

### WARRANTY

The DTH35 is warranted to be free from defects in materials and workmanship for a period of one year from the date of purchase. If within the warranty period your instrument should become inoperative from such defects, the unit will be repaired or replaced at UEi's option. This warranty covers normal use and does not cover damage which occurs in shipment or failure which results from alteration, tampering, accident, misuse, abuse, neglect or improper maintenance. Batteries and consequential damage resulting from failed batteries are not covered by warranty.

Any implied warranties, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the express warranty. UEi shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expenses or economic loss.

A purchase receipt or other proof of original purchase date will be required before warranty repairs will be rendered. Instruments out of warranty will be repaired (when repairable) for a service charge.

For more information on warranty and service:

www.ueitest.com • Email: info@ueitest.com 1-800-547-5740 • FAX: (503) 643-6322

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Para la versión en español de este manual por favor visite www.ueitest.com

Pour une version française du manuel de l'utilisateur s'il vous plaît visitez www.ueitest.com

Copyright © 2014 UEi. All Rights Reserved

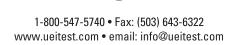
17050 03/14



# **DIGITAL PSYCHROMETER**

INSTRUCTION MANUAL ENGLISH







DTH35 Manual.indd 1-4 3/26/14 1:07 PM



The DTH35 Digital Psychrometer measures temperature, relative humidity, and calculates wet bulb, dew point, and enthalpy of moist air (air with humidity). The housing design is useful for in-duct measurement, as well as ambient or vent outlet applications. A large, easy to read display, and built in magnet improves ease of use

#### Features:

- Large-digit back-lit display
- Designed for in-duct measurement (4" x 3/8" probe dimensions)
- · Magnetic mount for hands-free use
- Probe cover functions as an extension for hard to reach areas

#### **Functions:**

- Measures Temperature and Relative Humidity
- Calculates Wet Bulb, Dew Point and Enthalpy
- Min/Max and Data Hold
- Temperature Range: -4 to 122°F (-20 to 50°C)
- RH% Range: 0 to 99.9% RH%
- Wet Bulb: 5 to 121.8°F(-15 to 49.9°C)
- Dew Point: -4 to 121.8°F (-20 to 49.9°C)
- Enthalpy 0 to 125 BTU/Lb (0 to 292 KJ/KG)

### Accuracy

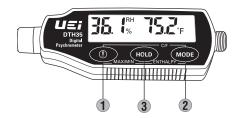
- Temperature
- : ±1.0°F(±0.6°C) for 32~122°F
- : ± 2°F(±1.2°C) for -4 to 32°F (-20 to 0°C)
- BH%
- : ±3% at 77°F (25°C) for 10~90% RH
- : ±5% all other

Response Time 60 seconds typical for stable reading

### **CONTROLS AND INDICATORS**

#### **Buttons**

- 1. ON/OFF Press (1) for one second to turn DTH35 on or off.
- 2. MODE Press to cycle through measurement parameters: Temperature, Dew Point (DP), Wet Bulb (WB)
- 3. HOLD Freezes all measurement data.



## **OPERATING INSTRUCTIONS**

Remove probe cover before taking measurements. The probe cover can be connected to the opposite end of the housing, offering use as an extension handle.

Place the meter in the area to be measured, or in an access hole to measure inside ductwork.

- 1. Backlight Press any button to activate the backlight for 10 seconds.
- 2. Select Scale Press (1) and MODE together to switch scales
- 3. Max/Min Press (1) and HOLD together to view maximum value (MX), repeat to view minimum value (MN), repeat to view real-time reading.
- 4. Enthalpy Press HOLD and MODE together to view Enthalpy, repeat to return to normal measurement modes.

#### **Auto Power Off**

The DTH35 will automatically power off after 20 minutes. To disable auto power off press HOLD while turning the meter on. An "N" will appear on the LCD indicating that auto power off is disabled.

#### Low Battery

When " appears, the batteries should be changed. Remove the battery cover by rotating the cap slightly then tilting the meter. Insert the batteries with negative pole down, carefully placing them under that contact tab. Reinstall the cap and rotate slightly to lock in place.

### **SPECIFICATION**

Item Measure	Tair	RH	WBT	DP	Enthalpy
Range	-4.0 ~ 122.0°F	0.1% ~ 99.9%	5.0 ~ 121.8°F	-4.0 ~ 121.8°F	-2.2 ~ 292KJ/KG
	-20.0 ~ 50.0°C		-15.0 ~ 49.9°C	-20.0 ~ 49.9°C	-1.0 ~ 125BTU/LB
Resolution	0.1°F 0.1°C	0.1%	0.1°F 0.1°C	0.1°F 0.1°C	0.1BTU/LB or KJ/ KG(measured value <100) 1 BTU/LB or KJ/ KG(Other range)
Accuracy	$\pm 0.6^{\circ}\text{C } (\pm 1^{\circ}\text{F})$ (0~50°C) $\pm 1.2^{\circ}\text{C } (\pm 2^{\circ}\text{F})$ (Others)	±3.0% (10~90% @25°C) ±5% (other)	±1.2°C (RH: 20 ~ 90 %) ±2.1°C (RH: 10 ~ 20 %)	±1.0°C 40 ~ 90 % ±2.0°C 20 ~ 40 % ±4.0°C 10 ~ 20 %	
Max/Min function	YES				
Error message	E02/E03/E31	E04/E11/E33	E04	E04	E04
Backlight	Press any key to activate the blue backlight for 10 seconds				
Auto power off	20 minutes ("ON/OFF"+ "HOLD" > 2 seconds to power meter on and disable "Auto power off" function)				
Low battery	Low Voltage indicator				
RH Calibration	2 points calibration (32.8% & 75.3%)				
Battery life (2pcs CR2032)	>110 Hours without backlight				







