

Precision Wet/Dry Bulb RH Transducer

- High Accuracy
- Wide temperature range.
- 4-20 mA sourcing output
- Small size and easy installation
- Low cost

APPLICATION

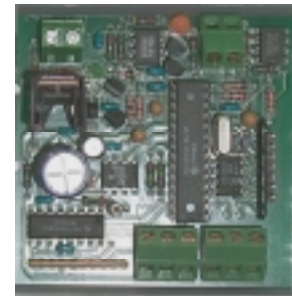
The HT-WD-420 offers inexpensive yet very accurate rH measurements over a wide temperature range. It works with two RTD sensors in a wet/dry bulb arrangement. The board may be used for rH measurements in industrial environment where high temperatures and harsh environment preclude the use of other instruments. It may also be used for enthalpy control and in any accurate climate monitoring applications.

PRODUCT DESCRIPTION

The HT-WD-420 transmitter is a microprocessor based device that uses the 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 inch wide snap-track (provided).



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TECHNICAL DATA

- Power:** 24 VAC, 2 VA
- Input:** 3 wire RTD's; 100 ohms 385 Platinum to IEC 751 (DIN 43 760)
- Output:** 4-20mA, sourcing, maximum loop resistance 1000 ohms
- Accuracy:** 0.5 % FS for 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:** plastic housing 3.5" x 4.75" x 2.625" with 2.75" x 2.75" board mounted internally on TR-2 snaptrack

ORDERING DATA

HT-WD-420 psychrometric transmitter

ENERCORP

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