



F-8017C2

16-ch Isolated Current Input Redundant Module

Features

- 16 current input channels
- Overrange measurement (0~24 mA)
- 16 bit A/D Converter
- Termination board break off detection
- Redundant switching time (<100 us)



Introduction

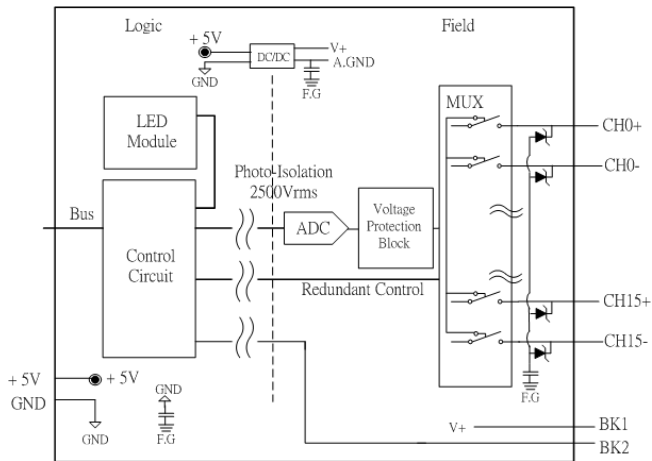
F-8017C2 is a 16-bit 16-channel analog differential input module that provides a 1000Hz sampling rate, a current input range of 4~20mA, an error value of $\pm 0.05\%$, enabling high-accuracy applications, and supports $\pm 25\%$ over-range measurements (accuracy not guaranteed). It also provides 3000 V_{DC} isolation between the power supply and the backplane bus, making it better able to prevent noise interference in industrial environments without affecting the iDCS-8000 system.

Specifications

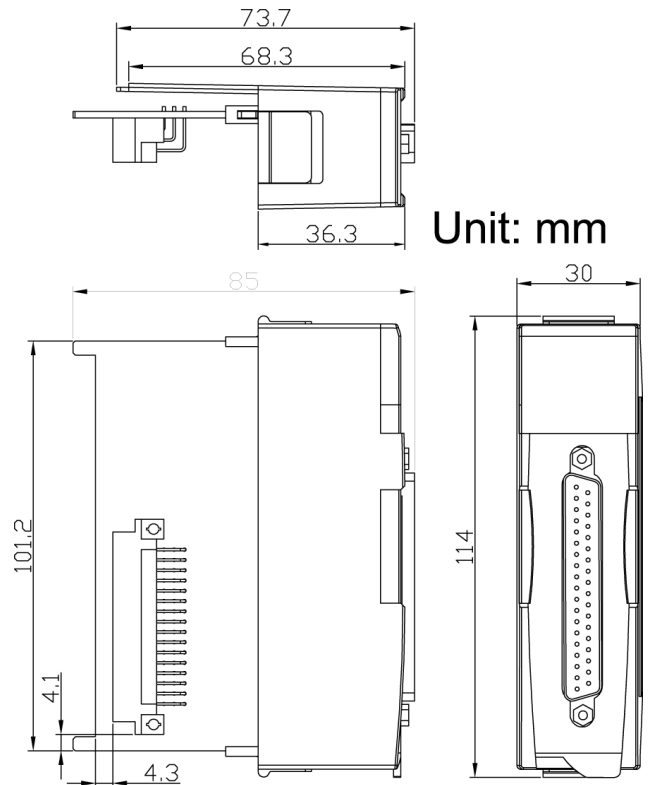
Feature	
Redundant	Yes (Switching time < 100us)
Termination board break off detection	Yes
Over-Current Protection	Yes
LED	
LED indicator	1 RUN, 1 ACT, 1 DUX
Analog Input	
Number of channels	16
Type	4~20 mA (Support $\pm 25\%$ overrange)
Max. Input Current	24 mA
Resolution	16 bit
Sampling Rate	1000 Samples/Sec.
Accuracy	$\pm 0.05\%$ FSR
Zero Drift	$\pm 20 \mu\text{V}/^\circ\text{C}$
Span Drift	$\pm 25 \text{ ppm}/^\circ\text{C}$
Common Mode Rejection	86 dB
Normal Mode Rejection	100 dB
Input Impedance	230 Ω
Date Range	-2500~12500 (0~24 mA)
Isolation	3000 V _{DC}

Certification	
Emission	IEC 61000-6-4
Immunity	IEC 61000-6-2
	IEC 61000-4-3
	IEC 61000-4-4
	IEC 61000-4-6
	IEC 61000-4-9
	IEC 61000-4-10
IEC 61000-4-12	
General	
Termination Board	DN-AIO-M
Max. Power Consumption	2.2 W
Operating Temperature	-25 ~ 75 $^\circ\text{C}$
Storage Temperature	-30 ~ 80 $^\circ\text{C}$
Humidity	5 ~ 95 % RH, Non-condensing
Weight	300g
Dimensions (WxLxH)	30mm x 85mm x 115mm

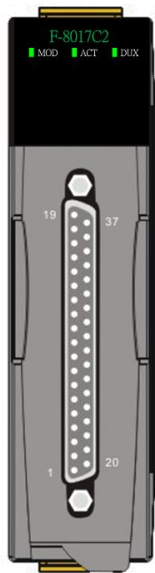
Internal I/O Structure



Dimension (unit: mm)



Pin Assignment



Pin Assignment Name	Terminal No.	Pin Assignment Name
X	19	37
X	18	36
CH15-	17	35
CH14-	16	34
CH13-	15	33
CH12-	14	32
CH11-	13	31
CH10-	12	30
CH9-	11	29
CH8-	10	28
CH7-	09	27
CH6-	08	26
CH5-	07	25
CH4-	06	24
CH3-	05	23
CH2-	04	22
CH1-	03	21
CH0-	02	20
BK1	01	

37-pin male D-Sub Connector

Ordering Information

F-8017C2 CR	16-ch Isolated Current Input Redundant Module (RoHS)
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Accessories

CA-3710AM CR	DB37 Male to Female, with Molded Cable, 45°, 1M (RoHS)
DN-AIO-M CR	Universal termination board for analog I/O (RoHS)