

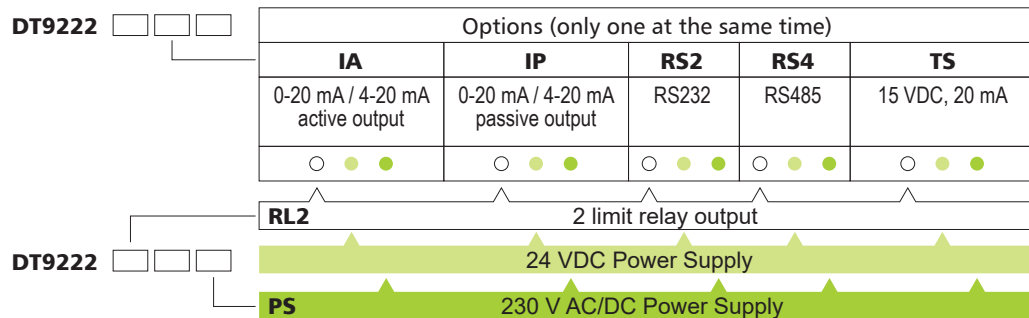
Process Indicator

Product features

- 0-20 mA / 4-20 mA / 0-10 V / 2-10 V / 0-5 V inputs
- 5 digit LED display, 20.3 mm character height
- 0.03% accuracy
- 0-20 mA / 4-20 mA, galvanic isolated output (optional)
- 2 limit relay output (optional)
- RS232 / RS485 communication, MODBUS RTU protocol (optional)
- 24 VDC ±10% or 230 V AC/DC ±10% power supply
- IP 65 protection
- readable even at a 10 m distance



Type designation



The **DT9222 ... Process Indicator** enable linear process variables (0-20 mA / 4-20 mA / 0-10 V / 2-10 V / 0-5 V) to be displayed in engineering units on the control panel. Any optional display range can be assigned to the input signal range. Large 5 digit, 20.3 mm character height LED display with adjustable brightness make process value easily visible at a 10 m distance. The instrument is available with the following output options:

- 2 normally open relay contacts (SPST) for limit switching or for simple control tasks
- 0-20 mA / 4-20 mA galvanic isolated scalable current output *
- RS232 / RS485 galvanic isolated communication output with MODBUS RTU slave protocol *
- transmitter supply galvanic isolated 15 VDC 20 mA*

(* either analogue or communication or transmitter supply option can be implemented at the same time)

The functional parameters can be set by push-buttons on the front panel of the device, through a simple menu system: input selection, averaging of input signals, scaling, display frequency, limit values, limit operating modes, scaling the analogue output, etc. The settings are protected by a two-level password against unauthorised manipulation.

The instruments has two power supply versions: 24 VDC ±10% (DT9222 ...) or 230 V AC/DC ±10% (DT9222 ... PS).

The DT9222 ... is housed in a moulded polycarbonate case which is dust-tight and houseproof to IP 65 to allow for installation in the field or on the control panel.

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 or DC voltage
 Measurement range: 0-20 mA / 4-20 mA / 0-10 V / 2-10 V / 0-5 V
 Overrange: ±50 mA (current input), ±200 V (voltage input)
 Sampling: 12 measurement / sec.
 Number of averaged samples: 1 / 2 / 4 / 8 / 16 / 32 / 64 (selectable)
 Error of displayed value: < 0.02% (Ta = 23 °C ±2 °C)

Output parameters:

Analogue output (optional):

Output type: 1 active or passive DC current (scalable)
 Range: 0-20 mA / 4-20 mA
 Burden: 600 ohm (max.)
 Error: < 0.03% (Ta = 23 °C ±2 °C) < 0.4% (Ta = 0 – +60 °C)

Limit outputs (optional):

Outputs: 2 NO SPST relays
 Contact rating: 30 VDC, 3 ADC / 240 VAC, 3 AAC

Transmitter supply (optional):

Output voltage: 15 VDC ±10% @ 30 mA, 16 VDC ±10% @ 4 mA
 Output current: 30 mA max.
 Isolation voltage: 0.5 kV

Communication interface (optional):

Type: RS232 or RS485 (isolated)
 Protocol: MODBUS RTU slave
 Baud rate: 300 / 600 / 1200 / 2400 / 4800 / 9600 Baud

Display:

Display: 5 digit (+ values), 4 digit (- values), negative sign, decimal point
 Display unit: 5 digit LED, 20.3 mm character height
 Display color: red

Manual controls:

Manual controls: 3 membrane push-buttons on the front cover

Power supply:

Power supply: 24 VDC ±10% (DT9222 ...)
 230 V AC/DC ±10% (DT9222 ... PS)
 Consumption: 3.5 W / 6 VA

Ambient conditions:

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

Electromagnetic compatibility (EMC)

accordance with the standard EN 61326-1

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

General data:

Housing: moulded polycarbonate case, installable as a field or panel instrument
 Connection: IP 65 cable entry, plug-in screw terminal / push-in direct connection
 Connection cable: 0.25-1.5 mm² (max.)
 Dimensions: 167 × 87 × 88 mm (width × height × depth) as a panel instrument
 167 × 107 × 68 mm (width × height × depth) as a field instrument
 Weight: 0.8 kg
 Protection: IP 65

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