

# Rail-mounted smart temperature transmitter type LI-24, LI-24Ex



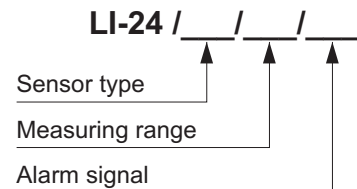
**Outer dimensions:**  
width: 27,5mm  
height: 80mm  
depth: 106,7mm

- ✓ Galvanic insulation (In, out)
- ✓ Programmable sensor type
- ✓ Programmable measuring range
- ✓ Resistant thermoresistance line compensation
- ✓ Compensation of thermocouple cold junction
- ✓ Output signal 4...20mA + Hart protocol
- ✓ Ambient temperature from -25 to +80 °C
- ✓ Rail mounting system.
- ✓ Autodiagnostic system
- ✓ Hart protocol
- ✓ ATEX certificate

II 1G Ex ia IIC T4/T5  
I M1 Ex ia I  
FTZU 08 ATEX 0160x



## Ordering procedure



## Technical data

|                               |   |
|-------------------------------|---|
| Input signal                  | K, J, S, B, N, T voltage<br>Pt100, Ni100 resistance                             |
| Limit process                 | - 10mV < E < 100mV<br>or -100mV < E < 1000mV<br>0Ω < R < 400Ω or 0Ω < R < 2000Ω |
| Min. measuring range          | 10mV or 10Ω   |
| Output signal                 | 4 – 20mA  |
| Power supply                  | 13...50V DC   |
| Max. Wires resistance         | 500Ω  |
| Alarm signal                  | 21,5mA or 3,75 mA or setting by user  |
| Sensor current                | 0,42mA  |
| Galvanic insulation           | Optoelectrical  |
| Accuracy                      | ± 0,1%  |
| Time constant                 | 0,3s  |
| Additional electronic damping | 0..30s  |
| Ambient temperature           | -25...+75°C   |

## Application and function

The temperature transmitter LI-24 is applicable to converting resistance of temperature or voltage of thermocouple sensor to standard current signal 4-20mA. The transmitter has two separate measuring channels enabling measurement of difference temperature, average, average with redundancy, max or min temperature. Transmitter has compensation of ambient temperature influence and compensation of thermocouple cold junction using internal/external (Pt100) sensor or constant temperature.

Most of parameters such as: sensor type, measuring range, current alarm signal when electric circuit is broken, output characteristic correction, user characteristic (60 points) are programmed using PC with RS/Hart converter and Aplisens MPT2 configuration software or KAP-03 communicator. For request Aplisens can set temperature transmitter parameters like measuring range, type of sensor. Their values are printed on label. Transmitter for rail mounting (TS-35).

## Electrical diagrams.

