

## A Feature

■ 8 RTD input channels
■ User defined up/down scale

- 16 bit A/D Converter

■ Termination board break off detection

- Redundant switching time (<100 us)



## F-8015

8-ch Isolated RTD Input Redundant Module

## Introduction

F-8015 is a 16 -bit 8-channel RTD input module. Each channel has a self-programmable input range and an accuracy of $\pm 0.05 \%$. It also provides $3000 \mathrm{~V}_{\mathrm{DC}}$ 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 indicator | 1 RUN, 1 ACT, 1 DUX |  |
| Analog Input |  |  |
| Number of channels | 8 |  |
| Connection | 3-Wire |  |
| Type | Pt 100 | $\begin{aligned} & \text { IEC } 60751 \text { ITS90 } \\ & \left(0.03851 \Omega / \Omega /{ }^{\circ} \mathrm{C}\right) \\ & \hline \end{aligned}$ |
|  | JPt 100 | $\begin{array}{\|l\|} \hline \text { JIS C } 1604 \\ \left(0.03916 \Omega / \Omega /{ }^{\circ} \mathrm{C}\right) \\ \hline \end{array}$ |
|  | Pt 1000 | IEC 60751 ITS90 ( $0.03851 \Omega / \Omega /{ }^{\circ} \mathrm{C}$ ) |
| Range | Pt 100 | -200 ~ + 850 |
|  | $\begin{aligned} & \hline \text { JPt 100, } \\ & \text { Pt 1000 } \end{aligned}$ | $-200 \sim+630$ |
| Resolution | 16 bit |  |
| Sampling Rate | 8 Samples/Sec. |  |
| Accuracy | $\pm 0.05 \%$ FSR |  |
| Zero Drift | $\pm 0.5 \mu \mathrm{~V} /{ }^{\circ} \mathrm{C}$ |  |
| Span Drift | $\pm 20 \mathrm{ppm} /{ }^{\circ} \mathrm{C}$ |  |


| Analog Input |  |
| :---: | :---: |
| Common Mode Rejetion | 106 dB |
| Normal Mode Rejetion | 90 dB |
| Input Impedance | $20 \mathrm{M} \Omega$ |
| Date Range | -2500~12500 |
| Isolation | $3000 \mathrm{~V}_{\text {D }}$ |
| Certification |  |
| Emission | IEC 61000-6-4 |
| Immunity | IEC 61000-6-2 <br> IEC 61000-4-3 <br> IEC 61000-4-4 <br> IEC 61000-4-6 <br> IEC 61000-4-9 <br> IEC 61000-4-10 <br> IEC 61000-4-12 |
| General |  |
| Termination Board | DN-RTD-M |
| Max. Power Consumption | 1 W |
| Operating Temp. | $-25 \sim 75^{\circ} \mathrm{C}$ |
| Storage Temp. | $-30 \sim 80^{\circ} \mathrm{C}$ |
| Humidity | 5 ~ 95 \% RH, Non-condensing |
| Weight | 300 g |
| Dimensions (WxLxH) | $30 \mathrm{~mm} \times 85 \mathrm{~mm} \times 115 \mathrm{~mm}$ |

- Internal I/O Structure

- Pin Assignment


Dimension (unit: mm)


Unit: mm


## Ordering Information

| F-8015 CR | 8-ch Isolated RTD Input Redundant Module (RoHS) |
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Accessories

| CA-3710AM CR | DB37 Male to Female, with Molded Cable, $45^{\circ}, 1 \mathrm{M}$ (RoHS) |
| :--- | :--- |
| DN-RTD-M CR | Termination board for RTD module (RoHS) |

