ICP DAS

R-9028CH

8-ch, isolated 4~20mA output, HART master

Features

- 8 current output channels
- Power-on value & Safety value
- Built-in HART master interface
- 16-bit D/A converter
- Channel disconnection detection
- Termination board disconnection detection
- Redundant switching time (<1 ms)
- Supports automatic detection of output current accuracy
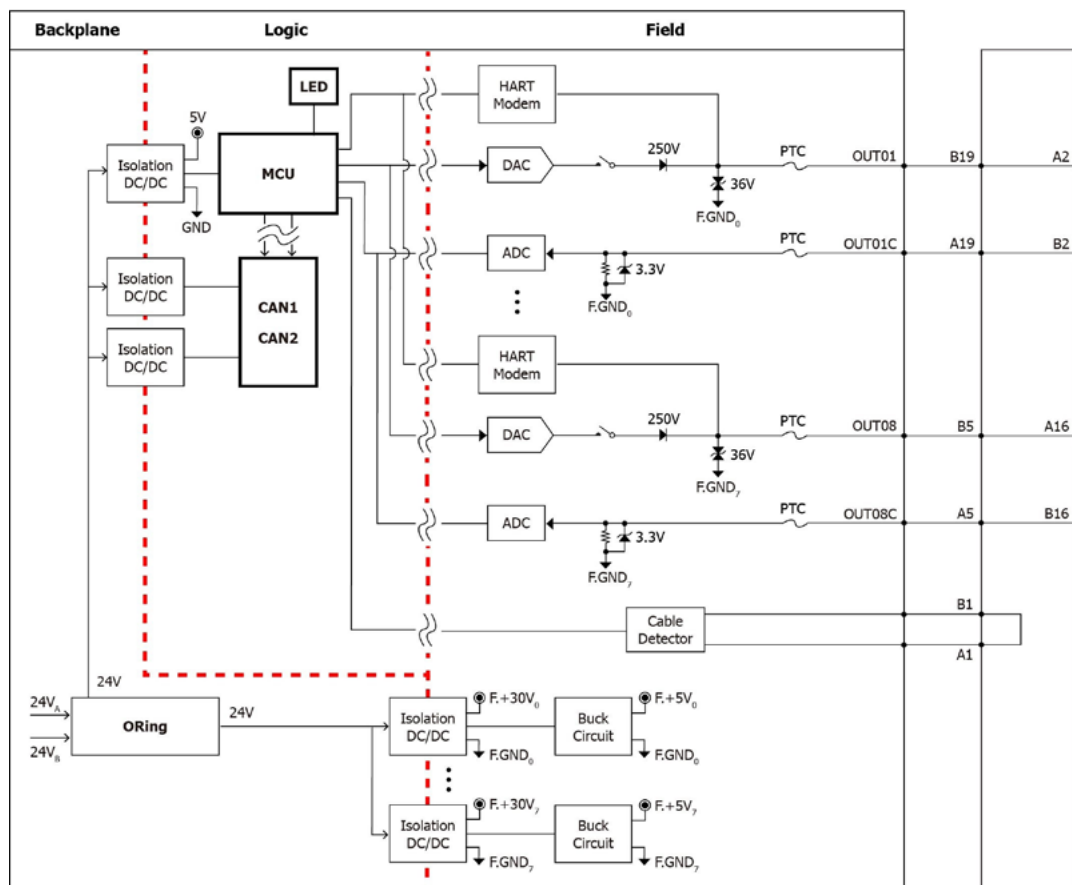
CE UKCA RoHS

Introduction

R-9028CH is a 16-bit 8-channel isolated current output module. Users can customize the power on value and safety value through the setting software. It has an error value of ±0.05% to achieve high accuracy application. It also has a built-in HART master interface, which can remotely maintain equipment through HART. It also provides 3000 VDC isolation between the channels 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
Power-on Value	Yes
Safety Value	Yes
LED Indicator	1 PWR, 1 MOD, 1 ACT, 1 DX, 1 ERR
	LED 0~7: CH High/Low Alarm LED 16~23: CH Break Line

Analog Output	
Number of Channels	8
Type	4~20 mA (Support ±25% overrange)
Max. Current	24 mA
Resolution	16 bit
Accuracy	±0.05% FSR
Zero Drift	±1.5 ppm/°C
Span Drift	±3 ppm/°C
Output Capability	<1K Ω
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-S09 / RDB-D09
Max. Power Consumption	5.6 W
Operating Temp.	-25 ~ 70 °C
Storage Temp.	-30 ~ 75 °C
Humidity	5 ~ 95 % RH, Non-condensing
Weight	360 g
Dimensions (WxLxH)	33 mm x 129 mm x 130 mm

■ I/O Structure

■ Pin Assignment

Pin Assigment Name	Terminal No.		Pin Assigment Name
X	A1	B1	X
OUT01	A2	B2	OUT01C
X	A3	B3	X
OUT02	A4	B4	OUT02C
X	A5	B5	X
OUT03	A6	B6	OUT03C
X	A7	B7	X
OUT04	A8	B8	OUT04C
X	A9	B9	X
OUT05	A10	B10	OUT05C
X	A11	B11	X
OUT06	A12	B12	OUT06C
X	A13	B13	X
OUT07	A14	B14	OUT07C
X	A15	B15	X
OUT08	A16	B16	OUT08C
X	A17	B17	X
X	A18	B18	X
X	A19	B19	X
BK	A20	B20	BK

■ Dimensions (Units: mm)

129.0

33.0

130.0

Left View

Front View
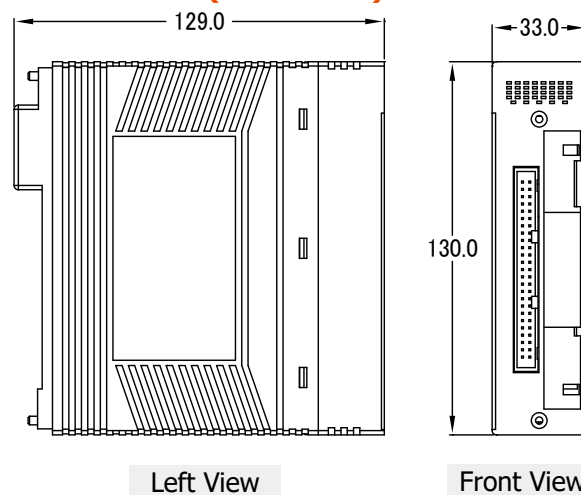
■ Ordering Information

R-9028CH CR	8-ch, isolated 4~20mA output, HART master (RoHS)

■ Accessories

RDB-S09 CR	Single I/O termination board (RoHS), for R-9017C1H, R-9028V1, R-9028CH, R-9084
RDB-D09 CR	Duplex I/O termination board (RoHS), for R-9017C1H, R-9028V1, R-9028CH, R-9084