

iTEMP TMT82 temperature transmitter

HART® temperature transmitter as head, field or DIN rail device with two universal sensor inputs suitable for use in hazardous areas and SIL 2



More information and current pricing:

www.us.endress.com/TMT82

Benefits:

- Robust temperature transmitter delivering precise, long-term stable measurements for high plant availability
- SIL certification up to SIL2, SC3 according to IEC 61508:2010
- Versatile mounting and housing options: terminal head form B, DIN rail, field housing with separate terminal compartment, integrated display (**TID10**)
- Sensor-transmitter-matching for highest measurement accuracy
- Sensor and hardware failure detection; diagnostic status information according to NAMUR NE 107
- Time-saving installation: Tool-free wiring with push-in terminal technology

Specs at a glance

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

Field of application: The iTEMP TMT82 is a highly reliable, accurate and long-term stable temperature transmitter for industrial processes requiring high availability. The versatile 2-channel device converts universal sensor inputs such as thermocouples or RTD into stable, scalable 4 to 20 mA output signals and **HART®** communication. With its built-in smart sensor monitoring capability and diagnostic status information according to NAMUR NE 107, the **SIL 2**, SC3 certified transmitter increases process safety and uptime.

Features and specifications

Temperature transmitters

Measuring principle

Head transmitter

Input

2 x RTD, TC, Ohm, mV

Output

1 x analog 4...20 mA / HART

Auxiliary power supply

11...42 V DC (head transmitter)

12...42 V DC (Din rail device)

11/12...30 V DC (Ex ia)

Communication

HART-protocol

Installation

Terminal head form B, DIN-Rail housing or field mount housing

Accuracy

(Pt100, -50...200 °C) $\leq 0,1$ K

(Pt100, -58...392 °F) $\leq 0,18$ °F

Galvanic isolation

yes

Temperature transmitters

Certification

ATEX Ex ia, Ex ic, Ex tb, Ex tc, Ex nA, Ex d

ATEX IECEx Ex ia

IECEx Ex ia, Ex tb, Ex d

CSA C/US General Purpose

CSA IS, NI, XP, DIP

FM IS, NI, XP, DIP

FM+CSA IS, NI

INMETRO Ex ia [ia Ga], Ex d, Ex tb

NEPSI Ex ia, Ex d, Ex tb, Ex ec

EAC Ex ia, Ex d

UKCA Ex ia, Ex tb, Ex tc, Ex nA, Ex db

KC Ex

IND Ex

PESO Ex

More information www.us.endress.com/TMT82