

FX₂N SERIES

INPUT CHANNELS ABOUND ONE UNIT CAPABLE OF HANDLING NUMEROUS TASKS

Product Introduction

The FX₂N-8AD is a specially designed block with 8 analog channel input terminals. Analog values are converted to digital via voltage, current and temperature (thermocouple) input control. Connected to FX₂N or FX₂NC Series sequencers, the block can read present, average and peak values, and write offset and gain data, average frequency, etc.

Features

■ Multi-point 8-Channel Analog Input

A single block is capable of handling the input of 8 analog channels. Voltage, current and temperature (thermocouple) inputs can be selected for each channel. (Mixed settings possible.)

■ High Functionality

Highly precise setting variations such as 0.63mV for voltage input, 2.50μA current input and 0.1°C temperature input enable minute detection of fluctuation in analog input values.

■ High-Speed A/D Conversion

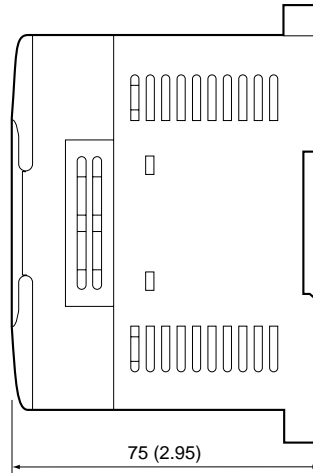
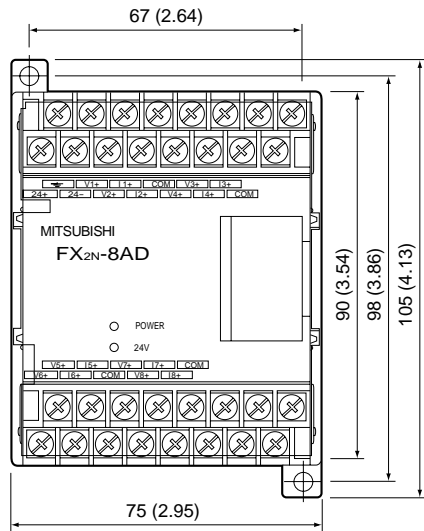
Conversion is executed at 500μs times the number of channels (temperature input: 3ms×number of channels). Most efficient when average analog input data is used.



8-Point Input Block
FX₂N-8AD



External Dimensions



Color: Munsell 0.08GY/7.64/0.81
Unit: mm (inch)
Weight: 0.4kg

Specifications (General specifications are the same as the sequencer main body)

Power Supply

Item	Specifications
Interface drive	24VDC $\pm 10\%$; 100mA terminal from external source
CPU drive	5VDC; 50mA extension cable supplied from sequencer main body

Performance

Item	Voltage Input	Current Input
Analog input limitations	-10~10VDC (1M Ω input resistance) Offset value: -10~9V Gain value: Adjustment below 10V and gain offset of $\geq 1V$ (constant analysis) possible	-20~20mADC, 4~20mADC (250 Ω input resistance) Offset value: -20~18mA Gain value: Adjustment below 20mA and gain offset of $\geq 2mA$ (constant analysis) possible
Absolute input (max)	$\pm 15V$	$\pm 30mA$
Digital output	16 bit binary w/code	16 bit binary w/code
Analysis	0.63mV (10V $\times 1/16,000$) 2.50mV (10V $\times 1/4,000$)	2.50 μA (20mA $\times 1/8,000$) 5.00 μA (20mA $\times 1/4,000$)
Overall accuracy	$\pm 0.5\%$ (full-scale 20V)	$\pm 1.0\%$ (full-scale 40mA)
Conversion speed	500 μs \times number of channels however, 3ms \times number of channels when thermocouple temperature of more than 1 channel is used	
Insulation	Photocoupler insulation between analog input component and sequencer DC/DC converter insulation between power supply and analog input component: No insulation between each channel	
I/O points	8 (count either input or output)	

Thermocouple Temperature Input

Item	K-type Thermocouple	J-type Thermocouple	T-type Thermocouple
Analog input limitations	-100~1,200°C (-148~2,192°F)	-100~600°C (-148~1,112°F)	-100~350°C (-148~662°F)
Digital output	16 bit binary w/code	16 bit binary w/code	16 bit binary w/code
Input Channels Aboard	0.1°C	0.1°C	0.1°C
Overall accuracy	$\pm 0.5\%$ (full-scale 1,300°C)	$\pm 0.5\%$ (full-scale 700°C)	$\pm 0.5\%$ (full-scale 450°C)

Safety Warning

To ensure proper use of the products listed in this catalog, please be sure to read the instruction manual prior to use.

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