

5 YEARS WARRANTY

MonoCONT

SMART FIELD DISPLAY & DATA LOGGER



NIVELCO

SIGNAL PROCESSING UNITS



POF-510-0

MonoCONT is a single-channel HART® smart field display and data logger. It can be integrated as a universal field interface with NIVELCO intelligent level transmitters and other process control system components (e.g. PCs, PLCs and actuators). The MonoCONT can communicate with one transmitter with 4...20mA/HART® output at a time. It can be used with any NIVELCO transmitter with HART® to set up the transmitter, read and display measured data, log data (*data logger*) and transmit data via the RS485 (*Modbus*) communication line.

The LCD allows for on-site reading. It can display an "echo map" for suitable transmitters. The text menu displayed on the MonoCONT device is identical when it is connected to the following three level transmitters: the **PiloTREK** (W-200) non-contact microwave level transmitters and the **EasyTREK** (SP-300 and SP-500 Pro) and **EchoTREK** (SE-300) ultrasonic level transmitters for liquids.

The unit can also perform stand-alone control functions using one or more outputs that can be controlled based on the measured data, allowing multiple control functions to be implemented. It can also be connected to other process control devices via the optional RS485 (*Modbus*) communication line to perform higher-level tasks. It can also be used with transmitters from other manufacturers, in which case all functions except transmitter setting are available (*readout, display, data logging, transmission (Modbus), output control*).



POF-410-0

FEATURES

- Provides a flexible solution to commissioning process control systems containing HART®-compatible intelligent (*level, temperature or pressure*) transmitters
- 4-key interface
- Process controller for transmitters
- Field loop display and controller module
- Ex variant
- Data logging to internal memory

APPLICATIONS

- Remote programming, displaying of transmitter's data
- Process controller for transmitters
- Displaying measured data in numerical and bargraph mode
- Data transmission via RS485 (*via Modbus protocol*)
- Simple data-logging function
- Trend or flow-measurement logging

CERTIFICATES

- ATEX (Ex ia G), (Ex d G), (Ex d ia G)
- INMETRO (Ex ia G), (Ex d G), (Ex d ia G)

TECHNICAL DATA

		2-wire version	3-wire version
Power supply		4...20 mA loop powered, voltage drop: 4.5...5.5 V DC	8...30 V DC, max. 250 mW
Housing		Painted aluminum, fiberglass-reinforced plastic (PBT) or stainless steel	
Ambient temperature		-25...+70 °C (-4...+158 °F)	
Input		4...20 mA loop, HART® protocol, max. 1 transmitter	
Output	Display	SAP-300 graphic display unit	
	Optocoupler	Polarity independent switch, max. 30 V / 320 mA, R _{on} : 2 Ω	
	RS485 (optional)	–	Galvanically isolated Modbus RTU protocol
	Data logger (optional)	Integrated Flash memory (32 MB) ⁽¹⁾	
Electrical connection		2× M20×1.5 plastic cable gland + 2× internally threaded ½" NPT ⁽²⁾ connection, cable outer diameter: Ø6...12 mm (Ø0.2...Ø0.5"), wire cross section: 0.5...1.5 mm ² (0.5...1.5 mm ²)	
Electrical protection		Overvoltage Class 1; (Class III [SELV])	
Ingress protection		IP67	
Weight		With plastic housing: ~0.55 kg (~1.2 lb); with aluminum housing: ~0.9 kg (~2 lb); with stainless steel housing: ~2.5 kg (~5.5 lb)	

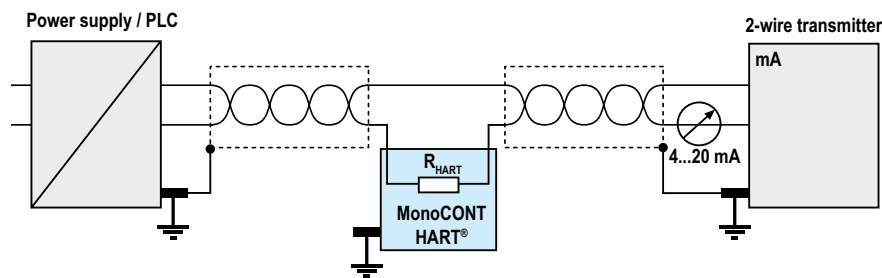
⁽¹⁾ Serial read (SAT-506 e-Link module required), or Bluetooth® read with MobileView or EView2 (under development).

⁽²⁾ Except stainless steel housing version.

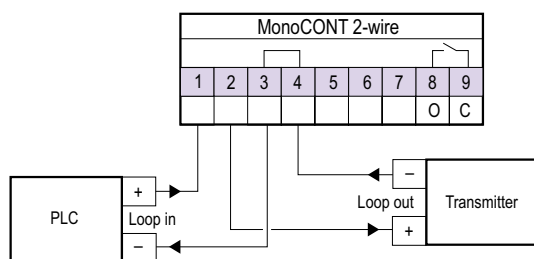
WIRING

System structure

MonoCONT includes the loop resistor required for HART® communication. The application must provide the power supply for the current loop. Only one power supply can be in the loop and no other HART® Master device is allowed.

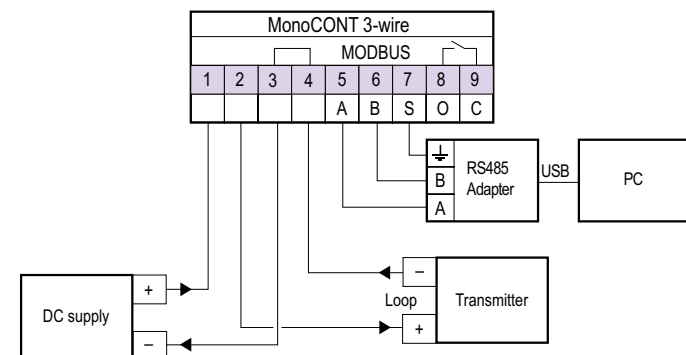


Wiring of 2-wire version



- 2-wire devices can be connected to a 4...20 mA current loop.
- 2-wire devices do not require a separate power supply.

Wiring of 3-wire version

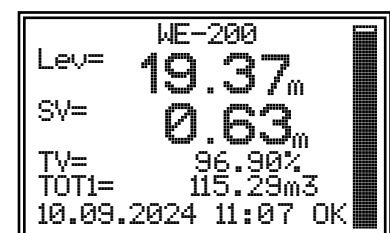


MAIN SCREEN

The values measured and calculated by the transmitter are displayed in the center of the screen. The data displayed can be modified. For more information on the settings, see chapter 6.2. in the manual.

Displayed information

- [top center]: HART® Short Tag, or the connected device type if Short Tag empty;
- [four data lines]: the selected measured data (according to the setting);
- [bargraph on right side]: loop current, level, or distance (according to the settings);
- [status line]:
 - general status information (e.g., test mode, simulation, log reading),
 - in the case of a data logging version, the set date and time,
 - the error code (in case of an error).



ORDER CODE⁽³⁾

MonoCONT P ■ F - ■ 1 ■ - ■

Function	Code	Housing	Code	Output	Code
Display	D	Painted aluminum	4	Opto-coupled dual FET switch output	0
Display + data logging	F	Fiberglass-reinforced plastic (PBT)	5	Opto-coupled dual FET switch output + RS485	1
		Stainless steel	6		

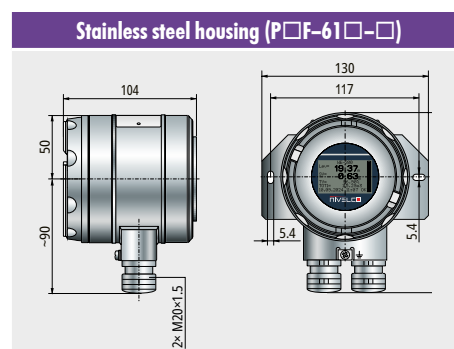
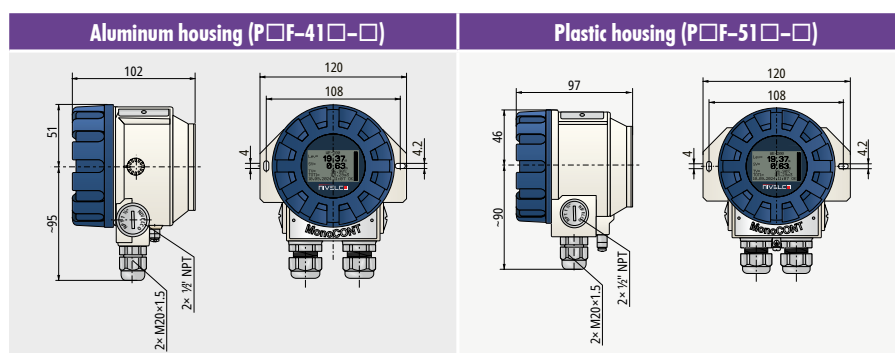
Supply voltage / Ex	Code
2-wire, loop powered	2
Ex ia G/D	6 ⁽⁴⁾
Ex d G/tD	B ⁽⁵⁾
Ex d ia G	F ⁽⁵⁾
3-wire, 8...30 V DC	3
Ex ia G/D	7 ⁽⁴⁾
Ex d G/tD	C ⁽⁵⁾
Ex d ia G	G ⁽⁵⁾
4-wire, 85...230 V AC	1 ⁽⁴⁾
Ex d G/tD	A ⁽⁵⁾
Ex d ia G	E ⁽⁵⁾
4-wire, 8...30 V DC	4 ⁽⁴⁾
Ex ia G/D	8 ⁽⁴⁾
Ex d G/tD	D ⁽⁵⁾
Ex d ia G	H ⁽⁵⁾

⁽³⁾ Not all combinations are available. For explosion-proof devices, the article number is followed by "Ex" on the data plate.

⁽⁴⁾ Under development.

⁽⁵⁾ Under development, only with metal housing.

DIMENSIONS



ACCESSORIES

UNICOMM SAT-506 eLink Module

eLink plug-in unit	UNICOMM SAT-506-0
eLink plug-in unit, for data logger readout only	UNICOMM SAT-506-1

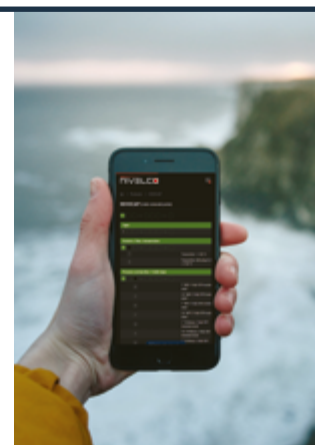


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Maximize Your Results!**



**MonoCONT
- CONFIGURATION &
REQUEST FOR QUOTE**



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