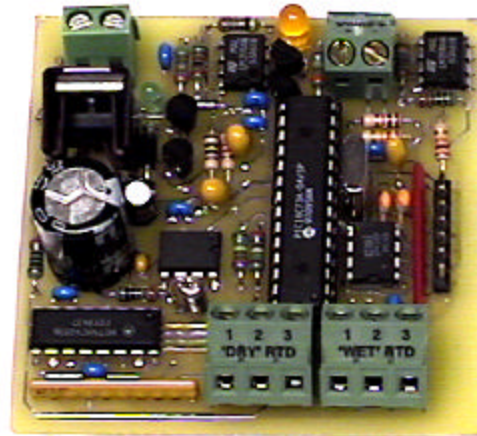

PRECISION WET/DRY BULB RH TRANSDUCER

FEATURES:

- ◆ High Accuracy, wide temperature range.
- ◆ Scientific RH algorithm; compensation for RTD non-linearity and 'above sea level'.
- ◆ 4-20 mA sourcing output.
- ◆ Small size and easy installation.
- ◆ Low cost, ideal for Energy Management Applications.


APPLICATION:

The ETRH offers inexpensive yet very accurate RH measurements over a wide temperature range. It works with two RTD sensors in a 'wet/dry bulb' arrangement.

The board may be used for RH measurements in industrial environment where high temperatures and harsh environment preclude the use of other RH instruments. It may also be used for enthalpy control and in any accurate climate monitoring applications.

PRODUCT DESCRIPTION:

The ETRH transmitter is a micro-processor based device that uses signal from two 3-wire RTD sensors ('wet bulb' and 'dry bulb') to calculate the relative humidity value. The microprocessor utilizes a scientific RH calculation algorithm that produces very accurate data over a wide temperature range. (This algorithm is a refined version of ASHRAE equations used originally for the creation of Psychrometric Charts).

The board may be programmed for various 'above sea level' values to allow RH compensation in the wet/dry method. The output is linear in its entire range from 0 to 100 % RH. The 4-20 mA transmitter is sourcing to a loop with Rmax of 1000 R.

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

SPECIFICATIONS:

Power: 24 VAC, 2 VA

Input: 3 wire RTDs; 100 R 385 Platinum is standard

Output: 4-20mA, sourcing, max. loop resistance 1000 R (0-5 VDC also available)

Accuracy: 0.5 % FS in the entire range (linearity better than 0.5%)

Temp.Range: typical input range 0 to 100 deg. C

Indication: Power Supply - green LED, output status - orange LED.

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

ORDERING INFORMATION:

ETRH - fully describes this board.

Note: Wet/dry bulb RTDs are extra.