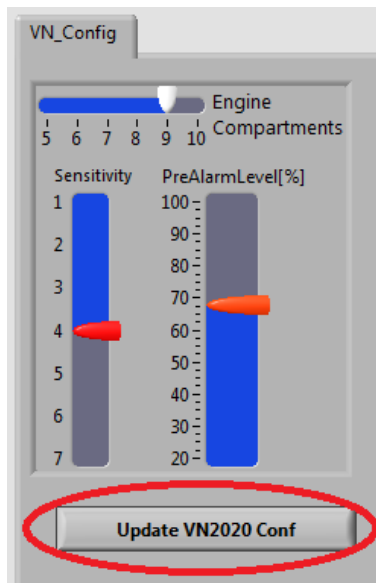
During the VN2020 PowerUp phase, all controls are greyed out.

Once all the required parameters have been read from the VN2020, the controls that were greyed out and disabled are enabled again.

The section circled in red has 3 control boxes with control fields.



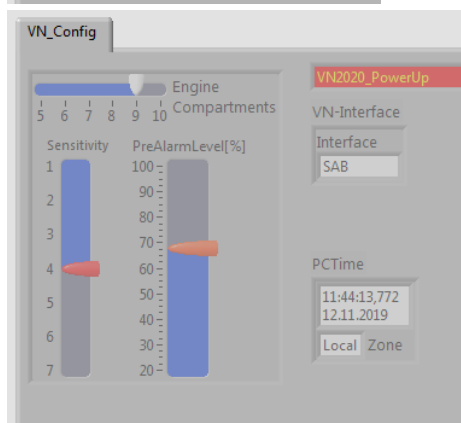
- The **Engine Compartments** control field is used to set the number of compartments.
The **Sensitivity** control field is used to adjust the sensitivity.
The **PreAlarmLevel[%]** control field is used to set the PreAlarm level.



If one of the control fields is changed, the following button is displayed: **Update VN2020 Conf**.

Left-clicking this button transfers the modified settings to the VN2020.

Once the Update VN2020 Conf button has been pressed, the **Update VN2020 Conf button** is hidden.



All control boxes are greyed out and disabled.

The VN2020 performs a soft reset and then the PowerUp phase.

Progress is displayed on the user interface.

- **VN Interface** control box with **Interface** control field.

The Interface control field is used to define the interface (hardware, software) that the VN2020 uses to communicate with its environment via the fieldbus interface (terminal box PIN 5-7). Possible interface settings are **SAB** (Remote Indicator II), **CAN**, **CANOpen** and **ModBus**. The settings that are made here only apply to the fieldbus interface.



Left-clicking the Interface control field opens a selection box:

SAB (Remote Indicator II)
CAN
CANOpen
ModBus



- ▶ Clicking the **CAN** option opens the following screen:

The CAN bus speed must be entered in the **kBit/s** field.
A valid CAN bus address must be entered in the **Adr** field.
The CAN bus address must be between 0 and 2048!
Once you have entered all CAN bus settings, you can use the **Change Interface** button to transfer the new Interface setting to the VN2020.

- ▶ Clicking the **CANOpen** option opens the following screen:

The *Change Interface* button is only displayed after you have entered a valid CANOpen address.

A valid CANOpen address is between 1 and 128

- ▶ Left-clicking the **Change Interface** button activates the CANOpen Interface:

- ▶ Clicking on the **ModBus** option opens the following screen:

To activate the **ModBus interface**, you must set a valid ModBus address.

A valid ModBus address is between 1 and 248.

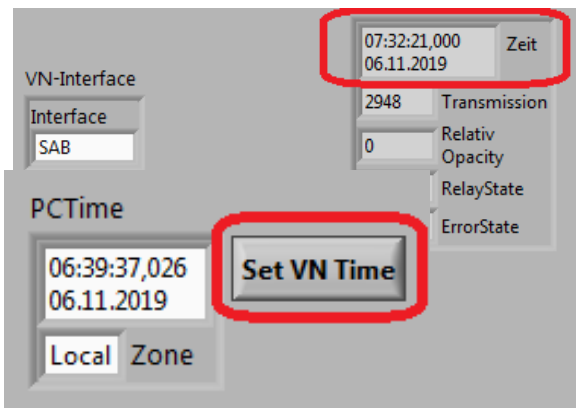
- ▶ Left-clicking the **Change Interface** button activates the **ModBus Interface**



► PCTime control box

The PCTime control box contains two control fields:

- A field for the current time (PCTime)
The current **PCTime** is displayed here. The field is NOT editable.
- A field for the time zone.
The **Time** can be set to LOCAL or UTC by mouse-click.



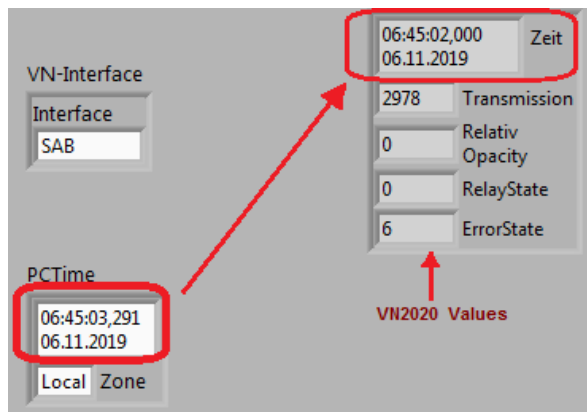
To transfer the time displayed in **PCTime** to the VN2020, left-click the Time field in the PCTime control box.

The following button is then displayed: **SET VN Time**.

PCTime to the VN2020.

Left-click the Set VN Time button to transfer the

Once you have pressed the **SET VN Time** button, the time that is currently set on the VN2020 is displayed:

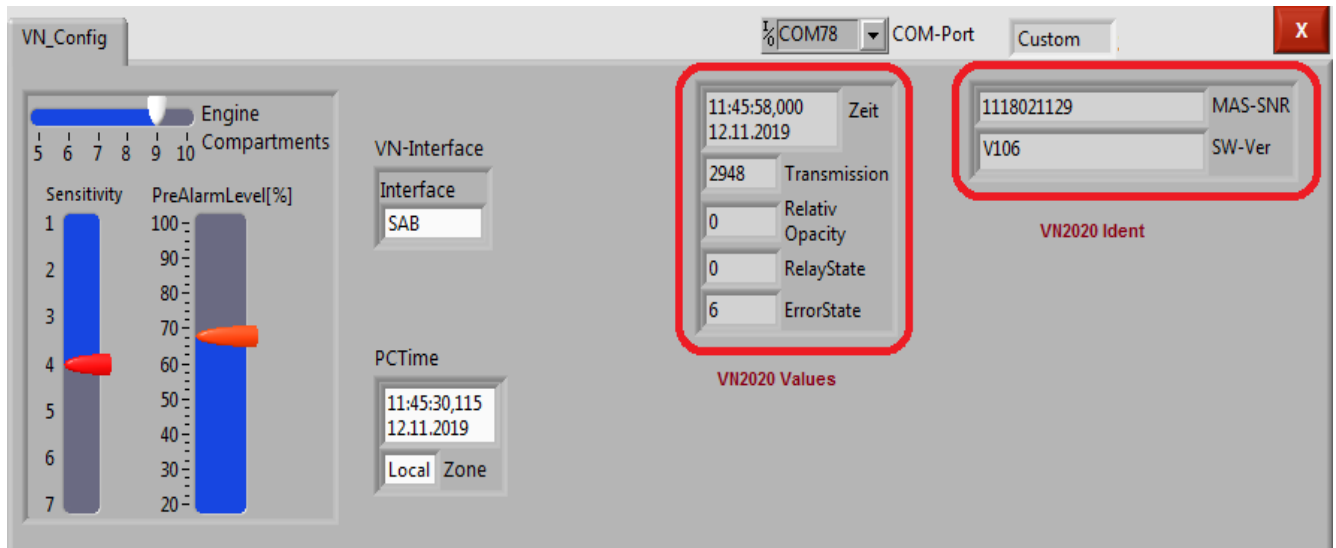


The time difference between PCTime and VN2020 time, which you can see in the screenshot here, is due to the fact that:

- VN2020 values can only be queried every approx. 800ms.
- The VN2020 time must always be rounded down to a full second.



► Display fields for **VN2020 Values** and **VN2020 Ident**:



The VN2020 Values display box displays values provided by the VN2020.

- The displayed values are updated every approx. 800ms. Static values are displayed in the VN2020 Ident display box.
- The static values are the serial number of the measuring head and the software version that is used.

► **System requirements**

The minimum system requirements for the VN2020 configuration program are as follows:

- Microsoft Windows 10
- Intel Pentium Dual-Core 2.80GHz or equivalent
- 2 GB RAM
- 500 MB free hard disk space
- USB 2.0 interface

The following interface cable is required:

- USB cable A/B (A-plug to B-plug)

