

# iTEMP TMT181

## Temperature head transmitter

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



More information and current pricing:

[www.si.endress.com/TMT181](http://www.si.endress.com/TMT181)

### Benefits:

- High accuracy in total ambient temperature range
- Ex certification: ATEX Ex ia and dust ex zone 22 in compliance with EN 50281-1; FM IS; CSA IS
- Fault signal on sensor break or short circuit, NAMUR NE 43 compliant EMC to NAMUR NE 21, CE
- Configuration during measurement using configuration kit
- Galvanic isolation
- Output simulation
- Marine approval

### Specs at a glance

- **Accuracy** (Pt100, -50...200 °C)  $\leq 0,2$  K (Pt100, -58...392 °F)  $\leq 0,4$  °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 resistance thermometers (RTD) and thermocouples (TC), it also transfers resistance and voltage signals. The standardized output signal used for process measurement is a 4 to 20 mA signal. Swift and easy operation, visualization and maintenance by PC using operating software.

### Features and specifications

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**Temperature transmitters****Measuring principle**Head 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**

8...35 V DC (standard-version)

8...30 V DC (Ex-version)

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**Communication**PCP (pc-programmable)

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**Installation**Terminal head form B

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**Accuracy**(Pt100, -50...200 °C)  $\leq 0,2$  K(Pt100, -58...392 °F)  $\leq 0,4$  °F

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**Galvanic isolation**yes

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**Temperature transmitters****Certification**

UL Ex IS, NI  
Marine approval  
GOST Ex i  
FM IS,NI,Class I,Div.1+2,Group ABCD  
CSA IS,NI,Class I,Div.1+2,Group ABCD  
ATEX II3G Ex nA IIC T4/T5/T6  
ATEX II1G EEx ia IIC T4/T5/T6  
ATEX II3D  
ATEX II1G EEx ia IIC T6, II3D  
ATEX II3G Ex nA IIC T6, II3D  
FM+CSA IS,NI,Class I,Div.1+2,Group  
ABC  
CSA General Purpose  
NEPSI Ex ia IIC T4-T6  
NEPSI Ex nA II T4-T6  
GL (German Lloyd)

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