

16-channel Discrete Input

24 V dc, non-isolated, module-powered

8121-DI-DC

- 16 input channels
- For dry contact switches
- 24 V dc provided on input high side
- Returns commoned internally
- Pulse counting option
- 24 V dc bussed field power required

MODULE SPECIFICATION

See also *System Specification*

INPUTS

Number of channels

- 16

OFF current

- < 0.3 mA

ON current

- >1.2 mA

Wetting current

- 2.8 mA (typ.)

Minimum pulse width detected

- 5 ms

Max input freq in pulse counting mode (no-debounce)

- 100 Hz

Isolation

- Any channel to Railbus – 250 V ac

CONFIGURABLE PARAMETERS

Selectable input filter

- Fast, slow or user defined

(User defined permits 0 to 512 ms values in 2ms steps)

Latch inputs

- Enable / Disable

Latch polarity

- Latch on high / latch on low

Pulse counting

- Enable / Disable

RESPONSE TIME

I/O response time

- Field event to new data available on Railbus – 5 ms (max.)

SAFETY

FM non-incendive field wiring parameters (each channel)

- $V_{oc} = 30\text{ V}$; $I_{sc} = 3.5\text{ mA}$; $C_o = 0.12\text{ }\mu\text{F}$; $L_o = 1000\text{ mH}$

POWER SUPPLIES

Railbus (12V) current

- 90 mA (typ.)
- 135 mA (max.)

Bussed Field Power

- 60 mA, @ 18–30 V dc

MECHANICAL

Module Key Code

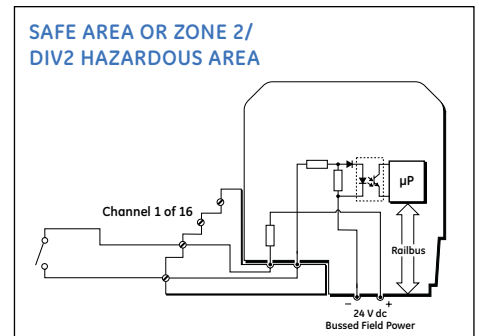
- E1

Module width

- 42 mm

Weight

- 210 g



FIELD TERMINALS

Field Wiring	Recommended Field Terminal	Compatible Field Terminal
General purpose	8617-FT-NI [†] 16 Channel DI	—
Class 1, Div 2 or Zone 2 hazardous area	8617-FT-NI [†] 16 Channel DI	—

[†] External fusing of the Field Power supply is recommended in order to protect the field wiring.