

# iTEMP TMT162

## Temperature field transmitter

Electronic monitoring, conversion and display of input signals - all over the industries



More information and current pricing:

[www.endress.com/TMT162](http://www.endress.com/TMT162)

### Benefits:

- High reliability in harsh industrial environments due to dual compartment housing and compact, fully potted electronics
- Backlit display with large measured value, bar graph and status condition indication
- Diagnostics information according to NAMUR NE107
- International approvals such as FM, CSA (IS, NI, XP and DIP) and ATEX (Ex ia, Ex nA nL, Ex d and dust ignition-proof); marine approval
- SIL certification as per IEC 61508:2010
- Galvanic isolation 2 kV (sensor input / current output)

### Specs at a glance

- **Accuracy** (Pt100, -50...200 °C)  $\leq 0,15$  K (HART) (Pt100, -58...392 °F)  $\leq 0,3$  °F (HART) (Pt100)  $\leq 0,1$  K (FF, PA) (Pt100)  $\leq 0,18$  °F (FF, PA)

**Field of application:** Unsurpassed reliability, accuracy and long-term stability in critical processes. The remote configurable transmitter transfers and monitors converted signals from RTD sensors and thermocouples as well as from resistance and voltage signals using selectively HART®, FOUNDATION Fieldbus™-, PROFIBUS® PA-communication. It visualizes the signals on its own backlit display. A field housing allows a direct connection in harsh process areas as well as in hygienic applications as option.

### Features and specifications

## Temperature transmitters

### Measuring principle

Field transmitter

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### Input

2 x RTD, TC, Ohm, mV

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### Output

FOUNDATION Fieldbus H1  
PROFIBUS PA

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### Auxiliary power supply

11,5...42 V DC  
Ex ia: 11,5...30 V DC  
FOUNDATION Fieldbus:  
9...32 V DC  
Ex ia: 10,5...24 V DC  
PROFIBUS PA:  
9...32 V DC  
Ex ia: 10,5...24 V DC

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### Communication

FOUNDATION Fieldbus  
PROFIBUS PA

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### Installation

in field

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### Accuracy

(Pt100, -50...200 °C)  $\leq 0,15$  K (HART)  
(Pt100, -58...392 °F)  $\leq 0,3$  °F (HART)  
(Pt100)  $\leq 0,1$  K (FF, PA)  
(Pt100)  $\leq 0,18$  °F (FF, PA)

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### Galvanic isolation

yes

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## Temperature transmitters

### Certification

UL rec. Comp  
FM IS, NI I/1+2/ABCD  
CSA IS, NI I/1+2/ABCD  
ATEX II1G Ex ia IIC T6  
ATEX II2G Ex d IIC T6  
ATEX II3G Ex nA IIC T6  
ATEX II3G Ex ic IIC T6  
ATEX IECEX II2D Ex tb IIIC Db  
ATEX II1G Ex ia IIC T6, II2D Ex ia IIIC  
FM XP, NI, DIP I,II,III/1+2/A-G  
CSA XP, NI, DIP I,II,III/1+2/A-G  
FM XP, DIP, IS, NI I,II,III/1+2/A-G  
CSA XP, DIP, IS, NI I,II,III/1+2/A-G  
FM+CSA XP,DIP, IS, NI I,II,III/1+2/A-G  
CSA General Purpose  
IECEX Ex d IIC T6 Gb  
IECEX Ex ia, Ex d  
NEPSI Ex ia IIC T4-T6  
NEPSI Ex nA II T4-T6  
NEPSI Ex d IIC T4-T6  
TIIS Ex ia IIC T4  
TIIS Ex ia IIC T6  
TIIS Ex d IIC T6  
Marine approval only for HART-  
protocol  
SIL2/3 only for HART-protocol  
EAC Ex ia IIC T6 Ga  
EAC Ex d IIC T6 Gb

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