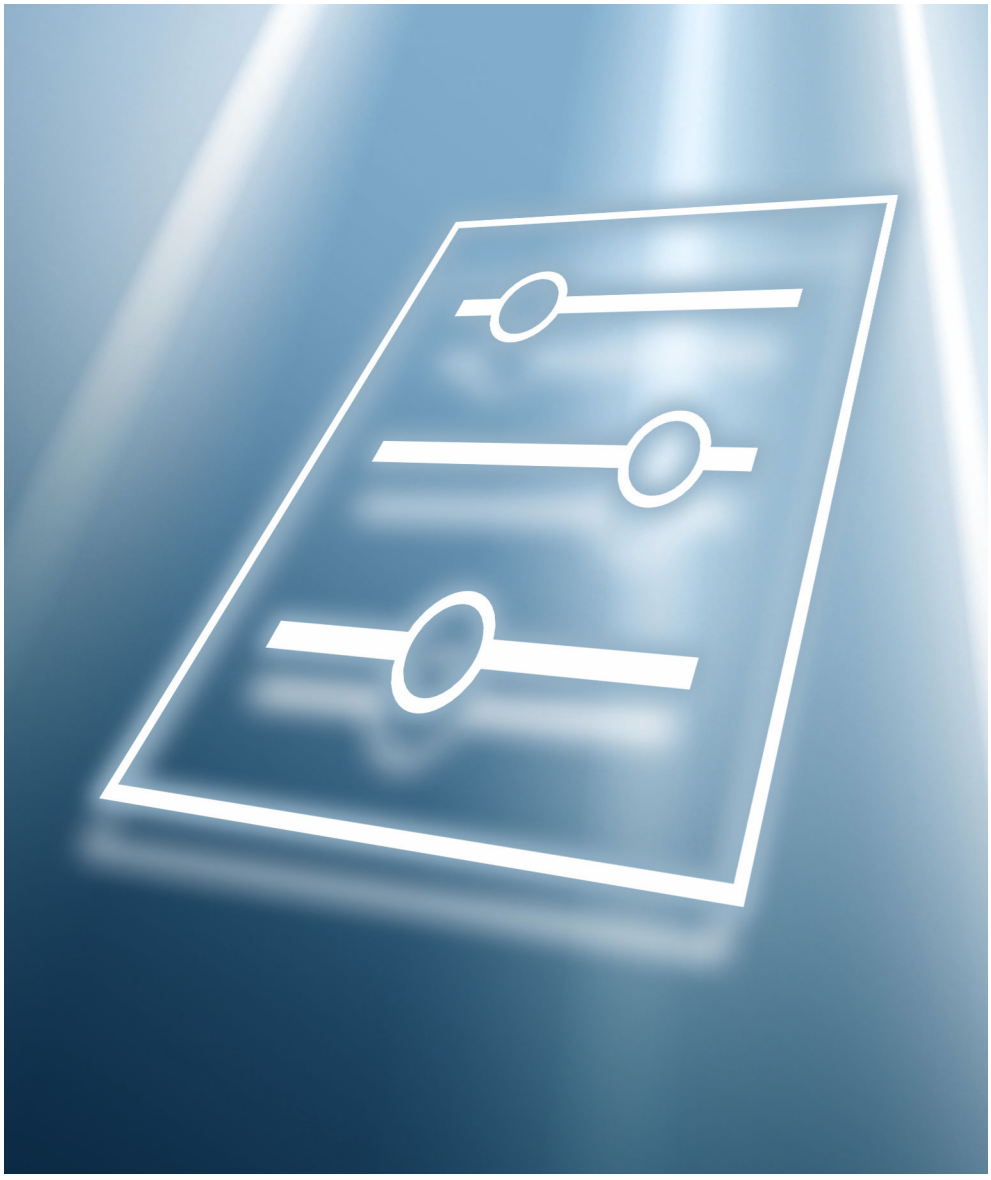
GP01244P/00/EN/01.25-00
71719169
2025-08-01

Description of Device Parameters
Cerabar PMC71B

Process pressure measurement
PROFIBUS PA



Endress+Hauser
People for Process Automation

1 About this document

1.1 Document function

The document is part of the Operating Instructions and serves as a reference for parameters.

Tasks that require detailed knowledge of the function of the device:
- Starting up measurements under difficult conditions
- Optimal adjustment of measurements to difficult conditions
- Detailed configuration of communication interface
- Fault diagnosis in difficult cases

1.2 Target group

This document is aimed at specialists who work with the device over the entire life cycle and perform specific configurations.

1.3 Document structure

The document consists of a general part and a specific part.

The structure of the document and its components are explained in the general part (section 1).

The specific part starts with an overview of the device operating menu, which is the focus of this manual.

The description of the device parameters follows the overview of the operating menu. The description is divided into 4 main menus and their submenus.

The 4 main menus:
- Guidance
- Diagnostics
- Application
- System

In the "Description of device parameters" section, the menus, submenus and parameters are displayed in the same way as they are laid out in the menu structure for the **operating tool**.

An operating tool is software, such as FieldCare, which can be used to display and edit the data and parameters stored in the device on a PC or laptop. Compared to operation via the local display, an operating tool offers more options. It provides additional information, such as graphics and help texts, which explain the properties of the parameters.

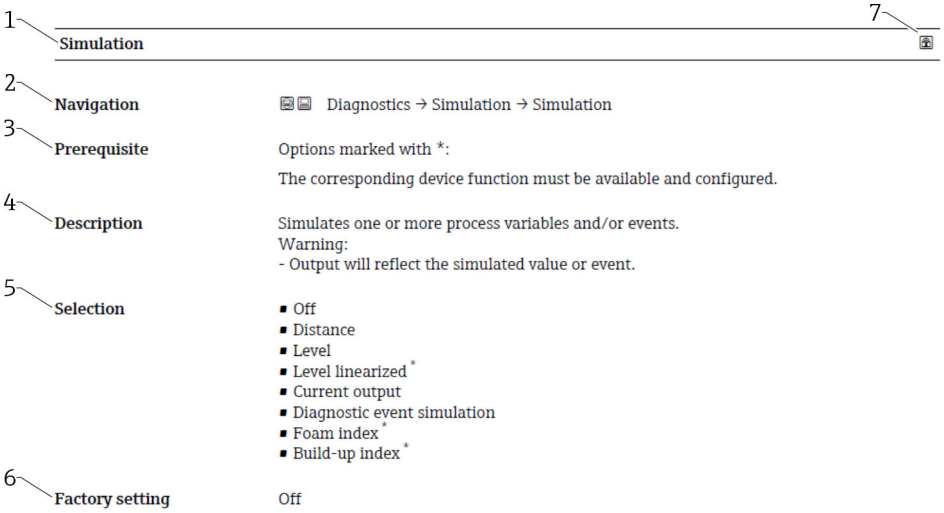
The submenus visible to a user depend on the **User role (→ 58)** they are logged in with. This document lists the submenus and their parameters that are available to the User role **Maintenance**.

The operating menu is dynamic and adapts the choice of parameters to the selected options.

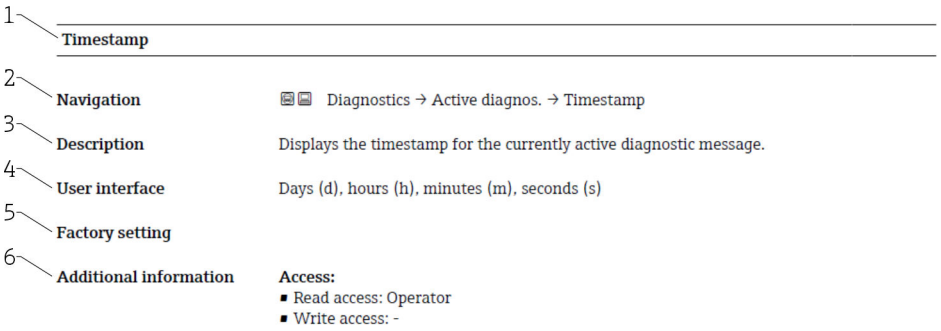
For information on operating options, see the Operating Instructions.

1.4 Elements of parameter descriptions

Parameter descriptions are structured and made up of a number of elements. Depending on the parameter, more or fewer elements may be available. Below are 2 examples of different parameters:



1 *Name: Parameter designation (Label)*
2 *Navigation: Navigation path to the parameter. The graphics indicate whether the path applies to the onsite display, the operating tool or both.*
3 *Prerequisite: The marked options can only be selected under the condition specified in each case*
4 *Description: Description of the parameter function*
5 *Selection: List of the individual options for the parameter*
6 *Factory setting: Default setting on leaving the factory*
7 *The lock symbol indicates that the parameter is write-protected*



1 *Name: Parameter designation (Label)*
2 *Navigation: Navigation path to the parameter. The graphics indicate whether the path applies to the onsite display, the operating tool or both.*
3 *Description: Description of the parameter function*
4 *User interface: Display value/data of the parameter*
5 *Factory setting: Default setting on leaving the factory*
6 *Additional information:*
Read and write access: Information on access rights that users with certain roles have to the parameter

Additional information at the end of the parameter description can refer to all elements of the parameter description and expand them.

1.5 Symbols

1.5.1 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.

1.5.2 Symbols for certain types of information

- Indicates additional information
- Reference to documentation
- Operation via local display
- Operation via operating tool
- Write-protected parameter

1.6 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.

The documentation is available via the Internet: → www.endress.com Download

2 Overview of the operating menu

Navigation Operating tool

- Counter underruns of user limit Tmin → 21
- Minimum terminal voltage → 21
- Minimum electronics temperature → 22
- Reset user defined counters P and T → 22
- Pressure max → 19
- Counter limit overruns sensor Pmax → 19
- Counter overruns of user limit Pmax → 20
- Maximum sensor temperature → 20
- Counter limit overruns sensor Tmax → 21
- Counter overruns of user limit Tmax → 21
- Maximum terminal voltage → 22
- Maximum electronics temperature → 22

▶ Simulation → 23

- Simulation → 23
- Diagnostic event simulation → 23
- Value pressure simulation → 23

▶ Heartbeat Technology → 24

▶ Heartbeat Verification → 24

- Date/time Heartbeat Verification → 24
- Operating time (Verification) → 24
- Verification result → 24
- Status → 25

▶ Statistical Sensor Diagnostics → 25

- SSD: Statistical Sensor Diagnostics → 25
- System status → 25

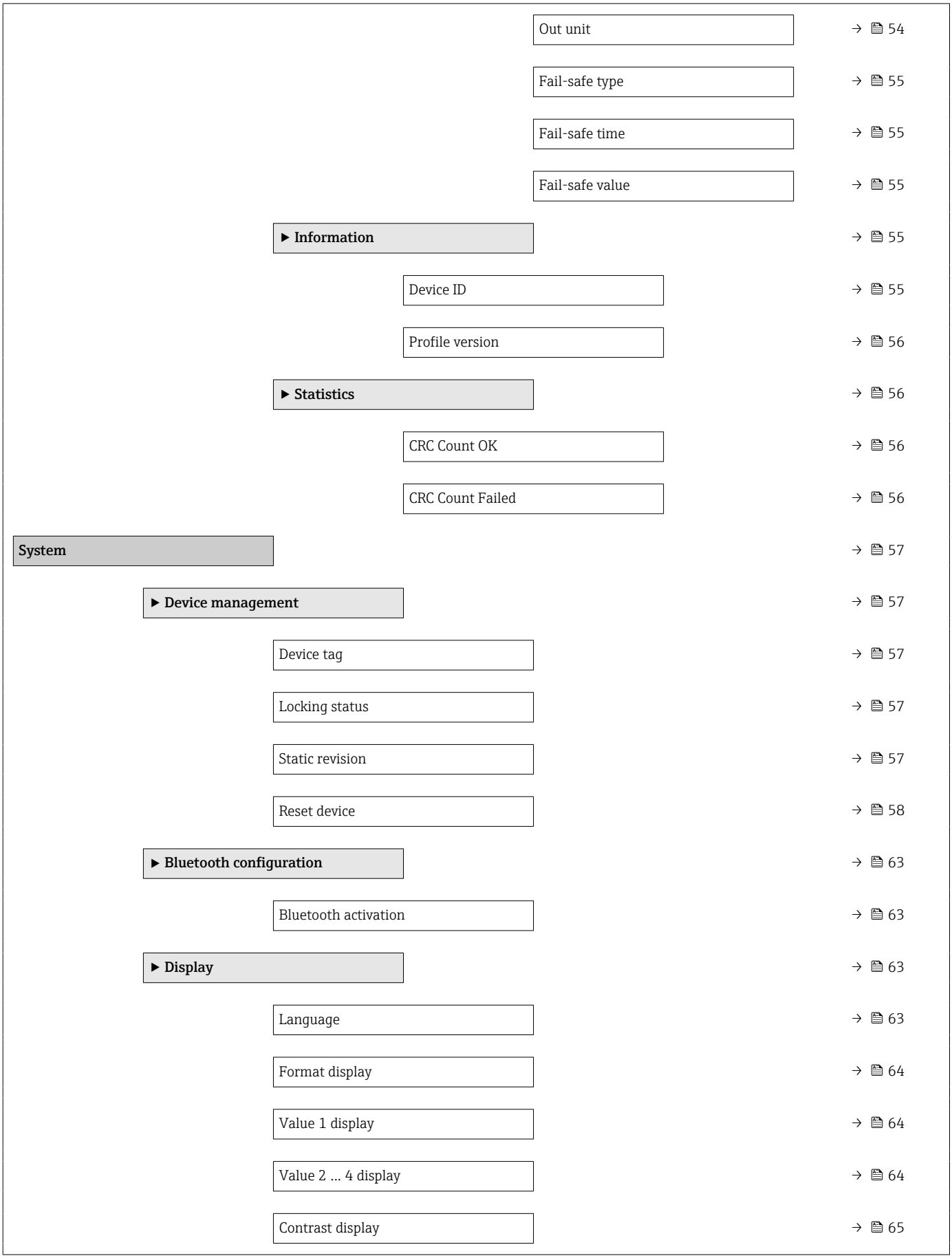
- Signal status → 26
- Signal noise status → 26
- ▶ **Diagnostic settings** → 27
  - ▶ **Properties** → 27
    - SSD Out of range delay time → 27
    - SSD Monitoring delay time → 27
    - 500 Process alert pressure → 27
    - Low alert value → 28
    - High alert value → 28
    - 501 Process alert scaled variable → 28
    - Low alert value → 28
    - High alert value → 29
    - User temperature process alert → 29
    - Low alert value → 29
    - High alert value → 30
  - ▶ **Configuration** → 30
    - ▶ **Configuration** → 30
      - 500 Diagnostic behavior → 30
      - 500 Event category → 31
      - 501 Diagnostic behavior → 31
      - 501 Event category → 31
      - 502 Diagnostic behavior → 32
      - 502 Event category → 32
    - ▶ **Process** → 32
      - 822 Diagnostic behavior → 32

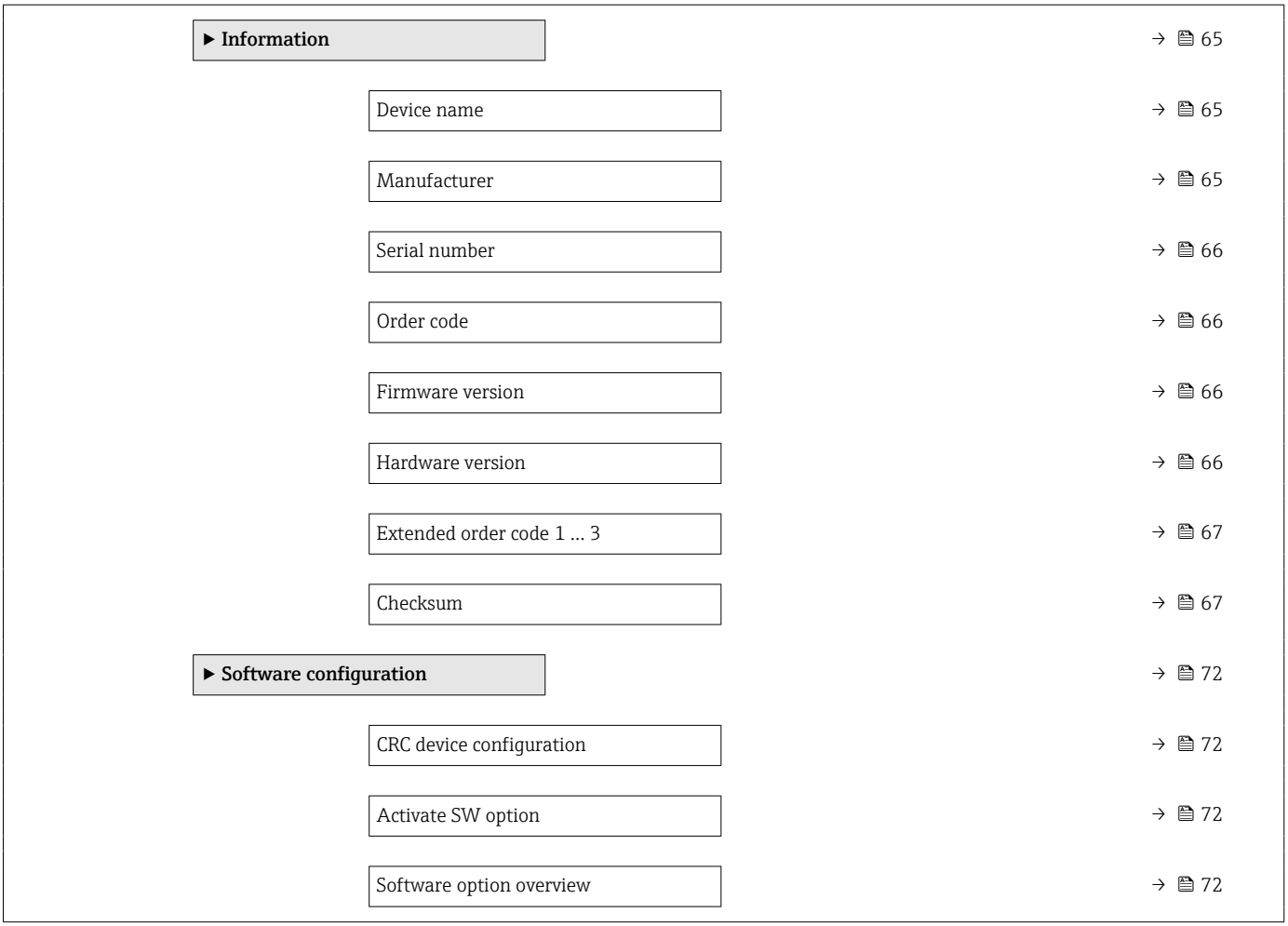
- 822 Event category → 33
- 900 Diagnostic behavior → 33
- 900 Event category → 33
- 906 Diagnostic behavior → 34
- 906 Event category → 34

Application → 35

- ▶ **Measuring units** → 35
  - Pressure unit → 35
  - Decimal places pressure → 35
  - Temperature unit → 36
  - Scaled variable unit → 36
  - Free text → 37
  - Decimal places scaled variable → 38
- ▶ **Measured values** → 38
  - Pressure → 38
  - Scaled variable → 38
  - Sensor temperature → 39
  - Terminal voltage 1 → 39
  - Electronics temperature → 39
- ▶ **Sensor** → 40
  - ▶ **Basic settings** → 40
    - Damping → 40
  - ▶ **Sensor calibration** → 40
    - Zero adjustment → 40
    - Calibration offset → 41

- PROFIBUS ident number → 48
- Address mode → 48
- Device address → 49
- **▶ Analog input** → 49
  - **▶ Analog input 1 to 6** → 49
    - Out value → 49
    - Out status → 49
    - Out unit text → 50
    - Channel → 50
    - PV filter time → 50
    - Simulate enabled → 51
    - Simulate value → 51
    - Simulate status → 51
- **▶ Digital input** → 52
  - **▶ Digital input 1 to 2** → 52
    - Out value → 52
    - Out status → 52
    - Channel → 52
    - Simulate enabled → 53
    - Simulate value → 53
    - Simulate status → 53
- **▶ Analog output** → 54
  - **▶ Analog output** → 54
    - Out value → 54
    - Out status → 54


Out unit → 54
Fail-safe type → 55
Fail-safe time → 55
Fail-safe value → 55
▶ Information → 55
Device ID → 55
Profile version → 56
▶ Statistics → 56
CRC Count OK → 56
CRC Count Failed → 56
System → 57
▶ Device management → 57
Device tag → 57
Locking status → 57
Static revision → 57
Reset device → 58
▶ Bluetooth configuration → 63
Bluetooth activation → 63
▶ Display → 63
Language → 63
Format display → 64
Value 1 display → 64
Value 2 ... 4 display → 64
Contrast display → 65


▶ Information
→ 65
Device name
→ 65
Manufacturer
→ 65
Serial number
→ 66
Order code
→ 66
Firmware version
→ 66
Hardware version
→ 66
Extended order code 1 ... 3
→ 67
Checksum
→ 67
▶ Software configuration
→ 72
CRC device configuration
→ 72
Activate SW option
→ 72
Software option overview
→ 72

3 Description of device parameters

3.1 Guidance

In the **Guidance** menu, the user can quickly perform basic tasks, such as commissioning. These primarily consist of guided wizards and cross-thematic special functions.

Navigation Guidance

3.1.1 Overview

The **Guidance** menu contains the following submenus and wizards:
- Commissioning
- Heartbeat Technology
  - Heartbeat Verification
  - SSD: Statistical Sensor Diagnostics
  - Process window
- Import/Export
- Compare

Commissioning

Run the **Commissioning** wizard to commission the device. Enter the appropriate value in each parameter or select the appropriate option.

⚠ WARNING

If the wizard is aborted before all the necessary parameters have been configured, any settings already set are saved.
The device may be in an undefined state!
▶ Reset the device to factory settings.

Navigation Guidance → Commissioning

Parameters for the "Commissioning" wizard

The following parameters are configured or displayed in this wizard:
- **Device identification**
  - Device tag
  - Device name
  - Serial number
  - Extended order code 1 … 3
  - Locking status
  - Device ID
  - Device address
- **Measurement adjustments**
  - Damping
  - Assign scaled variable?
  - Pressure unit
  - Temperature unit
  - Scaled variable unit
  - Zero adjustment
  - Pressure
- **Output settings**
  - Scaled variable transfer function
  - Lower Range Limit
  - Upper Range Limit
  - Minimum span
  - Linearization
  - Pressure value 1/2
  - Scaled variable value 1/2
  - Channel

Heartbeat Technology

Heartbeat Technology offers the following functions:
- Diagnostics through continuous self-monitoring
- Additional measured variables output to an external condition monitoring system
- In situ verification of measuring instruments in the application

Special Documentation on Heartbeat Technology is available via the Internet: www.endress.com → Download

Navigation Guidance → Heartbeat Techn.

Heartbeat Verification

This wizard is used to start an automatic verification of the device functionality. The results can be documented as a verification report.

Navigation Guidance → Heartbeat Techn. → Heartbeat Verif.

SSD: Statistical Sensor Diagnostics

Using statistical analysis of the pressure signal, process anomalies such as plugged impulse lines can be detected. This wizard supports the settings and thresholds that should lead to a diagnostic message.

Navigation Guidance → Heartbeat Techn. → Stat. Sens. Diag

Process window

This wizard uses user-defined limits for pressure and temperature to detect unwanted installation or application anomalies.

Applications:
- Defective heat tracer or insulation
- Frozen process connections
- Dynamic pressure peaks etc.

Navigation Guidance → Heartbeat Techn. → Process window

Import/Export

Save / Restore
- The device settings can be saved in a .deh file.
- The device settings saved in a .deh file can be written to the device.

Create configuration report
Under Create configuration report, device documentation can be saved in PDF format. This device documentation contains the following general device information:
- Information on device parameters
- Event list
- Diagnostic list

Navigation Guidance → Import/Export

Compare

Compare datasets
This function can be used to compare the following datasets:
- Data records in the .deh file format from the function Import/Export
- Datasets with the configuration currently in the device

Navigation Guidance → Compare

3.2 Diagnostics

Navigation Diagnostics

3.2.1 Active diagnostics

Navigation Diagnostics → Active diagnos.

Active diagnostics

Navigation Diagnostics → Active diagnos. → Active diagnos.

Description Displays the currently active diagnostic message.

If there is more than one pending diagnostic event, the message for the diagnostic event with the highest priority is displayed.

User interface
- Operating time of the device until the event occurs
- Symbol for diagnostic behavior
- Code for diagnostic behavior
- Event text
- Corrective measure

Timestamp

Navigation Diagnostics → Active diagnos. → Timestamp

Description Displays the timestamp for the currently active diagnostic message.

User interface Days (d), hours (h), minutes (m), seconds (s)

Previous diagnostics

Navigation Diagnostics → Active diagnos. → Prev.diagnostics

Description Displays the diagnostic message for the last diagnostic event that has ended.

User interface
- Operating time of the device until the event occurs
- Symbol for diagnostic behavior
- Code for diagnostic behavior
- Event text
- Corrective measure

Timestamp

Navigation Diagnostics → Active diagnos. → Timestamp

Description Displays the timestamp of the diagnostic message generated for the last diagnostic event that has ended.

User interface Days (d), hours (h), minutes (m), seconds (s)

Operating time from restart

Navigation Diagnostics → Active diagnos. → Time fr. restart

Description Indicates how long the device has been in operation since the last time the device was restarted.

User interface Days (d), hours (h), minutes (m), seconds (s)

Operating time

Navigation Diagnostics → Active diagnos. → Operating time

Description Indicates how long the device has been in operation.

User interface Days (d), hours (h), minutes (m), seconds (s)

3.2.2 Diagnostic list

Navigation Diagnostics → Diagnostic list

3.2.3 Event logbook

Navigation Diagnostics → Event logbook

Clear event list

Navigation Diagnostics → Event logbook → Clear event list

Description Delete all entries of the event list.

Selection
- Cancel
- Clear data

Factory setting Cancel

Additional information
Access:
- Read access: Expert
- Write access: Expert

3.2.4 Minimum/maximum values

Navigation Diagnostics → Min/max val.

Pressure min

Navigation Diagnostics → Min/max val. → Pressure min

Description Minimum value measured by the device

User interface Signed floating-point number

Factory setting Positive floating-point number

Pressure max

Navigation Diagnostics → Min/max val. → Pressure max

Description Maximum value measured by the device

User interface Signed floating-point number

Factory setting Negative floating-point number

Counter limit underruns sensor Pmin

Navigation Diagnostics → Min/max val. → Counter P < Pmin

Description Counts how many times the value underruns the sensor specific minimum values. Sensor specific minimum values are shown in Application/Sensor menu.

User interface 0 to 65 535

Factory setting 0

Counter limit overruns sensor Pmax

Navigation Diagnostics → Min/max val. → Counter P > Pmax

Description Counts how many times the value overruns the sensor specific maximum values. Sensor specific maximum values are shown in Application/Sensor menu.

User interface 0 to 65 535

Factory setting 0

Counter underruns of user limit Pmin

Navigation Diagnostics → Min/max val. → Counter < P user

Description Counts how many times the value underruns the minimum values defined by the user. User defined minimum values are shown in Diagnostic/Diagnostic settings/Properties menu.

User interface 0 to 65 535

Factory setting 0

Additional information Only visible if Process window in Heartbeat Monitoring is activated.

Counter overruns of user limit Pmax

Navigation Diagnostics → Min/max val. → Counter > P user

Description Counts how many times the value overruns the maximum values defined by the user. User defined maximum values are shown in Diagnostic/Diagnostic settings/Properties menu.

User interface 0 to 65 535

Factory setting 0

Additional information Only visible if Process window in Heartbeat Monitoring is activated.

Minimum sensor temperature

Navigation Diagnostics → Min/max val. → Min. sensor temp

Description Minimum value measured by the device

Users cannot reset this value.

Maximum sensor temperature

Navigation Diagnostics → Min/max val. → Max. sensor temp

Description Maximum value measured by the device

Users cannot reset this value.

Counter limit underruns sensor Tmin

Navigation Diagnostics → Min/max val. → Counter T < Tmin

Description Counts how often the value falls below the sensor-specific minimum values.The sensor-specific minimum values are displayed in the Application (→ 35)/Sensor (→ 40) menu.

User interface 0 to 65 535

Factory setting 0

Counter limit overruns sensor Tmax

Navigation Diagnostics → Min/max val. → Counter T > Tmax

Description Counts how often the value exceeds the sensor-specific maximum values. The sensor-specific maximum values are displayed in the Application (→ 35)/Sensor (→ 40) menu.

User interface 0 to 65 535

Factory setting 0

Counter underruns of user limit Tmin

Navigation Diagnostics → Min/max val. → Counter < T user

User interface 0 to 65 535

Factory setting 0

Additional information Only visible if Process window in Heartbeat Monitoring is activated.

Counter overruns of user limit Tmax

Navigation Diagnostics → Min/max val. → Counter > T user

User interface 0 to 65 535

Factory setting 0

Additional information Only visible if Process window in Heartbeat Monitoring is activated.

Minimum terminal voltage

Navigation Diagnostics → Min/max val. → Min.term.volt.

Description Minimum terminal voltage measured (supply).

User interface 0.0 to 50.0 V

Maximum terminal voltage

Navigation Diagnostics → Min/max val. → Max.term.voltage

Description Maximum terminal voltage measured (supply).

User interface 0.0 to 50.0 V

Minimum electronics temperature

Navigation Diagnostics → Min/max val. → Min.electr.temp.

Description Minimum measured temperature of the main electronics.

User interface Signed floating-point number

Maximum electronics temperature

Navigation Diagnostics → Min/max val. → Max.electr.temp.

Description Maximum measured temperature of the main electronics.

User interface Signed floating-point number

Reset user defined counters P and T

Navigation Diagnostics → Min/max val. → Reset count. P T

Selection
- Cancel
- Confirm

Factory setting Cancel

Additional information Only visible if Process window in Heartbeat Monitoring is activated.

3.2.5 Simulation

Navigation Diagnostics → Simulation

Simulation

Navigation Diagnostics → Simulation → Simulation

Description Simulates one or more process variables and/or events.

Warning:
Output will reflect the simulated value or event.

Selection
- Off
- Diagnostic event simulation
- Pressure

Factory setting Off

Diagnostic event simulation

Navigation Diagnostics → Simulation → Diagnostic event

Description Select the diagnostic event to be simulated.

Note:
To terminate the simulation, select "Off".

Selection
- Off
- Drop-down list of diagnostic events

Factory setting Off

Value pressure simulation

Navigation Diagnostics → Simulation → Pressure

User entry Signed floating-point number

Factory setting 0 mbar

3.2.6 Heartbeat Technology

Navigation Diagnostics → Heartbeat Techn.

Heartbeat Verification

Navigation Diagnostics → Heartbeat Techn. → Heartbeat Verif.

Date/time Heartbeat Verification

Navigation Diagnostics → Heartbeat Techn. → Heartbeat Verif. → Date/time Heartbeat Verification

Description Date and time of last Heartbeat Verification.

This value is updated with every Heartbeat verification.

Note:
If time information is not available, e.g. Heartbeat verification is started from display, "--------" is shown.

User interface Character string comprising numbers, letters and special characters

Factory setting 01.01.1970 00:00:00

Operating time (Verification)

Navigation Diagnostics → Heartbeat Techn. → Heartbeat Verif. → Operating time

Description Value of the operating hours counter at the time of verification.

User interface Days (d), hours (h), minutes (m), seconds (s)

Verification result

Navigation Diagnostics → Heartbeat Techn. → Heartbeat Verif. → Verific. result

Description Result of Heartbeat Verification.

User interface
- Not done
- Passed
- Not done
- Failed

Factory setting Not done

Status

Navigation Diagnostics → Heartbeat Techn. → Heartbeat Verif. → Status

Description Shows the actual status.

User interface
- Done
- Busy
- Failed
- Not done

Factory setting Not done

Statistical Sensor Diagnostics

Navigation Diagnostics → Heartbeat Techn. → SSD

SSD: Statistical Sensor Diagnostics

Navigation Diagnostics → Heartbeat Techn. → SSD → Stat. Sens. Diag

Description Enable or disable SSD.

After selecting "Disable", no statistical sensor diagnosis takes place. No diagnostic messages are output.

Selection
- Disable
- Enable

Factory setting Disable

System status

Navigation Diagnostics → Heartbeat Techn. → SSD → System status

User interface
- Idle
- No sufficient signal noise
- Stable
- Not stable
- Verify System Dynamics
- Process dynamic too high

Factory setting Idle

Signal status

Navigation Diagnostics → Heartbeat Techn. → SSD → Signal status

User interface
- Idle
- Building Baseline
- Verifying Baseline
- Verifying baseline failed
- Monitoring
- Out of range
- Monitoring inactive

Factory setting Idle

Signal noise status

Navigation Diagnostics → Heartbeat Techn. → SSD → Noise status

User interface
- Idle
- Building Baseline
- Verifying Baseline
- Verifying baseline failed
- Monitoring
- Out of range
- Monitoring inactive

Factory setting Idle

Counter Baseline creation SSD

Navigation Diagnostics → Heartbeat Techn. → SSD → Counter Baseline

Description Specifies how often the baseline has been rebuilt.

User interface Positive integer

Factory setting 0

Additional information **Access:**
- Read access: Expert
- Write access: -

3.2.7 Diagnostic settings

Navigation Diagnostics → Diag. settings

Properties

Navigation Diagnostics → Diag. settings → Properties

SSD Out of range delay time

Navigation Diagnostics → Diag. settings → Properties → SSD Delay time

User entry 0 to 604 800 s

Factory setting 600 s

SSD Monitoring delay time

Navigation Diagnostics → Diag. settings → Properties → SSD Verz. Zeit

User entry 0 to 86 400 s

Factory setting 60 s

500 Process alert pressure

Navigation Diagnostics → Diag. settings → Properties → 500 Pressure

Description Define whether user-defined pressure limits should be set.
If "Off" is selected, no analysis will take place and no event message will be generated.

Selection
- Off
- On

Factory setting Off

Low alert value

Navigation Diagnostics → Diag. settings → Properties → Low alert value

Description Set range.
If this limit value is exceeded or undercut, a diagnostic event is generated. There is no hysteresis.

User entry Signed floating-point number

Factory setting 0 mbar

High alert value

Navigation Diagnostics → Diag. settings → Properties → High alert value

Description Set range.
If this limit value is exceeded or undercut, a diagnostic event is generated. There is no hysteresis.

User entry Signed floating-point number

Factory setting 500 mbar

501 Process alert scaled variable

Navigation Diagnostics → Diag. settings → Properties → 501 Scaled var.

Description Define whether user-defined limits should be set.
If "Off" is selected, no analysis will take place and no event message will be generated.

Selection
- Off
- On

Factory setting Off

Low alert value

Navigation Diagnostics → Diag. settings → Properties → Low alert value

Description Set range.
If this limit value is exceeded or undercut, a diagnostic event is generated. There is no hysteresis.

User entry Signed floating-point number

Factory setting 0 %

High alert value

Navigation Diagnostics → Diag. settings → Properties → High alert value

Description Set range.
If this limit value is exceeded or undercut, a diagnostic event is generated. There is no hysteresis.

User entry Signed floating-point number

Factory setting 100 %

User temperature process alert

Navigation Diagnostics → Diag. settings → Properties → UserTemp alert

Description Define whether the user-defined sensor temperature limits should be set. If "Off" no analysis and therefore no event message will take place.

Selection
- Off
- On

Factory setting Off

Low alert value

Navigation Diagnostics → Diag. settings → Properties → Low alert value

Description Set range.
If this limit value is exceeded or undercut, a diagnostic event is generated. There is no hysteresis.

User entry −50 to 150 °C

Factory setting −35 °C

High alert value

Navigation Diagnostics → Diag. settings → Properties → High alert value

Description Set range.
If this limit value is exceeded or undercut, a diagnostic event is generated. There is no hysteresis.

User entry −50 to 150 °C

Factory setting 85 °C

Configuration

Navigation Diagnostics → Diag. settings → Configuration

Configuration

Navigation Diagnostics → Diag. settings → Configuration → Configuration

500 Diagnostic behavior

Navigation Diagnostics → Diag. settings → Configuration → Configuration → 500Diag. behav.

Description Select event behavior.

"Logbook entry only":
No digital or analog transmission of the message.

"Warning":
Current output unchanged. Message is output digitally (default).

"Alarm":
Current output assumes the set alarm current.

Regardless of the setting, the message appears on the display. If the permissible conditions are reached again, the warning is no longer available in the instrument.

Selection
- Off
- Alarm
- Warning
- Logbook entry only

Factory setting Off

500 Event category

Navigation Diagnostics → Diag. settings → Configuration → Configuration → 500Event categ.

Selection
- Failure (F)
- Function check (C)
- Out of specification (S)
- Maintenance required (M)
- Not categorized

Factory setting Out of specification (S)

501 Diagnostic behavior

Navigation Diagnostics → Diag. settings → Configuration → Configuration → 501Diag. behav.

Description Select event behavior.

"Logbook entry only":
No digital or analog transmission of the message.

"Warning":
Current output unchanged. Message is output digitally (default).

"Alarm":
Current output assumes the set alarm current.

Regardless of the setting, the message appears on the display. If the permissible conditions are reached again, the warning is no longer available in the instrument.

Selection
- Off
- Alarm
- Warning
- Logbook entry only

Factory setting Off

501 Event category

Navigation Diagnostics → Diag. settings → Configuration → Configuration → 501Event categ.

Selection
- Failure (F)
- Function check (C)
- Out of specification (S)
- Maintenance required (M)
- Not categorized

Factory setting Out of specification (S)

502 Diagnostic behavior

Navigation Diagnostics → Diag. settings → Configuration → Configuration → 502Diag. behav.

Description Select event behavior.

"Logbook entry only":
No digital or analog transmission of the message.

"Warning":
Current output unchanged. Message is output digitally (default).

"Alarm":
Current output assumes the set alarm current.

Regardless of the setting, the message appears on the display. If the permissible conditions are reached again, the warning is no longer available in the instrument.

Selection
- Off
- Alarm
- Warning
- Logbook entry only

Factory setting Off

502 Event category

Navigation Diagnostics → Diag. settings → Configuration → Configuration → 502Event categ.

Selection
- Failure (F)
- Function check (C)
- Out of specification (S)
- Maintenance required (M)
- Not categorized

Factory setting Out of specification (S)

Process

Navigation Diagnostics → Diag. settings → Configuration → Process

822 Diagnostic behavior

Navigation Diagnostics → Diag. settings → Configuration → Process → 822Diag. behav.

User interface
- Alarm
- Warning
- Logbook entry only

Factory setting Warning

822 Event category

Navigation Diagnostics → Diag. settings → Configuration → Process → 822Event categ.

Selection
- Failure (F)
- Function check (C)
- Out of specification (S)
- Maintenance required (M)
- Not categorized

Factory setting Out of specification (S)

900 Event category

Navigation Diagnostics → Diag. settings → Configuration → Process → 900Event categ.

Description Select category for diagnostic message.

Selection
- Failure (F)
- Function check (C)
- Out of specification (S)
- Maintenance required (M)
- Not categorized

Factory setting Maintenance required (M)

900 Diagnostic behavior

Navigation Diagnostics → Diag. settings → Configuration → Process → 900Diag. behav.

Description Select event behavior

"Logbook entry only":
No forwarding of the message via the fieldbus.

"Warning":
Warning message is transmitted via the fieldbus (default setting).

Regardless of the setting, the message appears on the display. If the permissible conditions are reached again, the warning is no longer available in the instrument.

Selection
- Warning
- Logbook entry only

Factory setting Warning

906 Diagnostic behavior

Navigation Diagnostics → Diag. settings → Configuration → Process → 906Diag. behav.

Description Select event behavior

"Logbook entry only":
No forwarding of the message via the fieldbus.

"Warning":
Warning message is transmitted via the fieldbus (default setting).

Regardless of the setting, the message appears on the display. If the permissible conditions are reached again, the warning is no longer available in the instrument.

Selection
- Off
- Warning
- Logbook entry only

Factory setting Off

906 Event category

Navigation Diagnostics → Diag. settings → Configuration → Process → 906Event categ.

Description Select category for diagnostic message.

Selection
- Failure (F)
- Function check (C)
- Out of specification (S)
- Maintenance required (M)
- Not categorized

Factory setting Not categorized

3.3 Application

Navigation Application

3.3.1 Measuring units

Navigation Application → Measuring units

Pressure unit

Navigation Application → Measuring units → Pressure unit

Selection
- MPa
- kPa
- Pa
- bar
- mbar
- torr
- atm
- psi
- kgf/cm²
- gf/cm²
- inH2O
- inH2O (4°C)
- mmH2O
- mmH2O (4°C)
- mH2O
- mH2O (4°C)
- ftH2O
- inHg
- mmHg

Factory setting Depends on the order option

Decimal places pressure

Navigation Application → Measuring units → Decimal pressure

Description This selection does not affect the measurement and calculation accuracy of the device.

Selection
- Automatic
- x
- x.x
- x.xx
- x.xxx
- x.xxxx

Factory setting Automatic

Temperature unit

Navigation Application → Measuring units → Temperature unit

Description Select the temperature unit.

Selection

SI units	*US units*
▪ ℃	℉
▪ K	

Factory setting ℃

Scaled variable unit

Navigation Application → Measuring units → Scaled Unit

Description Use "Free text", first selection, if the desired unit is not available in the selection list. It is possible to define a customer specific unit with another parameter.

Selection

SI units
- %
- mm
- cm
- m
- l
- hl
- m^3
- g
- kg
- t
- g/s
- kg/s
- kg/min
- kg/h
- t/min
- t/h
- t/d
- m^3/s
- m^3/min
- m^3/h
- m^3/d
- l/s
- l/min
- l/h
- Nm^3/h
- Nl/h
- Sm^3/s
- Sm^3/min
- Sm^3/h
- Sm^3/d
- Nm^3/s
- g/cm^3
- kg/m^3
- Nm^3/min
- Nm^3/d

US units
- ft
- in
- ft^3
- gal (us)
- bbl (us;oil)
- oz
- lb
- STon
- lb/s
- lb/min
- lb/h
- STon/min
- STon/h
- STon/d
- ft^3/s
- ft^3/min
- ft^3/h
- ft^3/d
- gal/s (us)
- gal/min (us)
- gal/h (us)
- gal/d (us)
- bbl/s (us;oil)
- bbl/min (us;oil)
- bbl/h (us;oil)
- bbl/d (us;oil)
- Sft^3/min
- Sft^3/h
- Sft^3/d

Imperial units
- gal (imp)
- gal/s (imp)
- gal/min (imp)
- gal/h (imp)

Custom-specific units
Free text

Factory setting %

Free text

Navigation Application → Measuring units → Free text

User entry Character string comprising numbers, letters and special characters (32)

Factory setting Free text

Decimal places scaled variable

Navigation Application → Measuring units → Decimal scaled

Description This selection does not affect the measurement and calculation accuracy of the device.

Selection
- x
- x.x
- x.xx
- x.xxx
- x.xxxx

Factory setting x.xx

3.3.2 Measured values

Navigation Application → Measured values

Sensor pressure

Navigation Application → Measured values → Sensor pressure

User interface Signed floating-point number

Factory setting 0 mbar

Additional information **Access:**
- Read access: Expert
- Write access: -

Pressure

Navigation Application → Measured values → Pressure

Factory setting 0 mbar

Scaled variable

Navigation Application → Measured values → Scaled variable

User interface Signed floating-point number

Factory setting 0 %

Sensor temperature

Navigation Application → Measured values → Sensor temp.

Description Displays the current temperature of the sensor.

User interface Floating point number with sign

Terminal voltage 1

Navigation Application → Measured values → Terminal volt. 1

Description Shows the current terminal voltage that is applied at the output

User interface 0.0 to 50.0 V

Electronics temperature

Navigation Application → Measured values → Electronics temp

Description Displays the current temperature of the main electronics.

User interface Signed floating-point number

3.3.3 Sensor

Navigation Application → Sensor

Basic settings

Navigation Application → Sensor → Basic settings

Damping

Navigation Application → Sensor → Basic settings → Damping

Description The damping is effective before the measured value is further processed, i.e., before the following processes:
- Scaling
- Limit value monitoring
- Forwarding to display
- Forwarding to Analog Input Block

Note:
The Analog Input Block has its own "Damping" parameter. In the measurement chain, only one of the two attenuation parameters shall have a value other than 0.
Otherwise, the signal will be attenuated several times.

User entry 0 to 999.0 s

Factory setting 1 s

Sensor calibration

Navigation Application → Sensor → Sensor cal.

Zero adjustment

Navigation Application → Sensor → Sensor cal. → Zero adjustment

Description Due to the mounting position of the measuring instrument, a pressure shift may occur. The pressure shift can be corrected with the zero adjustment.

Selection
- No
- Confirm

Factory setting No

Calibration offset

Navigation Application → Sensor → Sensor cal. → Calibr offset

Description Enter the value by which the measured value should be corrected, e.g., a position adjustment for absolute pressure sensors.

User entry Signed floating-point number

Factory setting 0 mbar

Additional information Parameters only available for absolute pressure sensors.

Zero adjustment offset

Navigation Application → Sensor → Sensor cal. → Zero offset

User entry Signed floating-point number

Factory setting 0 mbar

Sensor Trim Reset

Navigation Application → Sensor → Sensor cal. → Sen. Trim Reset

Selection
- No
- Confirm

Factory setting No

Lower sensor trim measured value

Navigation Application → Sensor → Sensor cal. → LowerTrimMeasVal

User interface Signed floating-point number

Factory setting 0 mbar

Lower sensor trim

Navigation Application → Sensor → Sensor cal. → LowerSensor trim

Description

Using the Lower sensor trim and Upper sensor trim parameters, a sensor can be recalibrated, e.g. if the sensor is to be precisely calibrated to the measuring range. Maximum measurement accuracy of the sensor is achieved when the value for the Lower sensor trim parameter is as close as possible to the lower measuring range, and the value for the Upper sensor trim parameter is as close as possible to the upper measuring range.

There must be a known reference pressure when setting a new lower or upper sensor characteristic curve value.

The more accurate the reference device used for sensor calibration, the higher the measurement accuracy of the pressure transmitter will be later.

Using the Lower sensor trim and Upper sensor trim parameters, a new value is then assigned to the applied pressure.

The entered value must not exceed **Sensor pressure** +/- 10 % of the permissible maximum pressure (URL).

Input as follows:
- Apply reference pressure for the lower measuring range.
- Enter and confirm the reference pressure in the Lower sensor trim field.
- Apply reference pressure for the upper measuring range.
- Enter and confirm the reference pressure in the Upper sensor trim field.
- The sensor calibration is now complete.

User entry Signed floating-point number

Factory setting 0 mbar

Upper sensor trim measured value

Navigation Application → Sensor → Sensor cal. → UpperTrimMeasVal

User interface Signed floating-point number

Factory setting 500 mbar

Upper sensor trim

Navigation Application → Sensor → Sensor cal. → UpperSensor trim

Description

Using the Lower sensor trim and Upper sensor trim parameters, a sensor can be recalibrated, e.g. if the sensor is to be precisely calibrated to the measuring range. Maximum measurement accuracy of the sensor is achieved when the value for the Lower sensor trim parameter is as close as possible to the lower measuring range, and the value for the Upper sensor trim parameter is as close as possible to the upper measuring range.

There must be a known reference pressure when setting a new lower or upper sensor characteristic curve value.

The more accurate the reference device used for sensor calibration, the higher the measurement accuracy of the pressure transmitter will be later.

Using the Lower sensor trim and Upper sensor trim parameters, a new value is then assigned to the applied pressure.

The entered value must not exceed **Sensor pressure** +/- 10 % of the permissible maximum pressure (URL).

Input as follows:
- Apply reference pressure for the lower measuring range.
- Enter and confirm the reference pressure in the Lower sensor trim field.
- Apply reference pressure for the upper measuring range.
- Enter and confirm the reference pressure in the Upper sensor trim field.
- The sensor calibration is now complete.

User entry Signed floating-point number

Factory setting 500 mbar

Sensor limits

Navigation Application → Sensor → Sensor limits

Lower Range Limit

Navigation Application → Sensor → Sensor limits → LRL

Description Indicates the lower measuring limit of the sensor.

User interface Signed floating-point number

Factory setting Depends on the order option

Upper Range Limit

Navigation Application → Sensor → Sensor limits → URL

Description Indicates the upper measuring limit of the sensor.

User interface Signed floating-point number

Factory setting Depends on the order option

Minimum span

Navigation Application → Sensor → Sensor limits → Minimum span

Description Specifies the smallest possible measuring span of the sensor.

User interface Signed floating-point number

Factory setting 0.498504 mbar

Sensor temperature lower range limit

Navigation Application → Sensor → Sensor limits → Sens.temp.lo.lim

Factory setting −35 °C

Sensor temperature upper range limit

Navigation Application → Sensor → Sensor limits → Sens.temp.up.lim

Factory setting 85 °C

Scaled variable

Navigation Application → Sensor → Scaled variable

Scaled variable unit

Navigation Application → Sensor → Scaled variable → Scaled Unit

Description Use "Free text", first selection, if the desired unit is not available in the selection list. It is possible to define a customer specific unit with another parameter.

Selection

SI units
- %
- mm
- cm
- m
- l
- hl
- m^3
- g
- kg
- t
- g/s
- kg/s
- kg/min
- kg/h
- t/min
- t/h
- t/d
- m^3/s
- m^3/min
- m^3/h
- m^3/d
- l/s
- l/min
- l/h
- Nm^3/h
- Nl/h
- Sm^3/s
- Sm^3/min
- Sm^3/h
- Sm^3/d
- Nm^3/s
- g/cm^3
- kg/m^3
- Nm^3/min
- Nm^3/d

US units
- ft
- in
- ft^3
- gal (us)
- bbl (us;oil)
- oz
- lb
- STon
- lb/s
- lb/min
- lb/h
- STon/min
- STon/h
- STon/d
- ft^3/s
- ft^3/min
- ft^3/h
- ft^3/d
- gal/s (us)
- gal/min (us)
- gal/h (us)
- gal/d (us)
- bbl/s (us;oil)
- bbl/min (us;oil)
- bbl/h (us;oil)
- bbl/d (us;oil)
- Sft^3/min
- Sft^3/h
- Sft^3/d

Imperial units
- gal (imp)
- gal/s (imp)
- gal/min (imp)
- gal/h (imp)

Custom-specific units
Free text

Factory setting

%

Free text

Navigation

Application → Sensor → Scaled variable → Free text

User entry

Character string comprising numbers, letters and special characters (32)

Factory setting

Free text

Pressure

Navigation Application → Sensor → Scaled variable → Pressure

Factory setting 0 mbar

Scaled variable transfer function

Navigation Application → Sensor → Scaled variable → Scaled function

Description "Linear": The linear pressure signal is used for the output. The flow must be calculated in the evaluation unit.

"Table": The output is defined by the entered table, scaled variable/pressure.

Selection
- Linear
- Table

Factory setting Linear

Pressure value 1

Navigation Application → Sensor → Scaled variable → Pressure 1

Description Enter pressure for the first scaling point. "Scaled variable value 1" will be allocated to this pressure.

User entry Signed floating-point number

Factory setting 0 mbar

Scaled variable value 1

Navigation Application → Sensor → Scaled variable → Scaled 1

Description Enter value for the first scaling point. This value is allocated to "Pressure value 1".

User entry Signed floating-point number

Factory setting 0 %

Pressure value 2

Navigation Application → Sensor → Scaled variable → Pressure 2

Description Enter pressure for the second scaling point. "Scaled variable value 2" will be allocated to this pressure.

User entry Signed floating-point number

Factory setting 500 mbar

Scaled variable value 2

Navigation Application → Sensor → Scaled variable → Scaled 2

Description Enter value for the second scaling point. This value is allocated to "Pressure value 2".

User entry Signed floating-point number

Factory setting 100 %

3.3.4 Profibus

Navigation Application → Profibus

Configuration

Navigation Application → Profibus → Configuration

Device tag

Navigation Application → Profibus → Configuration → Device tag

Description Enter a unique name for the measuring point to identify the device quickly within the plant.

User entry Character string comprising numbers, letters and special characters (32)

Factory setting Deltabar

Ident number selector

Navigation Application → Profibus → Configuration → Ident num select

Description In order to integrate the field devices into the bus system, the PROFIBUS system needs a description of the device parameters, such as output data, input data, data format, data volume and supported transmission rate. These data are available in the general station description (GSD) which is provided to the PROFIBUS Master when the communication system is commissioned.

Selection
- 0x9700 (1AI)
- Cerabar 0x1573
- Automatic mode

Factory setting Automatic mode

PROFIBUS ident number

Navigation Application → Profibus → Configuration → Ident number

Description Shows the Profibus Ident number of the device. Which Ident number is used can be defined in the parameter Ident number selector.

User interface 0 to 65 535

Factory setting 1574

Address mode

Navigation Application → Profibus → Configuration → Address mode

Description Shows the address mode that applies to the device address, e.g. 'Hardware' if set via DIP switch

User interface
- Hardware
- Software

Factory setting Software

Device address

Navigation Application → Profibus → Configuration → Device address

Description The device address must always be configured for a PROFIBUS device. The valid address range is
between 1 and 126. In a PROFIBUS network, each address can only be assigned once. If an address is not configured correctly, the device is not recognized by the master. All measuring devices are delivered ex works with device address 126 and software addressing.
The address can only be written here if it has not already been set via the DIP switches.

User entry 0 to 126

Factory setting 126

Analog input

Navigation Application → Profibus → Analog input

Analog input 1 to 6

Navigation Application → Profibus → Analog input → Analog input 1 to 6

Out value

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Out value

Description Shows the process value reported to the controller for further processing

User entry Signed floating-point number

Factory setting 0

Out status

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Out status

Description Shows the status of the measured value reported to the controller for further processing (Hex). Writeable in Manual mode.

User entry 0 to 255

Factory setting 128

Out unit text

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Out unit text

Description If a specific unit of OUT parameter is not in the code list the user has the possibility to write the specific text into this parameter. The unit code is then equal to "textual unit definition".

User entry Character string comprising numbers, letters and special characters (16)

Factory setting mbar

Channel

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Channel

Description Assigns a measured variable to the AI block.

Selection
- None
- Pressure
- Scaled variable
- Sensor temperature
- Sensor pressure
- Electronics temperature
- Median of pressure signal *
- Noise of pressure signal *

Factory setting Pressure

PV filter time

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → PV filter time

Description Enter time constant for input damping (PT1 element). Damping reduces the effect of fluctuations in the measured value on the output signal.

User entry Positive floating-point number

Factory setting 0

* Visibility depends on order options or device settings

Simulate enabled

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Simulate enabled

Description The simulation is used to bypass the physical I/O channel. In this way the block remains in the normal mode and using the simulated discrete I/O channel during operation.

Selection
- Disable
- Enable

Factory setting Disable

Simulate value

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Simulate value

Description The simulation value is used to bypass the physical I/O channel. In this way, the block remains in
the normal mode and using the simulated value during operation.

User entry Signed floating-point number

Factory setting 0

Simulate status

Navigation Application → Profibus → Analog input → Analog input 1 to 6 → Simulate status

Description To simulate a process status for this block. Possible input values can be taken from the PA profile used, see there under the chapter "Process variable status and diagnosis".

Examples for status values are:

0x80 (decimal 128) for status "GOOD"
0x24 (decimal 36) for status "BAD

User entry 0 to 255

Factory setting 0

Digital input

Navigation Application → Profibus → Digital input

Digital input 1 to 2

Navigation Application → Profibus → Digital input → Digital input 1 to 2

Out value

Navigation Application → Profibus → Digital input → Digital input 1 to 2 → Out value

Description Shows the state of the device function, which is transmitted to the controller for further processing.

User entry 0 to 255

Factory setting 0

Out status

Navigation Application → Profibus → Digital input → Digital input 1 to 2 → Out status

Description Shows the status of the device function state reported to the controller (Hex). Writeable in Manual mode.

User entry 0 to 255

Factory setting 128

Channel

Navigation Application → Profibus → Digital input → Digital input 1 to 2 → Channel

Description Select the device function

Selection
- None
- Process alert pressure
- Process alert scaled variable
- Process alert temperature
- Low signal noise detected *

* Visibility depends on order options or device settings

- High signal noise detected *
- Min signal noise detected *
- Out of range signal detected *

Factory setting None

Simulate enabled

Navigation Application → Profibus → Digital input → Digital input 1 to 2 → Simulate enabled

Selection
- Disable
- Enable

Factory setting Disable

Simulate value

Navigation Application → Profibus → Digital input → Digital input 1 to 2 → Simulate value

Description The simulation value is used to bypass the physical I/O channel. In this way, the block remains in
the normal mode and using the simulated value during operation.

User entry 0 to 255

Factory setting 0

Simulate status

Navigation Application → Profibus → Digital input → Digital input 1 to 2 → Simulate status

Description To simulate a process status for this block. Possible input values can be taken from the PA profile used, see there under the chapter "Process variable status and diagnosis".

Examples for status values are:

0x80 (decimal 128) for status "GOOD"
0x24 (decimal 36) for status "BAD

User entry 0 to 255

Factory setting 0

* Visibility depends on order options or device settings

Analog output

Navigation Application → Profibus → Analog output

Analog output 1

Navigation Application → Profibus → Analog output → Analog output 1

Out value

Navigation Application → Profibus → Analog output → Analog output → Out value

Description Shows an analog output value (AO) that is output from the controller to the device and can be shown on the local display. To show the AO on the local display, it must be assigned to a display output parameter as a value. This assignment is made in the menu under "System-Display".

User entry Signed floating-point number

Factory setting 0

Out status

Navigation Application → Profibus → Analog output → Analog output → Out status

Description Shows the status of the external compensation value reported to the measuring device for further processing (Hex). Writeable in Manual mode.

User entry 0 to 255

Factory setting 128

Out unit

Navigation Application → Profibus → Analog output → Analog output → Out unit

User entry 0 to 65 535

Factory setting 1 997

Fail-safe type

Navigation Application → Profibus → Analog output → Analog output → Fail-safe type

Description Select fail-safe behavior in the event of a failure (value with status 'Bad')

Selection
- Fixed value
- Last valid value
- Off

Factory setting Last valid value

Fail-safe time

Navigation Application → Profibus → Analog output → Analog output → Fail-safe time

Description Enter a delay until in the event of a failure (value with status 'Bad') the fail-safe behavior specified applies

User entry 0 to 999.0

Factory setting 0

Fail-safe value

Navigation Application → Profibus → Analog output → Analog output → Fail-safe value

Description Enter value to report in the event of a failure (value with status 'Bad')

User entry Signed floating-point number

Factory setting 0

Information

Navigation Application → Profibus → Information

Device ID

Navigation Application → Profibus → Information → Device ID

Description Shows the device ID used by the manufacturer to identify the measuring device type

User interface Character string comprising numbers, letters and special characters

Factory setting Deltabar

Profile version

Navigation Application → Profibus → Information → Profile version

Description Shows the profile version

User interface Character string comprising numbers, letters and special characters

Factory setting 3.02

Statistics

Navigation Application → Profibus → Statistics

CRC Count OK

Navigation Application → Profibus → Statistics → CRC Count OK

Description Indicates how often the checksum test of the cyclic data telegram was successful.

User interface Positive integer

Factory setting 0

CRC Count Failed

Navigation Application → Profibus → Statistics → CRC Count Failed

Description Indicates how often the checksum test of the cyclic data telegram detected an error.

User interface Positive integer

Factory setting 0

3.4 System

Navigation System

3.4.1 Device management

Navigation System → Device manag.

Device tag

Navigation System → Device manag. → Device tag

Description Enter a unique name for the measuring point to identify the device quickly within the plant.

User entry Character string comprising numbers, letters and special characters (32)

Factory setting Deltabar

Locking status

Navigation System → Device manag. → Locking status

Description Indicates the type of locking.

"Hardware locked" (HW)
The device is locked by the "WP" switch on the main electronics module. To unlock, set the switch into the OFF position.

"WHG locked" (SW)
Unlock the device by entering the appropriate access code in "Enter safety unlocking code".

"Temporarily locked" (SW)
The device is temporarily locked by processes in the device (e.g. data upload/download, reset). The device will automatically be unlocked after completion of these processes.

User interface
- Hardware locked
- WHG locked
- Temporarily locked

Static revision

Navigation System → Device manag. → Static revision

Description Shows the number of changes made to static parameters (e.g. configuration parameters)

User interface 0 to 65 535

Factory setting 0

Reset device

Navigation System → Device manag. → Reset device

Description Reset the device configuration - either entirely or in part - to a defined state

Selection
- Cancel
- To factory defaults *
- To delivery settings *
- Restart device

Factory setting Cancel

3.4.2 User management

Navigation System → User manag.

Navigation System → User manag. → User manag.

User role

Navigation System → User manag. → User manag. → User role

Description Shows the access authorization to the parameters via the operating tool

User interface
- Operator
- Maintenance
- Expert

Factory setting Maintenance

Delete password

Navigation System → User manag. → User manag. → Delete password

Description Deletes the 'Maintenance' password.
After deleting, the 'Operator' role will be no more available.
All users have read/write access rights.

* Visibility depends on order options or device settings

User entry Character string comprising numbers, letters and special characters (1)

Forgot password?

Navigation System → User manag. → Forgot password?
System → User manag. → User manag. → Forgot password?

User entry Character string comprising numbers, letters and special characters (1)

Enter password

Navigation System → User manag. → Enter password

Password

Navigation System → User manag. → Enter password → Password

Description Enter the password for the "Maintenance" user role to get access to the functionality of this role.

User entry Character string comprising numbers, letters and special characters (16)

Enter access code

Navigation System → User manag. → Enter password → Ent. access code

Description For authorized service personnel only.

User entry 0 to 9 999

Factory setting 0

Status password entry

Navigation System → User manag. → Enter password → Status pw entry

Description Use this function to display the status of the password verification.

User interface
- --------
- Wrong password
- Password rule violated
- Password accepted
- Permission denied
- Confirm PW mismatch
- Reset password accepted
- Invalid user role
- Wrong sequence of entry

Factory setting --------

Define password

Navigation System → User manag. → Define password

New password

Navigation System → User manag. → Define password → New password

Description Define the new "Maintenance" password.
A new password is valid after it has been confirmed within the "Confirm new password" parameter.
Any valid password consists of 4 to 16 characters and can contain letters and numbers.

User entry Character string comprising numbers, letters and special characters (16)

Confirm new password

Navigation System → User manag. → Define password → Confirm password

Description Enter the new password again to confirm.

User entry Character string comprising numbers, letters and special characters (16)

Status password entry

Navigation System → User manag. → Define password → Status pw entry

Description Use this function to display the status of the password verification.

User interface
- --------
- Wrong password
- Password rule violated
- Password accepted
- Permission denied
- Confirm PW mismatch
- Reset password accepted
- Invalid user role
- Wrong sequence of entry

Factory setting --------

Change password

Navigation System → User manag. → Change password

Old password

Navigation System → User manag. → Change password → Old password

Description Enter the current password, to subsequently change the existing password.

User entry Character string comprising numbers, letters and special characters (16)

New password

Navigation System → User manag. → Change password → New password

Description Define the new "Maintenance" password.
A new password is valid after it has been confirmed within the "Confirm new password" parameter.
Any valid password consists of 4 to 16 characters and can contain letters and numbers.

User entry Character string comprising numbers, letters and special characters (16)

Confirm new password

Navigation System → User manag. → Change password → Confirm password

Description Enter the new password again to confirm.

User entry Character string comprising numbers, letters and special characters (16)

Status password entry

Navigation System → User manag. → Change password → Status pw entry

Description Use this function to display the status of the password verification.

User interface
- --------
- Wrong password
- Password rule violated
- Password accepted
- Permission denied
- Confirm PW mismatch
- Reset password accepted
- Invalid user role
- Wrong sequence of entry

Factory setting --------

Recover password

Navigation System → User manag. → Recover password

Reset password

Navigation System → User manag. → Recover password → Reset password

Description Enter a code to reset the current "Maintenance" password.
The code is delivered by your local support.

User entry Character string comprising numbers, letters and special characters (16)

Status password entry

Navigation System → User manag. → Recover password → Status pw entry

Description Use this function to display the status of the password verification.

User interface
- --------
- Wrong password
- Password rule violated
- Password accepted
- Permission denied
- Confirm PW mismatch
- Reset password accepted
- Invalid user role
- Wrong sequence of entry

Factory setting --------

3.4.3 Bluetooth configuration

Navigation System → Bluetooth conf.

Bluetooth activation

Navigation System → Bluetooth conf. → Bluetooth active

Description If Bluetooth is deactivated, it can only be reactivated via the display or the operating tool. Reactivating via the SmartBlue app is not possible.

Selection
- Disable
- Enable

Factory setting Depends on the order option

3.4.4 Display

Navigation System → Display

Language

Navigation System → Display → Language

Prerequisite A local display is provided.

Description Use this function to select the configured language on the local display.

Selection
- English
- Deutsch
- Français
- Español
- Italiano
- Nederlands
- Portuguesa
- Polski
- русский язык (Russian)
- Svenska
- Türkçe
- 中文 (Chinese)
- 日本語 (Japanese)

- 한국어 (Korean)
- Bahasa Indonesia
- tiếng Việt (Vietnamese)
- čeština (Czech)

Factory setting English (alternatively, the ordered language is preset in the device)

Format display

Navigation System → Display → Format display

Description Select how measured values are shown on the display

Selection
- 1 value, max. size
- 2 values

Factory setting 1 value, max. size

Value 1 display

Navigation System → Display → Value 1 display

Description Select the measured value that is shown on the local display

Selection
- Pressure
- Scaled variable
- Sensor temperature
- Analog output 1

Factory setting Pressure

Value 2 ... 4 display

Navigation System → Display → Value 2 ... 4 display

Description Select the measured value that is shown on the local display

Selection
- None
- Pressure
- Scaled variable
- Sensor temperature
- Analog output 1

Factory setting None

Contrast display

Navigation	System → Display → Contrast display
Description	Adjust local display contrast setting to ambient conditions (e.g. lighting or reading angle)
User entry	20 to 80 %
Factory setting	30 %

3.4.5 Information

Navigation System → Information

Device name

Navigation	System → Information → Device name
Description	Use this function to display the device name. It can also be found on the nameplate.
User interface	Character string comprising numbers, letters and special characters
Factory setting	Deltabar

Manufacturer

Navigation	System → Information → Manufacturer
Description	Displays the manufacturer.
User interface	Character string comprising numbers, letters and special characters
Factory setting	Endress+Hauser

Serial number

Navigation System → Information → Serial number

Description The serial number is a unique alphanumerical code identifying the device.
It is printed on the nameplate.
In combination with the Operations app it allows to access all device related documentation.

User interface Character string comprising numbers, letters and special characters

Order code

Navigation System → Information → Order code

Description Shows the device order code.

User interface Character string comprising numbers, letters and special characters

Factory setting - none -

Additional information **Access:**
- Read access: Operator
- Write access: Expert

Firmware version

Navigation System → Information → Firmware version

Description Displays the device firmware version installed.

User interface Character string comprising numbers, letters and special characters

Hardware version

Navigation System → Information → Hardware version

User interface Character string comprising numbers, letters and special characters

Extended order code 1 ... 3

Navigation System → Information → Ext. order cd. 1

Description The extended order code is an alphanumeric code containing all information to identify the device and its options.

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Operator
- Write access: Expert

XML build number

Navigation System → Information → XML build no.

User interface Positive integer

Additional information **Access:**
- Read access: Expert
- Write access: -

Checksum

Navigation System → Information → Checksum

Description Checksum for Firmware version.

User interface Positive integer

3.4.6 Additional information

Navigation System → Additional info

Sensor

Navigation System → Additional info → Sensor

Serial number

Navigation System → Additional info → Sensor → Serial number

Description Shows the serial number of the module

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Expert
- Write access: -

Firmware version

Navigation System → Additional info → Sensor → Firmware version

Description Displays the firmware version of the module.

User interface Positive integer

Additional information **Access:**
- Read access: Expert
- Write access: -

Hardware version

Navigation System → Additional info → Sensor → Hardware version

Description Displays the hardware version of the module.

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Expert
- Write access: -

Checksum

Navigation System → Additional info → Sensor → Checksum

Description Checksum for Firmware version.

User interface Positive integer

Factory setting 0

Additional information **Access:**
- Read access: Expert
- Write access: -

Electronics

Navigation System → Additional info → Electronics

Serial number

Navigation System → Additional info → Electronics → Serial number

Description Shows the serial number of the module

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Expert
- Write access: -

Firmware version

Navigation System → Additional info → Electronics → Firmware version

Description Displays the firmware version of the module.

User interface Positive integer

Additional information **Access:**
- Read access: Expert
- Write access: -

Build no. software

Navigation System → Additional info → Electronics → Build no. softw.

Description Shows the build number of the module firmware

User interface 0 to 65 535

Additional information **Access:**
- Read access: Expert
- Write access: -

Hardware version

Navigation System → Additional info → Electronics → Hardware version

Description Displays the hardware version of the module.

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Expert
- Write access: -

Display/Bluetooth

Navigation System → Additional info → Displ./Bluetooth

Serial number

Navigation System → Additional info → Displ./Bluetooth → Serial number

Description Shows the serial number of the module

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Expert
- Write access: -

Firmware version

Navigation System → Additional info → Displ./Bluetooth → Firmware version

Description Displays the firmware version of the module.

User interface Positive integer

Additional information **Access:**
- Read access: Expert
- Write access: -

Build no. software

Navigation System → Additional info → Displ./Bluetooth → Build no. softw.

Description Shows the build number of the module firmware

User interface 0 to 65 535

Additional information **Access:**
- Read access: Expert
- Write access: -

Hardware version

Navigation System → Additional info → Displ./Bluetooth → Hardware version

Description Displays the hardware version of the module.

User interface Character string comprising numbers, letters and special characters

Additional information **Access:**
- Read access: Expert
- Write access: -

3.4.7 Software configuration

Navigation System → Softw. config.

CRC device configuration

Navigation System → Softw. config. → CRC device conf.

Description CRC device configuration based on current settings of safety relevant parameters. The CRC device configuration is unique and can be used to detect changes in safety relevant parameter settings.

User interface 0 to 65 535

Activate SW option

Navigation System → Softw. config. → Activate SW opt.

Description Enter the application package code or code of another re-ordered functionality to enable it

User entry Positive integer

Software option overview

Navigation System → Softw. config. → SW option overv.

Description Shows all enabled software options

User interface
- Heartbeat Verification
- Heartbeat Monitoring

www.addresses.endress.com

Endress+Hauser

People for Process Automation