

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

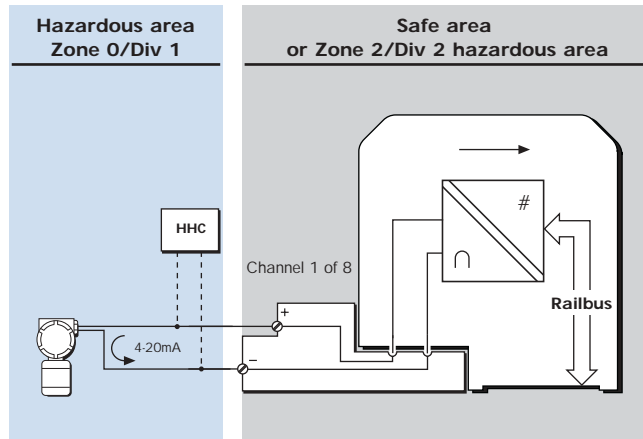
Number of channels8
 Nominal signal range (span)4 to 20 mA
 Full signal range0.5 to 22 mA
Line fault detection
 Short circuit current > 21.5 mA
 Open circuit current < 0.5 mA
Voltage to transmitter @ 20mA15 V (min.)
Accuracy (@25 °C) ± 20 µA
Resolution16 bits
Temperature Stability
 (– 40 °C to +70 °C) ± 0.006% of span per °C
Isolation
 (any channel to Railbus)60 V ac
 (between channels in same module)none

CONFIGURABLE PARAMETERS

Alarmshigh, high-high, low, low-low
Alarm deadband (hysteresis)user defined value
Input filter time constantuser defined value
Input dead zoneuser defined value
Drive on failsafeuser defined value
Channel status active /inactive
HART comms enable /disable

RESPONSE TIME

Analog signal change to availability on Railbus
 4–20 mA mode33 ms (max.)
 HART mode0.75 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 $V_{oc} \leq 28\text{ V dc}$, $I_{sc} \leq 93\text{ mA}$
 $C_a \leq 0.14\text{ }\mu\text{F}$, $L_a \leq 4.38\text{ mH}$

POWER SUPPLIES

IS Railbus (12V) current (all channels @ 22 mA)
600 mA (typ.)
Power dissipation within module4.2 W (max.)

MECHANICAL

Module Key CodeA1
Module width42 mm
Weight260 g

FIELD TERMINAL

Field wiring type	Recommended Field Terminal
Intrinsically safe standard	8621-FT-IS
Intrinsically safe loop disconnect	8622-FT-IS

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