



## R-9017C2H

16-ch Current Input Redundant Module  
with HART Master Interface

### Features

- 16 current input channels
- Overrange measurement (0~24 mA)
- Built-in HART master interface
- 16-bit A/D Converter
- Channel disconnection detection
- Termination board disconnection detection
- Redundant switching time (<1 ms)



### Introduction

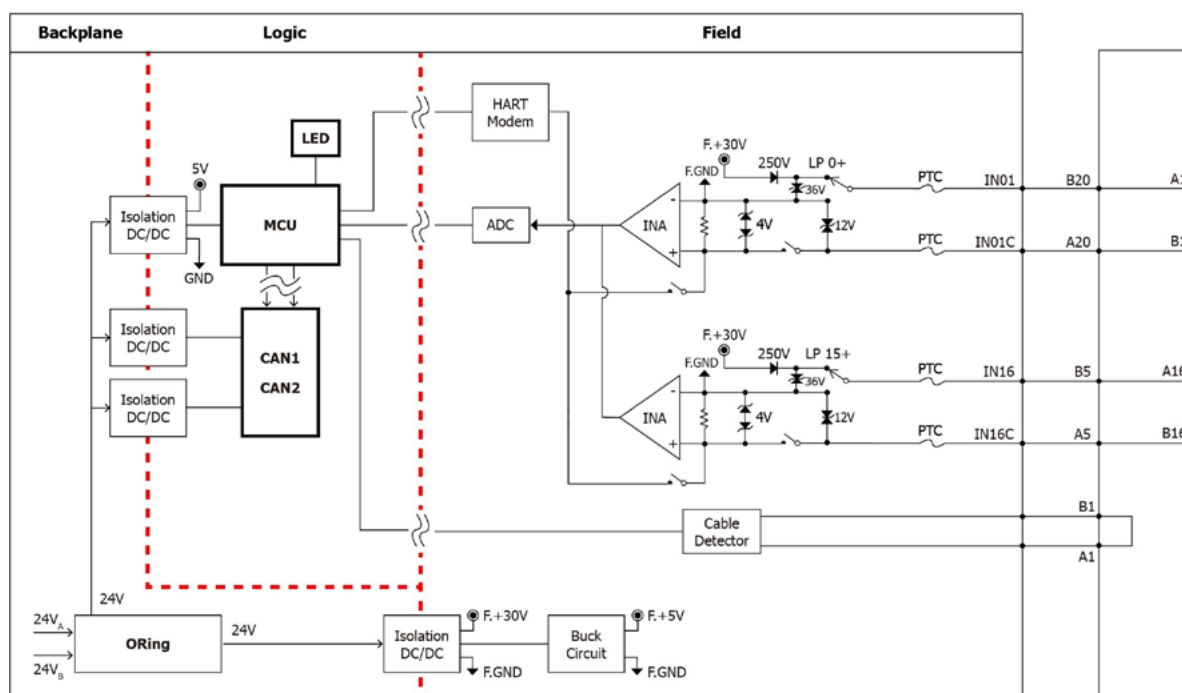
R-9017C2H is a 16-bit 16-channel analog input module that provides a 10Hz sampling rate, a current input range of 4~20mA, an error value of  $\pm 0.05\%$ , enabling high-accuracy applications, and supports  $\pm 25\%$  over-range measurements (accuracy not guaranteed). In addition to current input, R-9017C2H also has a built-in HART master interface, which can remotely maintain equipment through HART. It also provides 3000 VDC isolation between the power supply and the backplane bus, making it better able to prevent noise interference in industrial environments without affecting the RIO-98x0 system.

### Specifications

Features	
Redundant	Yes (Switching time < 1ms)
Disconnection Detection	Yes
Over-Current Protection	Yes
HART	Yes, supports HART master
LED Indicator	1 PWR, 1 MOD, 1 ACT, 1 DX, 1 ERR
	LED 0~15 for CH Hi/Lo Alarm LED 16~31 for CH Break Line
Analog Input	
Number of Channels	16
Type	4~20 mA (Support $\pm 25\%$ overrange)
Max. Input Current	24 mA
Resolution	16 bit
Sampling Rate	10 Samples/Sec.(per channel)
Accuracy	$\pm 0.05\%$ FSR
Zero Drift	$\pm 0.002$ LBS/°C
Span Drift	$\pm 5$ ppm/°C
Common Mode Rejection	86 dB
Normal Mode Rejection	100 dB

Analog Input	
Input Impedance	85.3 $\Omega \pm 1\%$
Date Range	-2500~12500 (0~24 mA)
Isolation	3000 VDC
HART	
Mode	Master, Monodrop (Point-to-Point)
Certification	
EMC	EN 61000-6-2 (EMS) EN 61000-6-4 (EMI) IEC/EN 61000-4-2 (ESD) IEC/EN 61000-4-4 (EFT)
General	
Termination Board	RDB-S01 / RDB-D01
Max. Power Consumption	2.4 W
Operating Temp.	-25 ~ 70 °C
Storage Temp.	-30 ~ 75 °C
Humidity	5 ~ 95 % RH, Non-condensing
Weight	260 g
Dimensions (WxLxH)	33 mm x 129 mm x 130 mm

## I/O Structure

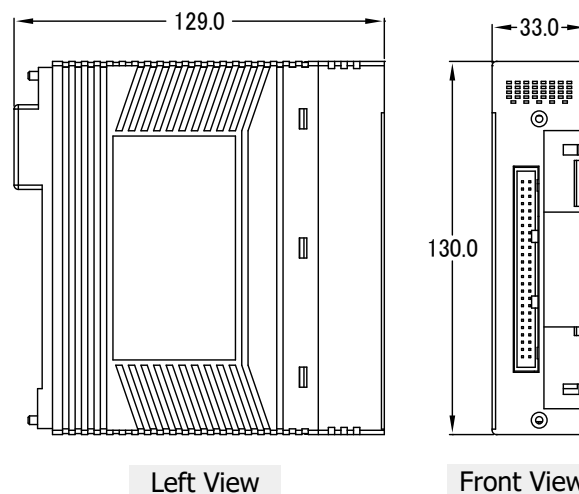


## Pin Assignment



Pin Assignment Name	Terminal No.	Pin Assignment Name
IN01	A1	B1
IN02	A2	B2
IN03	A3	B3
IN04	A4	B4
IN05	A5	B5
IN06	A6	B6
IN07	A7	B7
IN08	A8	B8
IN09	A9	B9
IN10	A10	B10
IN11	A11	B11
IN12	A12	B12
IN13	A13	B13
IN14	A14	B14
IN15	A15	B15
IN16	A16	B16
X	A17	B17
X	A18	B18
X	A19	B19
BK	A20	BK

## Dimensions (Units: mm)



## Ordering Information

<b>R-9017C2H CR</b>	16-ch Isolated Current Input Redundant Module with HART master Interface (RoHS)
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## Accessories

<b>RDB-S01 CR</b>	Termination board for single non-isolated analog modules (RoHS)
<b>RDB-D01 CR</b>	Termination board for duplex non-isolated analog modules (RoHS)