

# iTEMP TMT142B HART<sup>®</sup> 7 temperature transmitter

Smart, rugged, innovative: New generation temperature field transmitter with Bluetooth<sup>®</sup>



More information and current pricing:

[www.us.endress.com/TMT142B](http://www.us.endress.com/TMT142B)

## Benefits:

- Certified for use in hazardous areas: CSA (IS, NI, XP and DIP), ATEX, INMETRO, NEPSI (Ex ia, Ex d, dust ignition-proof)
- Reliable, long-term stable and accurate temperature measurement even under harsh environmental conditions thanks to a pressure-encapsulated single-chamber housing and integrated overvoltage protection
- Bluetooth<sup>®</sup> interface: Save time and effort on commissioning, configuration and maintenance using the Endress+Hauser SmartBlue app
- Predictive maintenance with advanced diagnostic functions and condensed status notification according to NAMUR NE 107
- Newly developed backlit display with large digits for clear process information under all ambient conditions

## Specs at a glance

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

**Field of application:** The single-channel iTEMP TMT142B transmitter with backlit display delivers highly reliable, accurate and long-term stable measurements in critical processes and hazardous areas. It offers **secure** remote operation via its integrated Bluetooth<sup>®</sup> interface ( **Endress+Hauser SmartBlue app**), packaged in a robust single-chamber field housing. It converts inputs from resistance sensors (RTD), thermocouple (TC), resistances ( $\Omega$ ) and voltage transmitters (mV) to a 4 to 20 mA signal and **HART<sup>®</sup> 7 communication**.

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## Features and specifications

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### 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**

11...36 V DC (standard-version)

11...30 V DC (Ex-version)

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**Communication**

HART-protocol

Bluetooth® wireless technology

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**Installation**

in field

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**Accuracy**

(Pt100, -50...200 °C)  $\leq 0,1$  K

(Pt100, -58...392 °F)  $\leq 0,18$  °F

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**Galvanic isolation**

yes

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## Temperature transmitters

### Certification

ATEX II1G Ex ia IIC T6  
ATEX II3G Ex ic IIC T6 Gc  
ATEX II3D Ex tc IIIC Dc  
ATEX II3G Ex nA IIC T6  
ATEX IECEx II1G Ex ia IIC T6, II2D Ex ia IIIC  
ATEX II3G Ex nA IIC T6, II3D  
ATEX II2G Ex db IIC T6 Gb, II2D Ex tb IIIC Db  
CSA C/US General Purpose  
CSA C/US IS, NI I/1+2/A-D  
CSA C/US XP, NI, DIP I, II, III/1+2/A-G  
EAC Ex ia IIC T6 Ga  
EAC Ex d IIC T6 Gb  
IECEX Ex d T6 Gb, Ex tb IIIC Db  
INMETRO Ex ia IIC T6 Ga  
INMETRO Ex d T6 Gb, Ex tb IIIC Db  
INMETRO Ex nA IIC T6 Gc  
NEPSI Ex ia IIC T6 Ga  
NEPSI Ex d IIC T6 Gb  
NEPSI Ex nA II T6 Gc  
UK II1G Ex ia IIC T6 Ga  
UK II3G Ex ic IIC T6 Gc  
UK II2D Ex tb IIIC Db  
UK II3D Ex tc IIIC Dc  
UK II1G Ex ia IIC T6 Ga, II2D Ex ia IIIC Db  
UK II3G Ex nA IIC T6 Gc, II3D Ex tc IIIC Dc  
UK II2G Ex db IIC T6 Gb, II2D Ex tb IIIC Db  
ATEX IECEx II1G Ex ia IIC T6 Ga  
ATEX IECEx II2D Ex tb IIIC Db  
ATEX IECEx II2G Ex db IIC T6 Gb, II2D Ex tb IIIC  
Db

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