8-channel Analog Input

4–20 mA with HART®

8202-HO-IS

- 8 single-ended ouput channels
- Intrinsically safe field circuits
- 4–20 mA for I/P converters
- Open-circuit field wiring detection
- HART pass-through
- HART variable and status reporting

MODULE SPECIFICATION

See also System Specification

OUTPUTS

Number of channels
- 8

Nominal signal range (span)
- 4 to 20 mA

Full signal range
- 1 to 22 mA

Voltage to load
- 13 V min. @ 20 mA

Load resistance
- 0 to 650 Ω max.

Accuracy (@ 25 °C)
- ± 20 µA

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

Resolution
- 12 bits

Open circuit detection threshold
- > 685 Ω (typ.)

(also detects loads greater than driveable range)

Isolation
- Any channel to Railbus – 60 V ac
- Between channels) – None

CONFIGURABLE PARAMETERS

Output initialisation state
- Predefined value

Drive on "fail-safe"
- Upscale / downscale / last value

Channel status
- Active / Inactive

HART variable and status reporting
- Enable / Disable

RESPONSE TIME

Railbus command to output change
- 4-20 mA mode
  - 20 ms (typ.)
  - 80 ms* (max.)
- HART mode
  - 1 s per channel

SAFETY

Location of module

Field wiring protection
- [EEx ia] IIC

Safety description (each channel)
- V_o = 24.6 V, I_o = 93 mA, P_o = 0.57 W

FM entity parameters
- $V_{oc} \leq 24.6$ V dc, $I_{sc} \leq 93$ mA
- $C_a \leq 0.42$ µF, $L_a \leq 4.2$ mH

POWER SUPPLIES

IS Railbus (12V) current
- All channels @ 22 mA into 650 Ω load) – 630 mA

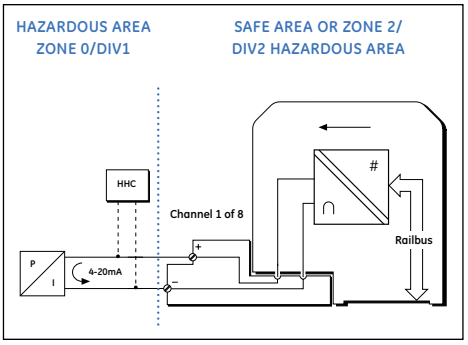
Power dissipation within module
- 4.1 W (max.)

MECHANICAL

Module Key Code
- A4

Module width
- 42 mm

Weight
- 265 g



FIELD TERMINALS

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

* *Time to reach 90% level for 4-20 mA step into 650 Ω load*