

MBs-16RTD

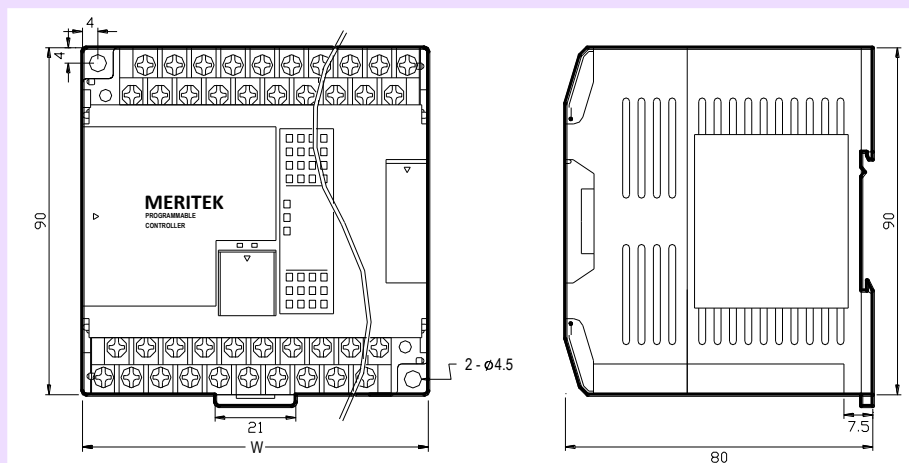
16 Channel RTD Temperature Input Module



Introduction

MBs-16RTD is one of the temperature input modules of MERITEK MBs series PLC. It provides 16 channels of RTD temperature measurement input with 0.1 °C or 1 °C resolution. The scan rate for 0.1 °C resolution is 4 seconds, while the scan rate for 1 °C resolution is 2 seconds. This module provides three-wire connection for RTD temperature sensor, thus can automatically compensate the resistance introduced by the wiring.

Dimensions



Specifications

Total Channels - 16 CH

Resolution- 0.1 °C or 1 °C

I/O Points Occupied –

1 RI(Input Register)

8 Discrete Output(DO)

Conversion Time- 2 or 4 Seconds

Accuracy- ±1 %

Sensor Type- Pt-100, Pt1000 (JIS or DIN)

Software Filter- Moving average

Average Samples- 1,2,4,8configurable

Measurement Range-

Pt100: -200~850°C

Pt1000: -200~600°C

Isolation- Transformer(Power) and photo-coupler(Signal)

Indicator(s) – 5V PWR LED

Supply Power- 24V-15%/+20%, 2VA

Internal Power Consumption- 5V, 100mA

Operating Temperature- 0 ~ 60 °C

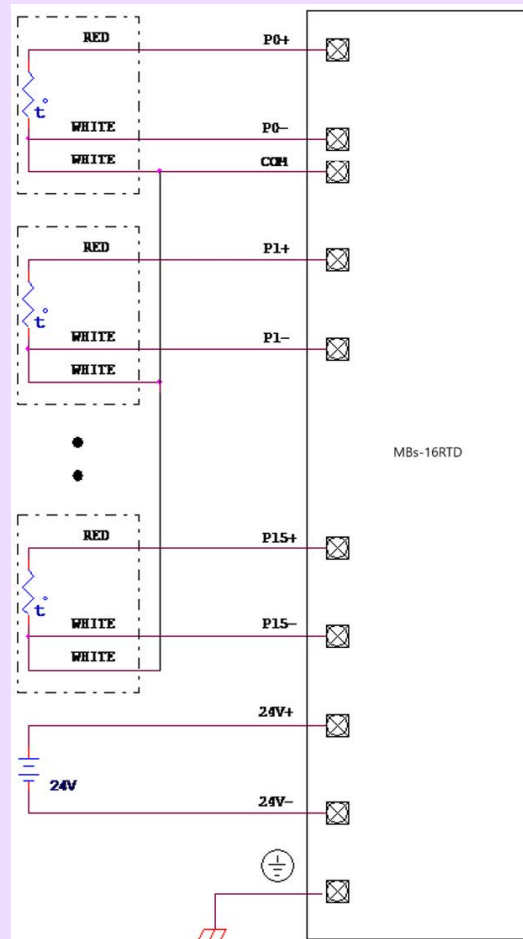
Storage Temperature- -20 ~ 80 °C

Dimensions- 90(W)x90(H)x80(D) mm

MBs-16RTD

16 Channel RTD Temperature Input Module

Wiring Diagram



I/O Configuration

Before the temperature value can be retrieved, the user should perform the I/O configuration of temperature module with the help of Winproladder software. The following screen will be shown when perform the I/O configuration

I/O Configuration MC v4.x

Utilization

I/O No.	Function
X0	Undefined
X1	Undefined
X2	Undefined
X3	Undefined
X4	Undefined
X5	Undefined
X6	Undefined
X7	Undefined
X8	Undefined
X9	Undefined
X10	Undefined
X11	Undefined
X12	Undefined
X13	Undefined
X14	Undefined
X15	Undefined
Y0	Undefined
Y1	Undefined
Y2	Undefined

Input Setup | **Temp. Configuration** | AI Configuration

Temperature Configuration

Starting Address of Configuration Table: R100 (R100~R108)

Starting Address of Temperature Register: R200 (R200~R245)

Starting Address of Working Register: R300 (R300~R323)

Address	Module Name	Sensor Type	Unit of Temp.	Times of Average	Scan Rate
#1: R3840	MBs-6TC	J	Celsius	No	Normal
#2: R3841	MBs-2TC	K			
#3: R3842	MBs-16TC	T			
#4: R3843	MBs-6RTD	PT100-DIN			
#5: R3844	MBs-16RTD	PT1000-DIN			
#6:					
#7:					
#8:					

Ok Cancel

The user need to assign a starting register of a contiguous register area for holding temperature reading value and areas for storing the configuration table and working scratchpad and define the sensor type, unit of temperature, scan speed and samples for average. Please refer the advanced manual II for detail explanation.