



Tursdale Technical Services Ltd
Unit N12B
Tursdale Business Park
Co. Durham
DH6 5PG
United Kingdom
Phone: +44 (0) 191 377 3398
Fax: +44 (0) 191 377 3357
info@tursdaletechnicalservices.co.uk
<http://www.industrial-needs.com/>

INSTRUCTION MANUAL PCE-555





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1. INTRODUCTION

The digital Humidity & Temperature Meter & Wet Bulb Temperature Dew Point temperature has been designed to combine the functions of Humidity Meter, Temperature Meter, Wet Bulb Temperature and Dew point temperature.



It is an ideal Humidity & Temperature Meter Instrument with scores of practical applications for laboratorial, industrial, Engineer and professional use.

The Humidity & Temperature Meter is for use a humidity & temperature semiconductor sensor. This operation manual contains general information and specification.

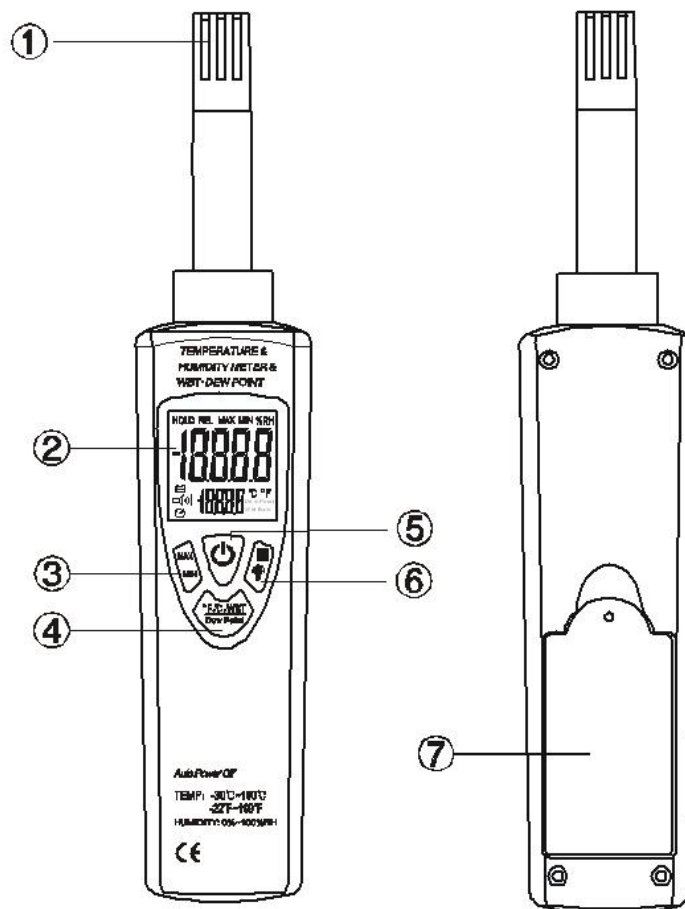
2. FEATURES

- Fast Response Time %RH: 10S (90% at 25 still air)
- High Accuracy
- Dew Point Temperature (-30 °C ~ 100 °C / -22°F~199°F)
- Wet Bulb Temperature (0 °C ~ 80 °C / 32°F~176°F)
- Resolution 0.01%RH, 0.01 °C / 0.01°F
- Max Hold and Data Hold Function
- Micro Processor - based Design
- Dual Display Temperature & Humidity
- Auto Power Off, Disable Sleep Mode
- Backlight
- Mini Size
- Size (H*W*D): 225*45*34mm
- Weight: 200g

3. SPECIFICATIONS

Display:	Large 4-1/2 dual digital LCD display with backlight
Sensor Type:	A single chip relative humidity and temperature multi sensor module comprising a calibrated digital output.
Response Time:	%RH: 10S (90% at +25 still air)
Accuracy Note:	Accuracy is specified for the following ambient temperature range: 64 to 82°F (18 to 28°C)
Sampling Rate:	2.5 samples per second
Polarity:	Automatic, (-) negative polarity indication.
Over-range:	“OL” mark indication.
Low Battery Indication:	The “  ” is displayed when the battery voltage drops below the operating level.
Operating Conditions:	32 to 104°F (0 to 40°C); < 80% RH non-condensing
Storage Conditions:	14 to 140°F (-10 to 60°C); <80% RH non-condensing
Auto Power Off:	Meter automatically shuts down after approx.15 minutes of inactivity (Sleep Mode) To override Auto Power Off function (Non-Sleep Mode): Firstly press hold/backlight button, then press power button. After the full display appears, release both buttons. Icon “  ” will not shown on the LCD. The unit will not auto power off now.
Power:	One standard 9V, NEDA1604 or 6F22 battery.
Dimensions/Wt.:	225 (H) x 45 (W) x 34 (D) mm/200g
Humidity / Temperature Measurement Range:	
Humidity:	0%~100%RH
Temperature:	-30 °C~ 100 °C, -30 °F~ 199 °F
Resolution:	0.01% RH, 0.01 °C / °F.
Humidity Accuracy:	± 2%RH (at 25 °C, 20% ~ 80% RH). ± 2.5%RH (at other ranges)
Note:	The measuring range is from 0% to 100%, but above 80% and below 20% the deviation is not specified.
Air Temperature Accuracy:	± 0.5 °C/ ± 0.9 °F (at 25 °C) ± 0.8 °C / ± 1.5 °F (all other ranges)

4. PANEL DESCRIPTION



1. **Humidity / Air Temperature Probe:** Humidity & and Temperature Semiconductor Sensor inside.
2. **LCD Display:** 4-1/2 dual digits LCD display with units of °F, °C, %RH dew point, wet bulb and low battery "BAT" MIN / MAX HOLD, indication.
3. **MAX/ MIN Button:** Press MAX / MIN button to enter MAX, MIN Recording mode (manual range only). Select the proper range before selecting MAX MIN to ensure that the MAX / MIN reading will not exceed the testing range. Press once to select MIN. Press again to select MAX. Press and hold the Button for over 2 second to turn off MAX, MIN Recording.
4. **°F, °C, Dew Point, Wbt Select Button:** Press °F, °C, Dew Point, Wbt select Button to enter select °F, °C, Dew Point, Wet Bulb Measurement.
5. **Power ON / OFF Button:** Turn the meter power ON / OFF.
6. **HOLD / Backlight Button:** Press Hold / backlight Button to enter hold function. The reading will be held when Data Hold button is pressed. Press Hold / backlight Button for over 2 seconds to turn on or off backlight function.
7. **Battery Compartment**

5. HUMIDITY AND AIR TEMPERATURE MEASUREMENTS

1. Hold the probe in the area to be tested & allow adequate time for readings to stabilize.
2. Press °F, °C, dew point, WBT select Button to enter select °F, °C, dew point Wet Bulb Measurement.
3. Read the Relative Humidity and Air Temperature, dew point temperature wet bulb temperature.


NOTE:

Do not immerse the probe in liquid; it is intended for use in air only.

Warning:

Don't expose the sensor to direct sunlight (insolation).
Don't touch or manipulate the sensor.

6. BATTERY REPLACEMENT

If the sign “” appears on the LCD display, it indicates that the battery should be replaced. Open the battery case and replace the exhausted battery with new battery. (1 x 9V battery NEDA 1604, 6F22 or equivalent).

In this direction will find a vision of the measurement technique:
<http://www.industrial-needs.com/measuring-instruments.htm>

NOTE: "This instrument doesn't have ATEX protection, so it should not be used in potentially explosive atmospheres (powder, flammable gases)."