

8-channel Analog Input



RTD and Ω

8206-TI-IS

- ◆ 8 input channels
- ◆ intrinsically safe field circuits
- ◆ RTD and Ω
- ◆ 2-, 3- and 4-wire RTD format
- ◆ channels independently configurable
- ◆ channels are o/c failure independent

MODULE SPECIFICATION

See also System Specification

INPUTS

Number of channels8
 RTD inputs(2-, 3- or 4-wire)
Pt100, Pt500 to BS EN60751: 1996
Ni120 to DIN 43 760: 1985
jPt100 to JIS C1604: 1981
user definable linearisation table, note 1
 RTD input

| Input type | Range |
|--------------------|------------------|
| RTDs: Pt100, Pt500 | - 200 to + 850°C |
| jPt100 | - 200 to + 650°C |
| Ni120 | - 60 to + 250°C |

Resistance input

| Excitation current | Range |
|--------------------|--------------------|
| 211 μ A | 0 to 110 Ω |
| 211 μ A | 0 to 280 Ω |
| 211 μ A | 0 to 470 Ω |
| 48 μ A | 0 to 2000 Ω |

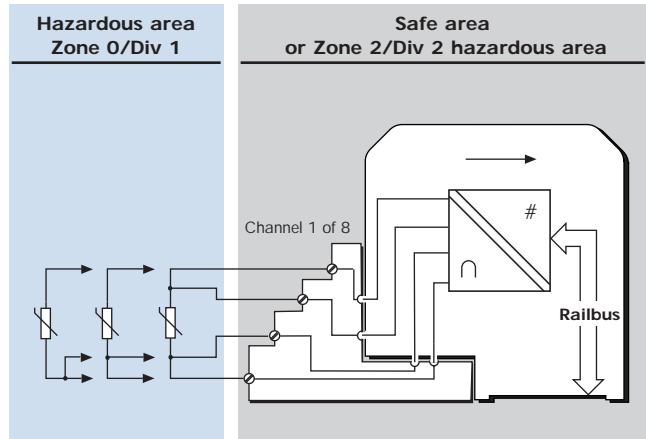
Accuracy (% of span), see note 2

| Tamb | (RTD & Ω inputs) |
|----------------|-------------------------|
| 25°C | \pm 0.05% |
| +10 to + 40°C | \pm 0.1% |
| - 40 to + 70°C | \pm 0.2% |

Cable resistance per loop50 W (max)
 RTD excitation current211 μ A (nom.)
 Compliance voltage of current source6.8 V
 Resolution16 bits
 Series mode rejection.....> 50 dB @ 50/60 Hz
 Isolation (any channel to Railbus).....60 V peak

Note 1: Consult MTL for support in BIM/configurator.

Note 2: For Pt500 and 0 to 2000 Ω ranges a deviation of 0 to + 0.1% of reading is to be added for channel 1 or any channel preceded by a lower resistance range.



CONFIGURABLE PARAMETERS

Sensor typeuser selectable
 Alarmshigh and low
 Input dead zoneuser defined value
 Selectable input filteringoff /2 reading avg./running avg.
 Drive on open circuit fault disabled /upscale /downscale
 Channel statusactive/ inactive
 Offset (2-wire RTD mode).....user defined value

RESPONSE TIME

Signal change to availability on Railbus600 ms (max.)

SAFETY

Field wiring protection[EEx ia] IIC
 Safety Description (all channels combined)
Uo = 16.4 V, Io = 217 mA, Po = 0.9 W
 FM entity parameters
Voc = 16.4 V dc, Isc = 350 mA, Po = 718 mW

POWER SUPPLIES

IS Railbus (12V) current120 mA (max.)
 Power dissipation within module1.5 W (max.)

MECHANICAL

Module Key CodeC3
 Module width42 mm
 Weight245 g

FIELD TERMINAL

| Field wiring type | Recommended Field Terminal |
|------------------------|----------------------------|
| Intrinsically safe RTD | 8626-FT-IS |

