



R-9084

8-ch Isolated High Speed Pulse Input Redundant Module

Features

- 8 up-counter/frequency channels
- 32-bit counter
- 1 ~ 32767 us digital filter
- Falling/Rising/Both edge trigger
- Termination board disconnection detection
- Redundant switching time (<1 ms)



Introduction

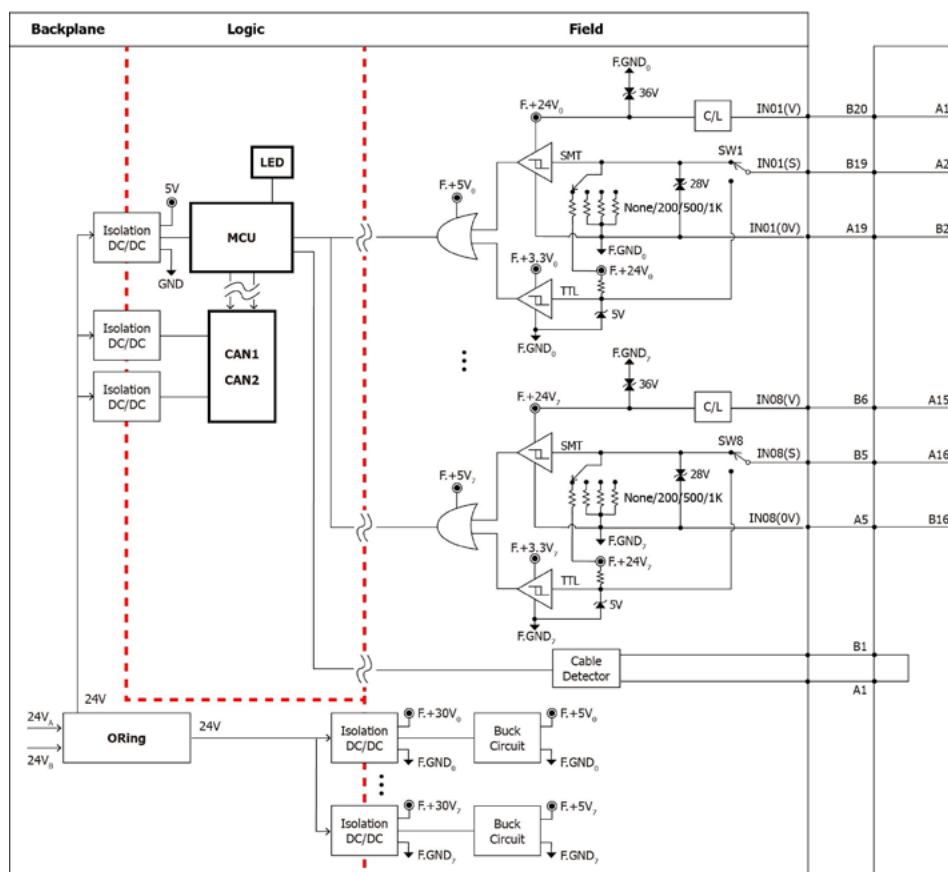
The R-9084 is a 32-bit high speed up-counter/frequency module. It can count up to 10KHz input signal, and accuracy of the frequency mode is $\pm 0.4\%$ FSR. The R-9084 features many diagnostic like some failures of communication, EEPROM, WDT, decoder, etc. When the modules are in the redundant mode and a failure occurs the slave module will take over as soon as possible. It also provides 3000VDC 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
LED Indicator	1 PWR, 1 MOD, 1 ACT, 1 DX, 1 ERR 8 channel status
Pulse input	
Number of Channels	8
Type	CH+/CH-: 3VDC/8VDC Level with schmitt trigger TTL/CH-: TTL Level trigger
Digital Filter	Yes (1~32767us, default is off)
Input Signal Level (Schmitt) between CH+ and CH-	
V _H (high level):	from 8 VDC to 30 V _{DC}
V _L (low level):	less than 3V _{DC}
Input Signal Level (TTL) between TTL+ and CH-	
V _H (high level):	larger than 2 V _{DC}
V _L (low level):	less than 0.8 V _{DC}
Input Impedance	200/500/1K Ω or none
Max. Input Current	24mA @ 24VDC / 30mA @ 30VDC (Input impedance: 1K)
Pulse Edge	Up / Down edge trigger

Pulse input	
Loop Power	LP / CH- voltage: 27~28VDC (<27mA/CH.)
Input Frequency Range	1 Hz ~ 10 KHz
Input Reaction Time	<3 ms
Isolation	3000 V _{DC}
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	6.8 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

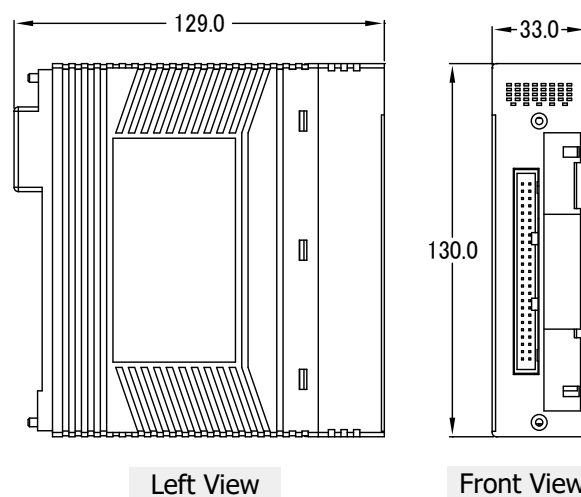


Pin Assignment



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

Dimensions (Units: mm)



Ordering Information

R-9084 CR	8-ch Isolated High Speed Pulse Input Redundant Module (RoHS)
------------------	--

Accessories

RDB-S09 CR	Termination board for single isolated analog modules and single pulse input modules (RoHS)
RDB-D09 CR	Termination board for duplex isolated analog modules and duplex pulse input modules (RoHS)