The Series 642 programmable HART® field temperature transmitter is a 2-wire unit with analog output. It includes input for RTDs; resistance inputs in 2-wire, 3-wire, and 4-wire connections; thermocouples and voltage signals. The transmitter can be supplied with or without a digital display, in either a general-purpose aluminum housing, or explosion-proof aluminum housing. The Series 642 can be programmed with a PC or a HART® protocol handheld terminal. When supplied with a digital display, the LC screen shows the current measured value and a bar graph with limit value violation indicator.

**Programmable Field Temperature Transmitter**

Programmable temperature transmitter for resistance thermometers (RTDs), thermocouples, resistance inputs and voltage inputs:

- Adjustable via HART® protocol.

**Application Areas**

- Temperature field transmitter with HART® protocol for converting various input signals to an analog, scaleable (4 to 20) mA output signal
- Input:
  - Resistance thermometer (RTD)
  - Thermocouples (TC)
  - Resistance input (Ohm)
  - Voltage input (mV)
- HART® protocol for operating the device on site using a handheld communicator or remotely via the PC

**Features and Benefits**

- Universally programmable with HART® protocol for various input signals
- Illuminated display, rotatable
- Operation, visualization and maintenance with PC; e.g. using TransComm Light operating software
- 2-wire technology, analog output (4 to 20) mA
- Undervoltage detection
- Highly accurate in entire operating temperature range
- Approvals:
  - FM and CSA (IS, NI, XP and DIP)
  - Galvanic isolation
  - Output simulation
  - Min./max. process values recorded
  - Customized measuring range setup or expanded SETUP; see questionnaire

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