

PRECISION RTD INTERFACE

FEATURES:

- ◆ High Accuracy, linear 0-5 VDC Output.
- ◆ Compensation for RTD non-linearity.
- ◆ Small Size and Easy Installation.
- ◆ Accepts 100 Ohm Pt.
- ◆ Low cost, ideal for Energy Management Applications.
- ◆ Eliminates need for 4-20 mA transmitters.



APPLICATION:

The ETRTD2 board allows for inexpensive yet very accurate RTD measurements over a wide temperature range. It interfaces two RTD sensors, typically in a '3 wire' arrangement.

The board may be used for temperature measurements in any environment where precision RTD sensors are specified for high accuracy. It may also be used to interface the existing RTDs with a generic DDC system.

SPECIFICATIONS:

Power: 24 VAC, 3 VA

Input: 3 wire RTD, typical 100 R Platinum (385)

Output: 0-5 VDC linear in full span (typical span 0-100 C)

Accuracy: 0.5 % for the entire span, linearity better than 0.5%.

Indication: Power Supply - green LED

Dimensions: 2.75 x 2.75 " (70 x 70 mm) , board mounts in TR-2 snap track (provided).

PRODUCT DESCRIPTION:

The ETRTD2 transmitter is a micro-processor based device that converts signal from two 3-wire RTD sensors to highly linear 0 to 5 VDC output. Digital communication via two wire RS485 port may be added as an option (please contact Elkor for protocol information). The ETRTD2 microprocessor utilizes a polynomial RTD equation that produces very accurate readings over a wide temperature range.

The board practically eliminates the need for two 4-20 mA transmitters and the associated power supplies, usually required for precision platinum RTDs.

The ETRTD2 may also be used with *two* wire high resistance RTDs.

The board is equipped with angular connectors for easy wiring. It mounts in a 2.75" wide snap-track (provided).

ORDERING INFORMATION:

ETRTD2-span*

* Platinum Pt385 100 Ohm 3 wire sensor is standard
Maximum span is 100 C (i.e -50 to +50) and
any values in this span may be specified.