

# 8-channel Analog Input

4–20 mA with HART®

## 8201-HI-IS

- 8 single-ended input channels
- Intrinsically safe field circuits
- Conventional 4–20 mA
- HART pass-through
- HART variable and status reporting
- For 2-wire transmitters
- In-built power supply

### MODULE SPECIFICATION

See also *System Specification*

#### INPUTS

##### Number of channels

- 8

##### Nominal signal range (span)

- 4 to 20 mA

##### Full signal range

- 0.5 to 22 mA

##### Line fault detection

- Short circuit current – >21.5 mA
- Open circuit current – <0.5 mA

##### Voltage to transmitter @ 20mA

- 15 V (min.)

##### Accuracy (@25 °C)

- ± 20 µA

##### Resolution

- 16 bits

##### Temperature Stability

- (-40 °C to +70 °C) – ± 0.006% of span per °C

##### Isolation

- Any channel to Railbus – 60 V ac
- Between channels in same module – None

### CONFIGURABLE PARAMETERS

#### Alarms

- High, high-high, low, low-low

#### Alarm deadband (hysteresis)

- User defined value

#### Input filter time constant

- User defined value

#### Input dead zone

- User defined value

#### Drive on failsafe

- User defined value

#### Channel status

- Active / Inactive

#### HART comms

- Enable / Disable

### RESPONSE TIME

#### Analog signal change to availability on Railbus

- 4–20 mA mode – 33 ms (max.)
- HART mode – 0.75 s per channel

### SAFETY

#### Field wiring protection

- [EEx ia] IIC

#### Safety description (each channel)

- $U_o = 28\text{ V}$ ,  $I_o = 93\text{ mA}$ ,  $P_o = 0.65\text{ W}$

#### FM entity parameters

- $V_{oc} \leq 28\text{ V dc}$ ,  $I_{sc} \leq 93\text{ mA}$ ,  $C_o \leq 0.14\text{ }\mu\text{F}$ ,  $L_o \leq 4.38\text{ mH}$

### POWER SUPPLIES

#### IS Railbus (12V) current (all channels @ 22 mA)

- 600 mA (typ.)

#### Power dissipation within module

- 4.2 W (max.)

### MECHANICAL

#### Module Key Code

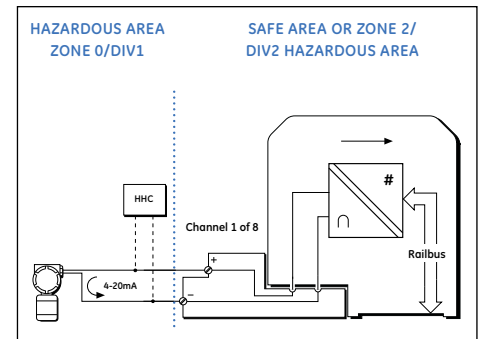
- A1

#### Module width

- 42 mm

#### Weight

- 260 g



### FIELD TERMINALS

Field Wiring Type	Recommended Field Terminal
Intrinsically safe standard	8621-FT-IS
Intrinsically safe loop disconnect	8622-FT-IS