

# iTEMP TMT142

## Temperature field transmitter

Transformation of sensor signals into stable and standardized output signals for all industries



More information and current pricing:

[www.endress.com/TMT142](http://www.endress.com/TMT142)

### Benefits:

- Illuminated display, rotatable
- Operation, visualization and maintenance with PC, e.g. using FieldCare operating software
- Sensor monitoring: Failure conditioning, corrosion detection to NAMUR NE 89 and in event of sensor break or sensor short-circuit, NAMUR NE 43 compliant
- Stainless steel housing for Ex d applications, optional
- Approvals: ATEX (Ex ia, Ex d and dust ignition-proof), FM and CSA (IS, NI, XP and DIP)
- Galvanic isolation
- Min./max. process value recorded

### Specs at a glance

- **Accuracy** (Pt100, -50...200 °C)  $\leq 0,15$  K (Pt100, -58...392 °F)  $\leq 0,3$  °F

**Field of application:** Unsurpassed reliability, accuracy and long-term stability in critical processes over all industries. The configurable transmitter not only transfers converted signals from RTD sensors and thermocouples, but also resistance and voltage signals using HART<sup>®</sup> communication. It visualizes the signals on its own backlit display. A rugged field housing allows a direct connection in the process areas. Moreover, a swift and easy operation and maintenance can be realized by PC using operating software.

### Features and specifications

## Temperature transmitters

### Measuring principle

Field transmitter

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### Input

1 x RTD, TC, Ohm, mV

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### Output

1 x analog 4...20 mA

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### Auxiliary power supply

10,5...40 V DC (standard-version)

10,5...30 V DC (Ex-version)

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### Communication

HART-protocol

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### Installation

in field

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### Accuracy

(Pt100, -50...200 °C)  $\leq 0,15$  K

(Pt100, -58...392 °F)  $\leq 0,3$  °F

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### Galvanic isolation

yes

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## Temperature transmitters

### Certification

UL rec. Comp  
FM IS, NI I/1+2/A-D  
ATEX II1G Ex ia IIC T6  
ATEX II2G Ex d IIC T6  
ATEX II3G Ex nA IIC T6  
ATEX IECEX II2D Ex tb IIIC Db  
ATEX II1G Ex ia IIC T6, II2D Ex ia  
IIIC  
CSA IS, NI I/1+2/A-D  
FM XP, NI, DIP I,II,III/1+2/A-G  
CSA XP, NI, DIP I,II,III/1+2/A-G  
CSA General Purpose  
IECEX Ex ia IIC T6 Ga  
IECEX Ex d IIC T6 Gb  
NEPSI Ex ia IIC T4-T6  
NEPSI Ex nA II T4-T6  
NEPSI Ex d IIC T4-T6  
EAC Ex ia IIC T6 Ga  
EAC Ex d IIC T6 Gb

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