

Product features

- Display in engineering units
- 4-20 mA loop-powered
- 4 1/2 digit LCD display (DT4200)
- 3 1/2 digit LCD display (DT420 E)
- 15.2 mm character height
- Min. / Max. values detection
- 2 isolated limit outputs (DT4200)
- Easy on site configuration
- IP 65 (front) and IP 30 (rear) protection



The **DT4200, DT420 E Process indicators** enable linear process variables to be displayed in engineering units on the control panel. The unit is loop-powered from 4-20 mA signals, dropping less than 2 V at 20 mA.

Two isolated outputs are available with different operating modes for limit signaling or for simple control purposes (DT4200). The process indicators housed in a DIN standard 96 × 45 mm ABS case with IP 65 protection from the front and IP 30 protection from the back side. Large 4 ½ digit (DT4200), 3 ½ digit (DT420 E) 15 mm character height liquid crystal display make process variables easily visible at a distance.

A label defining the appropriate engineering unit is attached to the right of the display. The unit can be set up to reverse the display „direction” (i.e. to produce a decreasing displayed value for a rising signal input) and to display a decimal point if required.

Easy on-site configuration through the front panel keypad is a major advantage of the microcontroller-based technology.

The settings of zero and end-values are non-interactive, making the configuration process rapid and simple.

The configuration parameters: scaling, decimal point position, display refresh-rate, signal filtering, (DT4200 limit modes, limit values), etc. are stored in EEPROM.

A two level password protects the settings from unauthorised changes.

Safety data:

The connection terminals of the supply voltages are isolated from each other, the isolation is in compliance with the standard EN 61010-1, taking into consideration the following:

Pollution level:	2
Measurement category:	II

Input parameters:

Input signal:	DC current
Characteristics:	linear
Measurement range:	4-20 mA
Overrange:	3.5-20.5 mA
Sampling rate:	15 measurement / sec.
Number of averaged samples:	1 / 2 / 4 / 8 / 16 / 32 (selectable)
Drop:	< 2 V @ I=20 mA (DT4200) < 2.5 V @ I=20 mA (DT420 E)
Accuracy:	0.01% @ Ta = 23 °C ±2 °C (DT4200) 0.02% @ Ta = 23 °C ±2 °C (DT420 E)
Temperature-coefficient:	±20 ppm / °C

Display:

Display:	4 1/2 digit, 7 segments, decimal point and negative sign (DT4200) 3 1/2 digit, 7 segments, decimal point and negative sign (DT420 E)
Display unit:	LCD, 15.2 mm character height
Display value assigned to 4 mA:	anywhere within the range
Display value assigned to 20 mA:	anywhere within the range
Decimal point:	its position can be selected, or it can be switched off
Display refreshing time:	0.1; 0.3; 0.5; 1.0; 2.0 sec. (selectable)

Manual controls:

Manual controls:	3 membrane push-buttons on the front cover
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Output parameters (DT4200):

Output:	2 limit outputs
Output type:	optically isolated passive switching transistor
Leakage current:	I < 0.1 mA @ 9 V
Drop:	U < 1 V @ 10 mA
Load reating:	30 V, 30 mA max.
Refreshing time:	same as the display refreshing time
Hysteresis:	0 - ±999

Power supply:

Power supply:	4-20 mA loop-powered, reverse polarity protected
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Ambient conditions:

Operating temperature range:	0 - +60 °C (-20 - +60 °C for customer request)
Relative humidity:	90% (max., non-condensing)
Place of installation:	cabinet, control panel

Electromagnetic compatibility (EMC)

accordance with the standard EN 61326

Immunity:	industrial area
Noise emission:	Group 1, Class B

General data:

Housing:	panel instrument
Connection:	push-in direct connection
Connection cable:	0.25-1.5 mm ² (max.)
Dimensions / weight:	96 × 48 × 39 mm (width × height × depth) / 0.1 kg
Protection:	IP 65 (front), IP 30 (rear)

Detailed information see in operating instructions. The Manufacturer maintains the right to change the technical data!