

Brief Operating Instructions Density Calculator QML51

Vibronic



These Brief Operating Instructions are not a substitute for the Operating Instructions. For further information on the product, see:

- www.endress.com/deviceviewer
- Smartphone/tablet: Endress+Hauser Operations app



1 About this document

1.1 Document function

The Brief Operating Instructions contain all the essential information from incoming acceptance to initial commissioning.

1.2 Symbols

1.2.1 Safety symbols

DANGER

This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.

WARNING

This symbol alerts you to a potentially dangerous situation. Failure to avoid this situation can result in serious or fatal injury.

CAUTION

This symbol alerts you to a potentially dangerous situation. Failure to avoid this situation can result in minor or medium injury.

NOTICE

This symbol alerts you to a potentially harmful situation. Failure to avoid this situation can result in damage to the product or something in its vicinity.

1.2.2 Symbols on the device

Safety instructions:  → 

Observe the safety instructions contained in the associated Operating Instructions. Observe the information on the degree of protection and shock resistance.

1.2.3 Documentation

 For an overview of the scope of the associated Technical Documentation, refer to the following:

- *Device Viewer* (www.endress.com/deviceviewer): Enter the serial number from the nameplate
- *Endress+Hauser Operations app*: Enter serial number from nameplate or scan matrix code on nameplate.

1.3 Registered trademarks

Google Chrome™ browser

Registered trademark of Google LLC in Mountain View, California, USA

HART®

Registered trademark of the FieldComm Group, Austin, Texas, USA

Modbus®

Registered trademark of SCHNEIDER AUTOMATION, INC.

OPC UA

Registered trademark of the OPC Foundation, Scottsdale, Arizona, USA

2 Basic safety instructions

2.1 Requirements for the personnel

The personnel must fulfill the following requirements for its tasks:

- ▶ Trained, qualified specialists must have a relevant qualification for this specific function and task.
- ▶ Are authorized by the plant owner/operator.
- ▶ Are familiar with federal/national regulations.
- ▶ Before starting work, read and understand the instructions in the manual and supplementary documentation as well as the certificates (depending on the application).
- ▶ Follow instructions and comply with basic conditions.

2.2 Intended use

Density Calculator QML51 is used to calculate the medium density, reference density and concentration of liquids, as well as for media detection.

The measuring system consists of the following equipment:

- One Density Calculator QML51
- Up to two 2 Liquiphant Density devices (electronic insert FEL60D)
- Up to 2 temperature sensors
- Up to 2 pressure measuring cells

Density Calculator QML51 uses mathematical methods and standards to calculate derived variables such as the concentration of a medium.



The exact number of sensors depends on the specific installation and configuration.

The input and output connections must be established as described in the documentation accompanying the product.

Use only the power supply unit described in the documentation accompanying the product for the power supply.

Incorrect use



The manufacturer is not liable for harm caused by improper or unintended use.

2.3 Workplace safety

For work on and with the device:

- ▶ Wear the required personal protective equipment according to federal/national regulations.

2.4 Operational safety

When performing configuration, testing, and maintenance work on the device, alternative supervisory measures must be taken to guarantee the operational safety and process safety.

Damage to the device!

- ▶ Operate the device only if it is in proper technical condition, free from errors and faults.
- ▶ The operator is responsible for interference-free operation of the device.

2.5 Product safety

This state-of-the-art device is designed and tested in accordance with good engineering practice to meet operational safety standards. It left the factory in a condition in which it is safe to operate.

It meets general safety standards and legal requirements. It also complies with the EU directives listed in the device-specific EU declaration of conformity. The manufacturer confirms this by affixing the CE mark.

2.6 IT security

The manufacturer warranty is valid only if the product is installed and used as described in the Operating Instructions. The product is equipped with security mechanisms to protect it against any inadvertent changes to the settings.

IT security measures, which provide additional protection for the product and associated data transfer, must be implemented by the operators themselves in line with their security standards.

2.7 Device-specific IT security

The device offers specific functions to support protective measures by the operator. These functions can be configured by the user and guarantee greater in-operation safety if used correctly. An overview of the most important functions is provided in the following section: Access to the device's web server is only possible with the correct login credentials.

3 Product description

3.1 Measuring principle

The measuring system consists of the following main components:

- Liquiphant Density
- Density calculator

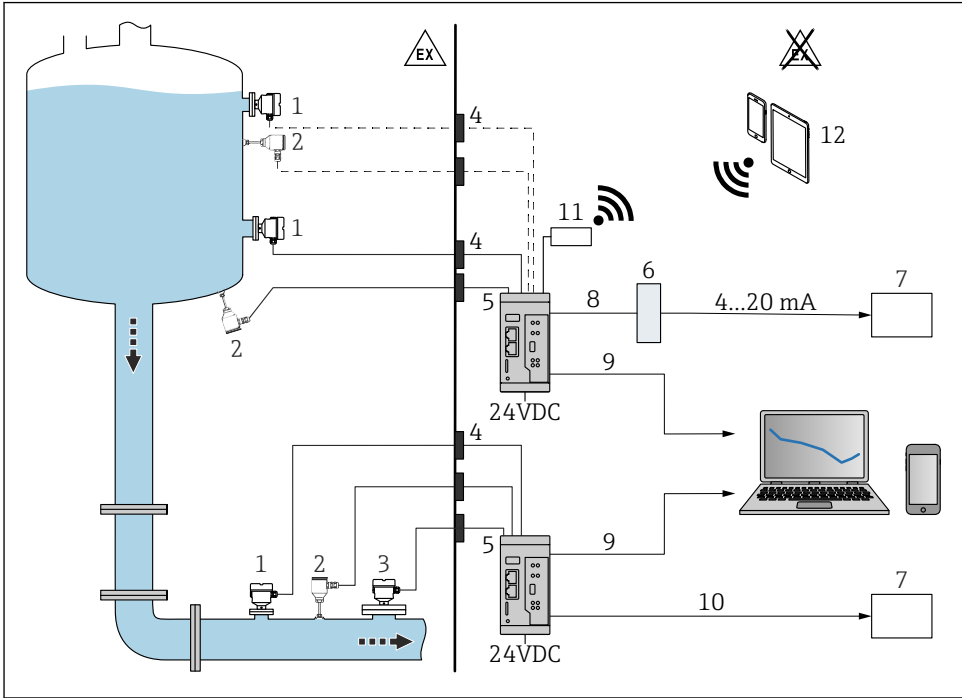
In conjunction with the density calculator, the Liquiphant Density measures the density of a Newtonian, purely viscous, liquid in pipes and tanks.

A piezoelectric drive causes the vibrating fork of the Liquiphant Density to vibrate at its resonance frequency. Changes in liquid density cause a change in the resonance frequency of

the vibrating fork. As a result, the density of the medium has a direct impact on the resonance frequency of the vibrating fork. This effect is used for density measurement.

In the density calculator, the density of the liquid is calculated from the resonance frequency of the vibrating fork transmitted by the sensor and from stored sensor-specific parameters. To compensate for temperature and pressure influences, additional corresponding sensors can be connected to the density calculator.

3.2 Measuring system



1 Density measurement with Density Calculator QML51

- 1 Liquiphant Density with electronic insert FEL60D → pulse output
- 2 Temperature sensor, e.g. 4 to 20 mA output
- 3 Pressure transmitter 4 to 20 mA output; required for pressures above 6 bar (87 psi) or for pressure fluctuations.
- 4 Ex barrier (Liquiphant Density, temperature and/or pressure measuring cell installed in the hazardous area)
- 5 Density Calculator QML51
- 6 Modbus TCP to 4 to 20 mA converter
- 7 Programmable Logic Controller (PLC)
- 8 Modbus TCP
- 9 Ethernet

- 10 *Modbus TCP or OPC UA*
- 11 *TELTONIKA Router RUT241 (accessory). For a wireless connection.*
- 12 *Mobile devices*



For use in hazardous areas: Ex barrier via RN22 active barrier. The two-channel RN22 active barrier powers analog device circuits and safety equipment up to SIL 2 (SC 3). The intrinsically safe, HART® transparent interface provides a reliable connection between the field devices and Density Computer QML51. It is connected to 2-wire/4-wire devices in hazardous areas and provides a second galvanically isolated signal output in accordance with NAMUR NE 175.

In addition to calculating the density of a liquid medium, Density Calculator QML51 can also determine the reference density of the medium and the concentration of a solution, as well as detect up to four different media or an empty pipeline.

In doing so, the density calculator evaluates up to two measuring points and directly supplies connected two-wire transmitters with auxiliary power. This allows the connection of up to two Liquiphant Density sensors and two temperature sensors for compensation of temperature effects in order to calculate reference densities.

For concentration determination, stored standards such as ICUMSA for sugar concentrations, OIML ITS-90 for ethanol, and various preconfigured calculations for electrolyte solutions (according to the Laliberté-Cooper model) can be used.

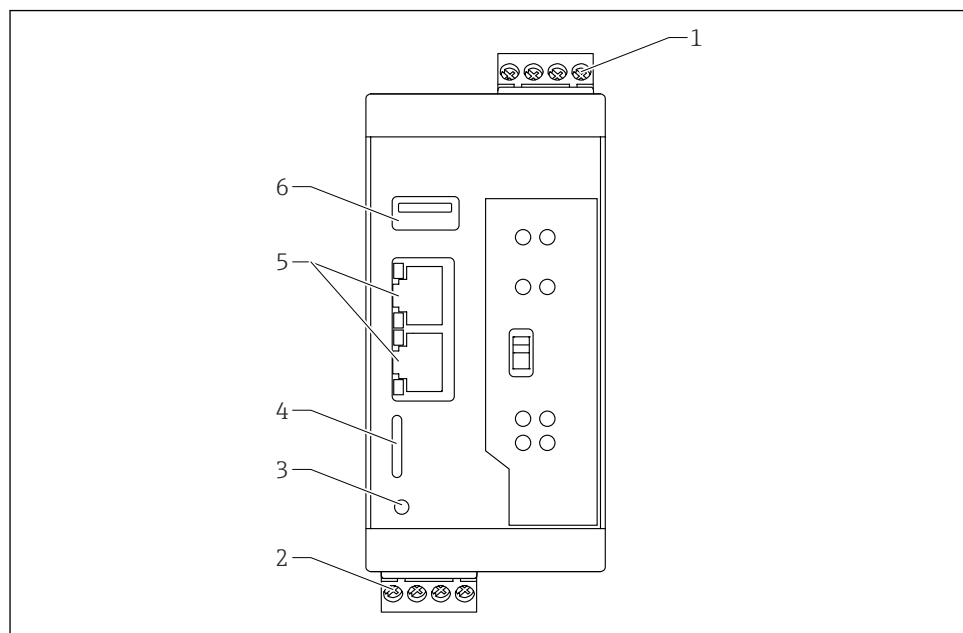
Specific reference density or concentration tables can be entered manually in the form of linearization tables or imported into the density calculator in standard data formats (e.g., .csv, .xlsx) and used for calculations.

Density and concentration values can be output in various units, for example, SI units, °Baume, °Brix or °API.

Configuration of the QML51 is performed via an integrated web server, which can be accessed via a secure TLS connection using a standard web browser.

For output to a PLC or a SCADA system, the QML51 supports the Ethernet protocols Modbus TCP and OPC UA. If a current signal is required for connection to a PLC, this can be generated via a converter. A converter that generates up to 4 channels with an analog 4 to 20 mA signal from the Modbus TCP protocol is available as an accessory.

3.3 Product design



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- 1 Terminals for inputs
- 2 Power supply terminal
- 3 Reset button
- 4 microSD card slot
- 5 LAN interfaces
- 6 USB slot

4 Incoming acceptance and product identification

4.1 Incoming acceptance

On receipt of the delivery:

1. Check the packaging for damage.
 - ↳ Report all damage immediately to the manufacturer.
Do not install damaged components.
2. Check the scope of delivery using the delivery note.
3. Compare the data on the nameplate with the order specifications on the delivery note.

4. Check the technical documentation and all other necessary documents, e.g. certificates, to ensure they are complete.



If one of the conditions is not satisfied, contact the manufacturer.

4.2 Product identification

The following options are available for identification of the device:

- Nameplate specifications
- Enter the serial number from the nameplate in the *Device Viewer* (www.endress.com/deviceviewer): all the information about the device and an overview of the Technical Documentation supplied with the device are displayed.
- Enter the serial number from the nameplate into the *Endress+Hauser Operations app* or scan the 2-D matrix code (QR code) on the nameplate with the *Endress+Hauser Operations app*: all the information about the device and the technical documentation pertaining to the device are displayed.

4.2.1 Nameplate

Do you have the correct device?

The nameplate provides you with the following information on the device:

- Manufacturer identification, device designation
- Order code
- Extended order code
- Serial number
- Tag name (TAG) (optional)
- Technical values such as supply voltage, current consumption, ambient temperature, communication-specific data (optional)
- Degree of protection
- Approvals with symbols
- Reference to Safety Instructions (XA) (optional)

- Compare the information on the nameplate with the order.

4.2.2 Manufacturer address

Endress+Hauser SE+Co. KG
Hauptstraße 1
79689 Maulburg, Germany
Place of manufacture: See nameplate.

4.3 Storage and transport

4.3.1 Storage conditions

- Use the original packaging
- Store the device in clean and dry conditions and protect from damage caused by shocks

Storage temperature

-25 to 85 °C (-13 to 185 °F)

5 Installation

5.1 Installation requirements

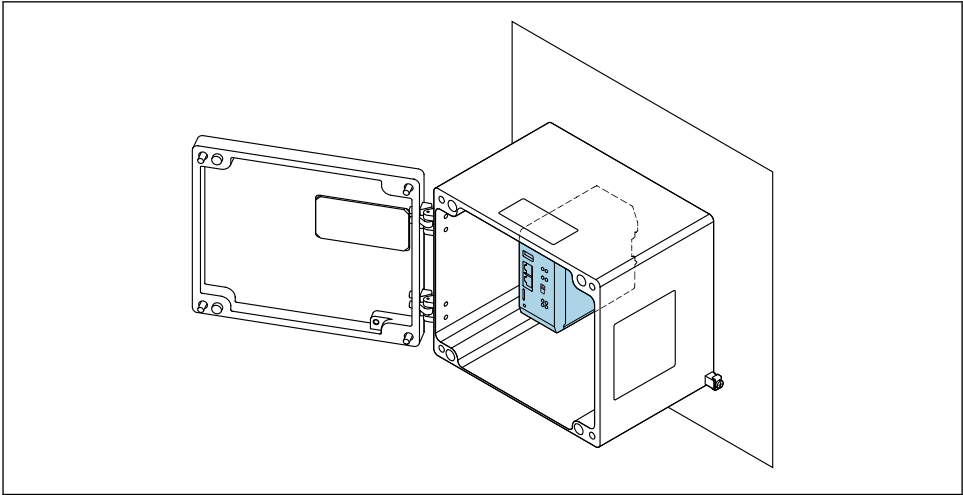
5.1.1 Ambient temperature range

-20 to 60 °C (-4 to 140 °F)

5.1.2 Mounting location

Installation requirements:

- Install the device outside the hazardous area.
- Use a control cabinet. The control cabinet must be securely and firmly mounted.
- For installation in a humid environment or outdoors:
The degree of protection of the control cabinet must be at least IP67 in accordance with IEC 60529



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 2 *Example illustration: installation in a control cabinet*



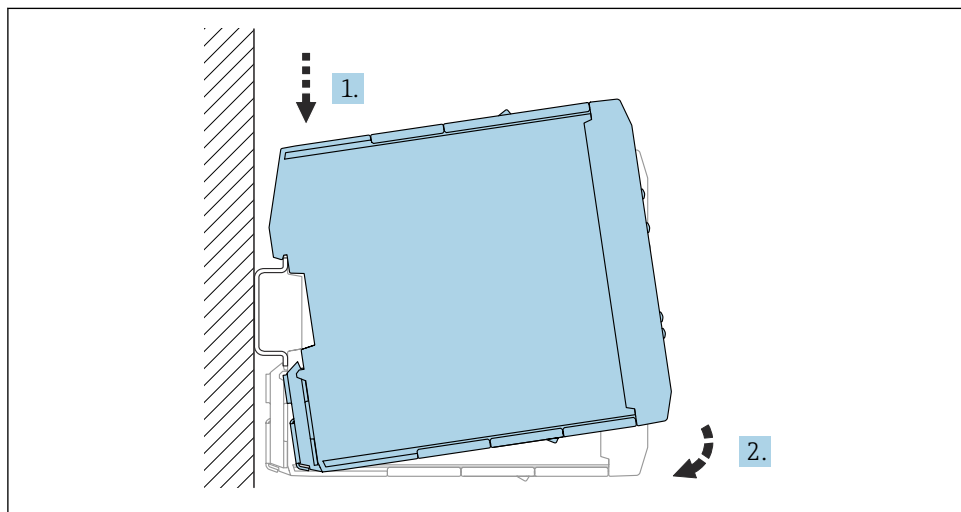
Detailed information on the environmental requirements can be found in the "Technical data" section in the Operating Instructions for the device.

5.1.3 Orientation

Vertical or horizontal installation on DIN rail (TH35 in accordance with EN 60715).

5.2 Installing the device

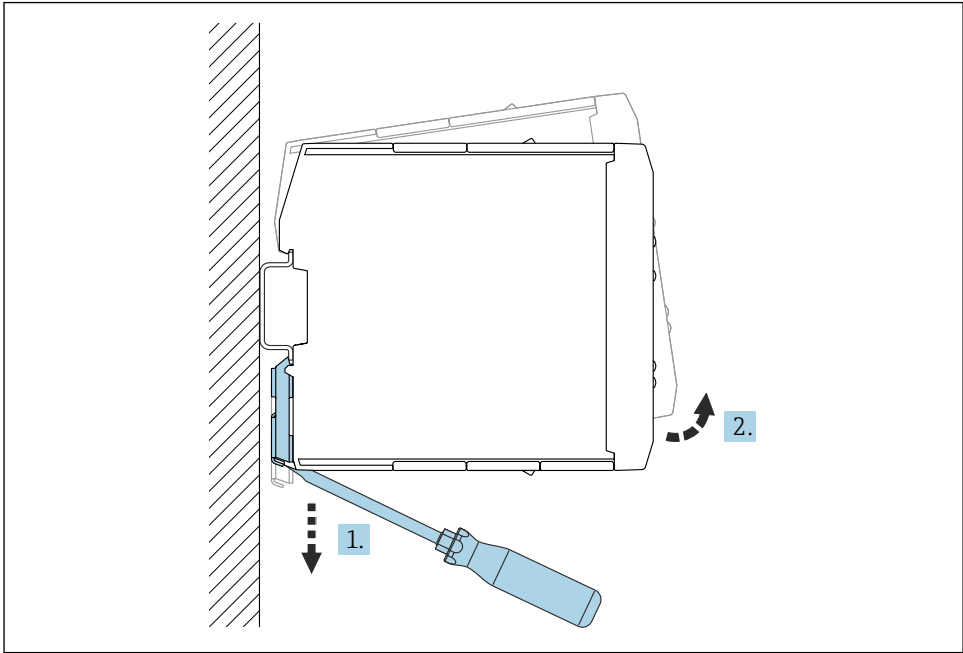
- Install the device on a DIN rail.



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1. Hook the housing onto the DIN rail.
2. Press the housing downward until it snaps into place on the DIN rail.

5.3 Removing device from top-hat rail



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1. Unlock the latch.
2. Pull up the housing.

5.4 Post-installation check

After mounting, make sure that:

- ☐ The device is in the correct position and the orientation is correct
- ☐ The device is protected from precipitation and direct sunlight
- ☐ The device is securely seated on the top-hat rail
- ☐ The top-hat rail clip is engaged
- ☐ The temperature limits are observed at the mounting location
- ☐ The mechanical connections are tightened

6 Electrical connection

WARNING

Risk of electric shock!

Burn injuries, cardiac arrhythmia, and other injuries caused by shock reactions following an electric shock can result.

- ▶ Always switch off the supply voltage first and measure to check that it is de-energized. Only then install or wire the device.
- ▶ Only properly trained specialist staff may perform electrical connection work.
- ▶ Before the supply voltage is applied, connect the protective ground to the device.
- ▶ Take the plant grounding concept into consideration.
- ▶ Comply with local workplace safety regulations.

6.1 Connecting requirements

- Provide a suitable switch or circuit breaker according to IEC EN 61010 in the building installation that can interrupt the supply voltage. This switch must be within easy reach, close to the device and marked as a circuit breaker.
- The supply voltage to which the device is to be connected must match the specifications on the nameplate. Only connect the device if this condition is met.

6.1.1 Cable specification

Power supply line

Conductor cross-section: 0.5 to 2.5 mm² (20 to 13 AWG)

Shielded cable not required.

Fieldbus connection

Conductor cross-section: 0.5 to 2.5 mm² (20 to 13 AWG)



Use shielded cables.

HART communication line

- For applications with HART protocol transmission, use a shielded cable.
- For applications with pure analog signal transmission, an unshielded cable may be used.



Observe the grounding concept of the plant. Connect the shielding according to the application.

6.1.2 Screw terminals

- Plug-in screw terminals
- Coded supply terminal (mechanical coding prevents incorrect insertion of the terminal)
- Clamping range: 0.5 to 2.5 mm² (20 to 13 AWG)

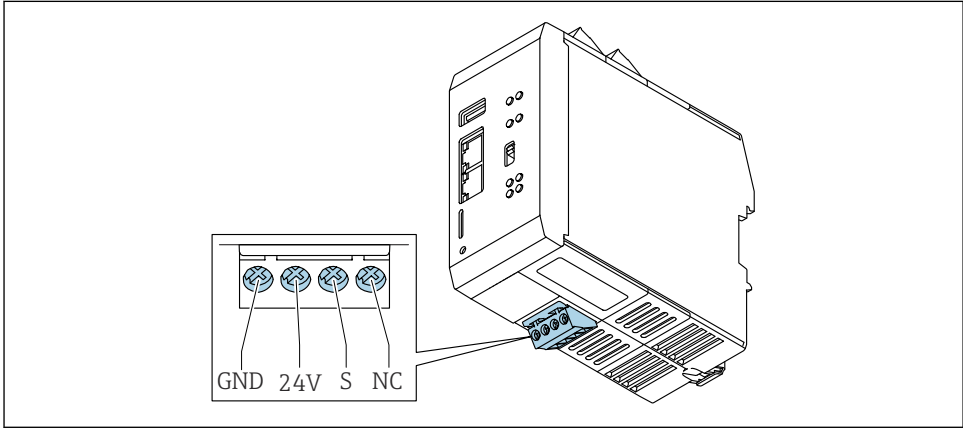


Use flexible stranded conductors only with ferrules.

6.2 Connecting the device

⚠ Warning! Always switch off the supply voltage first and measure to check that it is de-energized. Only then install or wire the device. Observe the safety instructions at the start of this section.

6.2.1 Power supply



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GND The functional grounding and negative potential of the power supply

24V The positive potential 24 V_{DC} of the power supply

S Shielding

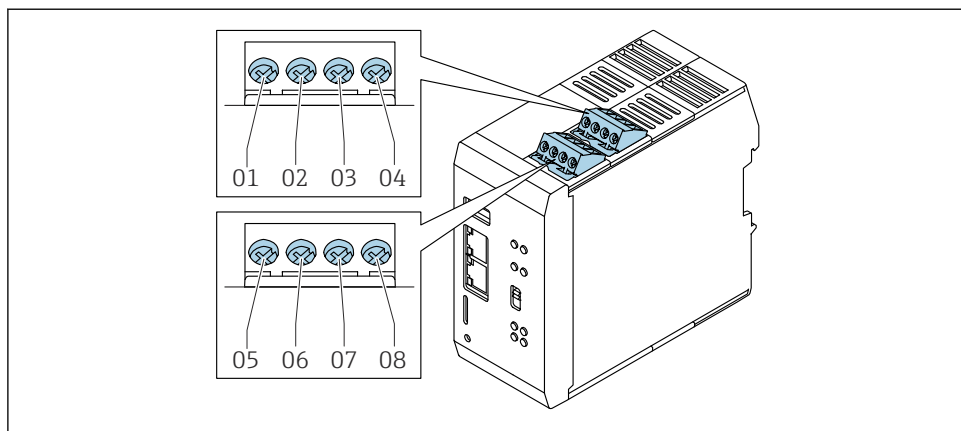
NC Not connected

Supply voltage

The supply voltage is 24 V_{DC} (±20%). Only use power units that ensure safe electrical isolation according to IEC 61558-2-6 and/or IEC EN 61558-2-6 (SELV/PELV or NEC Class 2) and that are designed as limited-energy circuits.

6.3 Pulse and analog input

- The terminals of Density Calculator QML51 serve as an input for sensor signals.
- The terminal blocks are galvanically isolated from each other.
- The terminal blocks are plug-in.



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3 Terminal assignment

- 01 Channel 3 (+), default setting: PFM
- 02 Channel 3 (-), default setting: PFM
- 03 Channel 4 (+), default setting: operating mode 4 to 20 mA
- 04 Channel 4 (-), default setting: operating mode 4 to 20 mA
- 05 Channel 1 (+), default setting: PFM
- 06 Channel 1 (-), default setting: PFM
- 07 Channel 2 (+), default setting: operating mode 4 to 20 mA
- 08 Channel 2 (-), default setting: operating mode 4 to 20 mA

i The channels are preset. The configuration can be changed.

i It is not possible to connect a device with a pulse output (PFM) and a device with a 4 to 20 mA HART or HART-only transmission to the same terminal block if the measured values are to be transmitted via HART communication.

i It is not possible to connect two devices with a pulse output (PFM) to the same terminal block.

The following devices can be connected to one terminal block:

- One device with a pulse output and one additional device with an analog output (4 to 20 mA).
- One device with a pulse output and one additional device with a 4 to 20 mA HART output, provided that HART communication is not used.
- Only one device with a pulse output. An additional device with a pulse output cannot be connected to the same terminal block.
- One or two devices with 4 to 20 mA or 4 to 20 mA HART. In this case, HART communication can be used by both devices.

6.4 Post-connection check

After connection, make sure that:

- ☐ The device is not damaged
- ☐ The cables are not damaged
- ☐ The mounted cables have adequate strain relief
- ☐ The plug-in terminals are securely engaged
- ☐ The supply voltage matches the specifications on the nameplate
- ☐ The terminal assignment is correct

7 Operation options

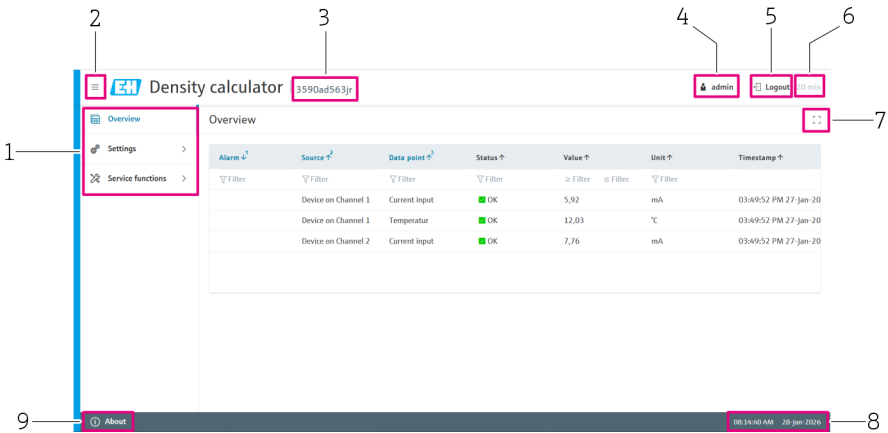
7.1 Access to the operating menu via web browser

The device's web server can be called up at the LAN 2 port via <https://IPDDRESS>. Default IP address: 192.168.3.1. The connection is TLS secure.

All of the main settings required to operate the device are made on the software user interface. The functions and settings can be accessed via the navigation area on the left-hand side of the screen.

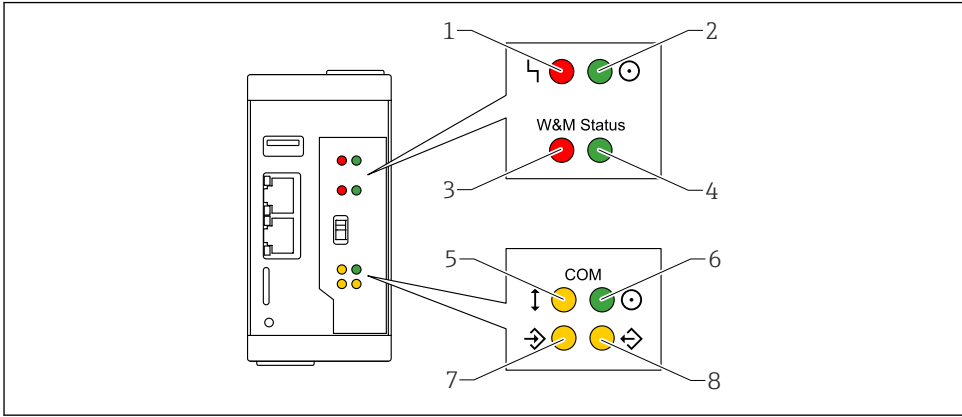


The browser may detect an unsecured connection, e.g. if the browser recognizes that the issued server certificate is not trusted. This risk can be accepted. To have the device certificate recognized as trusted, contact your IT service provider or Endress+Hauser Service team.



- 1 Navigation
- 2 Hide navigation
- 3 Identification of the device (Hostname)
- 4 User logged in
- 5 Logout button
- 6 Remaining time until user is forced out due to inactivity
- 7 Hide header and menus. Only the opened menu item is displayed
- 8 System time and date of the device displayed
- 9 Access to system information such as the serial number, firmware version and device name (Device name)

7.2 Local display



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4 Description of LED statuses

- 1 Red LED: Fault
- 2 Green LED: Power supply status
- 3 Red LED: verification switch in the locked position (no function assigned for Density Calculator QML51)
- 4 Green LED: verification switch in the unlocked position (no function assigned for Density Calculator QML51)
- 5 Yellow LED: Field communication status
- 6 Green LED: Power supply status of the communication interface
- 7 Yellow LED: Incoming data packets
- 8 Yellow LED: Outgoing data packets

8 Commissioning

8.1 Prior to initial commissioning

i After connecting the power supply, the device requires up to 10 min to complete the boot process.

The device's web server can be called up via <https://IPDDRESS>. The connection is TLS secure.

Default IP address on LAN 2: 192.168.3.1

Establishing a connection to the device's web server

1. Connect an Ethernet cable to the **LAN 2** port to establish a connection to the web server.
2. Start the web browser on the connected PC and enter the default IP address in the format <https://IPDDRESS>.

3. Log onto the device as administrator. To do this, log in as the user **admin** with the default password **admin** and then set a new password with at least 12 characters.

NOTICE**The password cannot be reset.**

If the assigned password can no longer be retrieved, the device must be reset to factory settings using the reset button. See the "Device reset" section.

- Keep the password in a safe place!



A message may be displayed the first time the system is started, indicating that the existing connection is not secure. The reason is that the stored certificate is not known to the web browser used. Once the device certificate has been added to the trusted websites list, the connection is recognized as secure. See the "Integrating certificates" section.



If the device has already been configured and the IP address changed, use the configured IP address of LAN 1 or LAN 2.



The connection is TLS secure.

8.2 Initial commissioning via the Basic settings



Parameters marked with * are mandatory fields.

Path: Settings → System → Basic settings

During initial commissioning, the user is guided through the most important settings and given explanations of the parameters available. The basic settings configured can be called up and edited again later.

8.2.1 Regional settings

Path: Settings → System → Basic settings

Basic settings

Regional settings

Network settings

Date and time

System default language *

English

Number format *

XX,XXX.XX

1. Open the **System default language** drop-down list and select the language for the graphical user interface.

- 2. Open the **Number format** drop-down list and select a number format.

8.2.2 Network settings

Path: Settings → System → Basic settings

On the **Network settings** tab, various settings must be entered to connect the device to the network correctly.

 LAN 1 and LAN 2 should be in different networks.

 It is not recommended to change the factory preset service IP address 192.168.3.1 on LAN 2.

Basic settings ↺

Regional settings

Network settings

Date and time

Device name

Device name*

3590ad58989 i

DNS server

1. DNS server address

2. DNS server address

Preferred DNS servers

1. 172.16.52.30

LAN 1

☐ No DHCP

☒ DHCP client

☐ DHCP server

IPv4*

10.56.53.155

Subnet mask*

255.255.255.0

Gateway

10.56.53.1

LAN 2

☐ No DHCP

☐ DHCP client

☒ DHCP server

IPv4*

192.168.3.1

Subnet mask*

255.255.255.0

Gateway

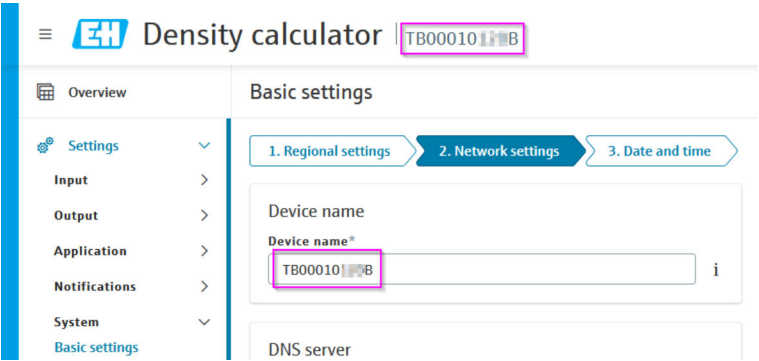
Save

- 1. Connect an Ethernet cable to LAN 1.
- 2. Start up LAN 1.
- 3. Enter a host name for the device in the **Device name** field. If multiple devices of the same type are used in a network, it is recommended to assign individual names to help identification.
- 4. In the **LAN** section, select one of the check boxes to determine the role the device is to assume in the network.
- 5. Enter an IP address in the **IPv4** field in the **LAN** section if **No DHCP** or **DHCP server** is selected. If **DHCP client** is selected, the IP address is taken from the network where the device is located.
- 6. Enter the subnet mask in the **Subnet mask** field in the **LAN** section.

7. Click the **Save** button to save the settings.

 If there are any changes to the IP addresses, the device must be called up via the new IP address.

A restart is not necessary if the connection has been established.



- **Device name** - Host name of device. The host name of the device is shown in the header of the user interface. Default setting: Serial number of the device
- **LAN 1** - Ethernet interface on the housing front provided for connection to the network
 - **No DHCP** - Parameters for network configuration are not assigned automatically. Static IP address, subnet mask and gateway must therefore be entered
 - **DHCP server** - The device acts as a DHCP server and can distribute IP addresses. The IP address and subnet mask must be entered
 - **DHCP client** - The device is given a free IP address from a DHCP server in the network. The IP address is displayed when a connection is established
 - **Gateway** - Gateway that connects the device to another network. It ensures that data is forwarded to other networks
- **DNS server** - Up to 2 DNS servers can be configured on the device. Format of IP addresses: IPv4
 - **1.DNS server address** - IP address of the first DNS server
 - **2.DNS server address** - IP address of the second DNS server
 - **Preferred DNS servers** - If the device receives an IP address from a DHCP server, the server may also provide a DNS server. The specified DNS server is identified as the preferred DNS server and displayed
- **LAN 2** - This interface is provided as a service LAN port. It is accessed via IP address 192.168.3.1 by default and acts as a DHCP server. This configuration should be retained to ensure easy service access. If necessary, LAN 2 can then be reconfigured like LAN 1
 - **No DHCP** - Parameters for network configuration are not assigned automatically. Static IP address, subnet mask and gateway must therefore be entered
 - **DHCP server**- The device acts as a DHCP server and can distribute IP addresses. The IP address and subnet mask must be entered
 - **DHCP client** - The device is given a free IP address from a DHCP server in the network. The IP address is displayed when a connection is established
 - **Gateway**- Gateway that connects the device to another network. It ensures that data is forwarded to other networks

8.2.3 Date and time

Path: Settings → System → Basic settings

- Click the **Date and time** tab.

The date and time can either be entered manually or sourced using the NTP (Network Time Protocol) via the browser.

Click the **Source** toggle switch to switch between the two options:

Basic settings

Regional settings

Network settings

Date and time

Source

Manual

5 Toggle switch set to manual entry (default setting)

Basic settings

Regional settings

Network settings

Date and time

Source

Network time protocol (NTP)

6 Toggle switch set to obtain date and time via NTP

Configure Date and time manually

Regional settings

Network settings

Date and time

Source

Manual

System date*

14-01-2026

System time*

02:56:41 PM

Set to actual date and time

Format

Time*

hh:mm:ss am

Date*

dd-MMM-yyyy

Time zone*

Europe/Berlin

Output

Serve as NTP server

Inactive

7 Operating panel to set date and time

- **Source** - Clicking the toggle switch allows you to change between the options **Manual** and **Network time protocol (NTP)**.
- **System date** - Input box with date selector for the system date
- **System time** - Input box with time selector for the system time

- **Set to actual date and time** - Date and time are updated automatically. The date and time are taken from the browser of the operating system of the device used by the user to access the device.
- **Format**
 - **Time** - Drop-down list for time formats
 - **Date** - Drop-down list for date formats
 - **Time zone** - Drop-down list for time zones
- **Output**

Serve as NTP server - Clicking the toggle switch allows you to change between the options **Inactive** and **Active**. **Inactive**: The device does not operate as an NTP server. **Active**: The device operates as an NTP server.

Configuring the date and time manually

1. Use the **Source** toggle switch to select **Manual** if this option is not already selected (default).
2. Click **Set to actual date and time** to set the current date and time.
 - ↳ The date and time are updated automatically.
3. If the device's internal time recording is to start on another specific date, proceed as follows: Enter the data directly in the **System date** field or open the date picker and select the date.
4. If the device's internal time recording is to start at another specific time, proceed as follows: Enter the data directly in the **System time** field or open the time picker and select the time.
5. Click the **Save** button to save the settings.

Obtaining Date and time via NTP

Regional settings

Network settings

Date and time

Source

Network time protocol (NTP)

Synchronizes with

Receive date and time

Automatic

According to preference

Preference

1. NTP address

de.pool.ntp.org

2. NTP address

3. NTP address

4. NTP address

Format

Time*

hh:mm:ss am

Date*

dd-MMM-yyyy

Time zone*

Europe/Berlin

Output

Serve as NTP server

Inactive

- **Source** - Clicking the toggle switch allows you to change between the options **Manual** and **Network time protocol (NTP)**.
- **Synchronizes with** - IP address of the NTP server
- **Receive date and time** - Option box with 2 radio buttons. NTP servers are either detected automatically or selected by the user.
 - **Automatic** - Default setting. Automatic search carried out in the network for an NTP server. If an NTP server is found, it is used as the source and displayed in the **1.NTP address** field.
 - **According to preference** - Connect manually entered NTP servers as sources.
- **Preference** - List of NTP servers that can be specified in order of preference. Users can specify up to 3 additional NTP servers. The UDP port 123 is used as a default connection to NTP.
- **Save** - Saves the settings.

Using the NTP server as source for Date and time

1. Use the **Source** toggle switch to select **Network time protocol (NTP)** in order to obtain the date and time via NTP.
 - ↳ A window opens with a warning message.
2. Click the **Close** button.
 - ↳ The new window content displays the two radio buttons **Automatic** and **According to preference**. The **Automatic** radio button is selected by default.
3. If the system time is to be obtained from a detected NTP server, click **Save** to apply the new source for the system time.
4. If the system time is to be obtained from a different NTP server, select the **According to preference** radio button and enter the IP addresses of the NTP servers in the desired order.
5. Click **Save** to adopt the new source for the system time.



Changing the time settings may require users to log out and log in again.

Configuring the format

The drop-down lists can be used to select different formats for time, date and different time zones.

Format

Time*

hh:mm:ss am

Date*

dd-MMM-yyyy

Time zone*

Europe/Berlin

Output

Serve as NTP server

☐ Inactive

- **Format** - 3 drop-down lists for time, date and time zone
 - **Time** - Drop-down list for time formats
 - **Date** - Drop-down list for date formats
 - **Time zone** - Drop-down list for time zones
- **Output**

Serve as NTP server - Clicking the toggle switch allows you to change between the options **Inactive** and **Active**. **Inactive**: The device does not operate as an NTP server. **Active**: The device itself is available as an NTP server for network devices within the same network.



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