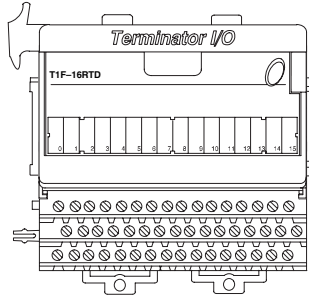


# RTD Input Module

T1F-16RTD <--->

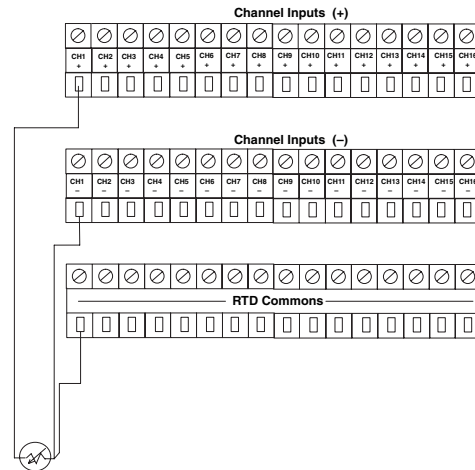
## 16-channel RTD input module

The 16-channel RTD input module uses a T1K-16B or T1K-16B-1 base, which is purchased separately.



| T1F-16RTD 16-Channel RTD Input Specifications |  |
|---|--|
| <b>Number of Channels</b>                     | 16   |
| <b>Common Mode Range</b>                      | 0-5 VDC  |
| <b>Resolution</b>                             | ± 0.1 °C or °F   |
| <b>Notch Filter</b>                           | >50db notches @ 50/60 Hz; f - 3db = 13.1 Hz                          |
| <b>Absolute Maximum Ratings</b>               | ±50 VDC  |
| <b>Converter Type</b>                         | Charge balancing, 24-bit   |
| <b>Master Update Rate</b>                     | 16 channels per scan max.  |
| <b>Input Points Required</b>                  | 512 Discrete I/O points /16 Double Words Network Interface Dependent |
| <b>Sampling Rate</b>                          | 140ms / channel  |
| <b>Base Power Required</b>                    | 150 mA max., 5 VDC   |
| <b>Temperature Drift</b>                      | 25 ppm / °C (max.)   |
| <b>Maximum Inaccuracy</b>                     | ± 1 °C   |
| <b>RTD Excitation Current</b>                 | 200 µA   |
| <b>Operating Temperature</b>                  | 32° to 140°F (0° to 60°C)  |
| <b>Storage Temperature</b>                    | -4° to 158°F (-20° to 70°C)  |
| <b>Relative Humidity</b>                      | 5 to 95% (non-condensing)  |
| <b>Environmental Air</b>                      | No corrosive gases permitted   |
| <b>Vibration</b>                              | MIL STD 810C 514.2   |
| <b>Shock</b>                                  | MIL STD 810C 516.2   |
| <b>Noise Immunity</b>                         | NEMA ICS3-304  |
| <b>Weight</b>                                 | 168 g  |

| RTD Input Ranges    |  |
|---------------------|--|
| <b>Input Ranges</b> | Pt100 -200 to 850°C -328 to 1562°F       |
|                     | Pt1000 -200 to 595°C -328 to 1103°F      |
|                     | Pt100 -38 to 450°C -36 to 842°F          |
|                     | Type CU 10 -200°C to 260°C -328 to 500°F |
|                     | Type CU 25 -200°C to 260°C -328 to 500°F |
|                     | 120 Ω Nickel -80 to 260°C -112 to 500°F  |



**Notes:**

- 1: The three wires connecting the RTD to the module must be the same type and length. Do not use the shield or drain wire for the third connection.
- 2: If an RTD sensor has four wires, the plus sense wire should be left unconnected as shown.

