## B1-6RTD – Right Side 6 Channel RTD Temperature Input Module

#### Introduction

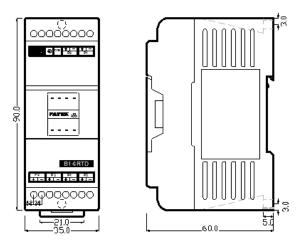
B1-6RTD is one of the temperature input modules of FATEK B1 series PLC. It provides 6 channels of

RTD temperature measurement input with 0.1 °C or 1 °C resolution. The scan rate for 0.1 °C resolution

is 2 seconds, while the scan rate for 1 °C resolution is 1 second. This module provides three-wire

connection for RTD temperature sensor, thus can automatically compensate the resistance introduced by the wiring. All the optional features of this module are software configurable, there are no hardware jumpers or switches for user to setup.

#### **Dimension**

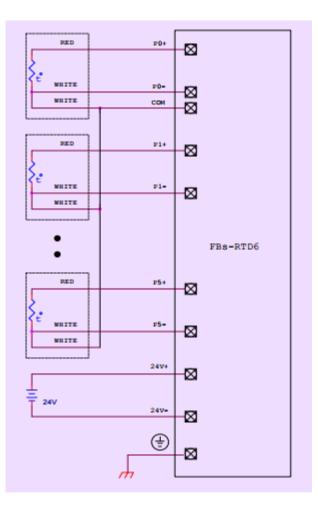


### **Specifications**

Expansion Type	Right Side
Total Channels	6 CH
Resolution	0.1°C or 1°C
I/O Points Occupied	1 RI(Input Register) and 8 DO - B1 PLC support up to 64 IR
Conversion Time	1 or 2 Seconds
Accuracy	±1 %
Sensor Type	Pt-100, Pt-1000 (JIS or DIN )
Software Filter	Moving Average
Average Samples	1, 2, 4, 8, 16 Samples
Measurement Range	Pt-100: -200 ~ 850°C
	Pt-1000: -200 ~ 600°C
Isolation	Transformer (Power) and Photo-couple (Signal)
Indicator(s)	5V PWR LED
Supply Power	24V-15%/+20%, 2VA
Internal Power Consumption	5V, 35mA

Operating Temperature	0 ~ 60 °C
Storage Temperature	-20 ~ 80 °C
Case Type Support	Standard Case
Dimensions	35(W)x90(H)x60(D) mm

# 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.

Utilization	Input Setup Temp. Configuration AI Configuration	
1/D 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   Y10 Undefined   Y11 Undefined   Y2 Undefined	Temperature Configuration   Executinguisation     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:   Celsius     #1:   R3840   FBs-TC6   J   Image: Temperature Register:   No     #2:   R3841   FBs-TC2   K   Scan Rate:   Normal     #3:   R3842   FBs-TC16   T   Image: Rate:   Normal     #5:   R3844   FBs-RTD16   PT1000-DIN   Image: Rate:   Normal     #6:   Image: Rate:   Image: Rate:   Image: Rate:   Image: Rate:   Normal     #8:   Image: Rate:   Image: Rate:   Image: Rate:   Image: Rate:   Image: Rate:	- - -

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.