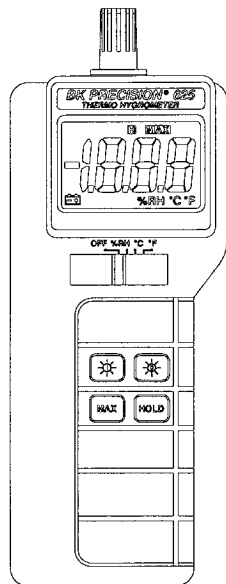


OPERATING INSTRUCTIONS

BK PRECISION® 625 

HYGROMETER



OPERATING INSTRUCTIONS

Push Button

Display Back-Light Button

Pressing "☀" button to turn on the Back-Light.

Pressing "☀" button to turn off the Back-Light.

DATA HOLD Button

Pressing the HOLD key to enter the Data Hold mode, the "H" annunciator is displayed. When DATA HOLD mode is selected, the hygrometer held the present readings and stops all further measurements.

Pressing the HOLD key again cancels DATA HOLD mode, causing hygrometer to resume taking measurements.

MAX HOLD Button

Pressing the MAX key to enter the MAX HOLD mode. The hygrometer then records and updates the maximum absolute values and the MAX annunciator appears on the display. Pressing the MAX key again to exit the MAX HOLD recording mode.

In the MAX HOLD mode, press HOLD key to stop the recording, press HOLD key again to resume recording.

INTRODUCTION

This instrument is a portable easy to use 3½ digit, compact digital Thermo-Hygrometer designed for simple one hand operation. It use Thermistor as temperature sensor, and a thin polymer capacitive type relative humidity sensor as the hygrometer sensor.

SAFETY INFORMATION

It is recommended that you read the safety and operation instructions before using the thermometer.

CAUTION

- Do not immerse the hygrometer sensor head into liquids since this causes permanent damage to the sensor.
- The meter when not in use, please use protective metal cap cover the sensor head and screw it to extend sensors life.

The  symbol on the instrument indicates that the operator must refer to an explanation in this manual.

OPERATION

1. Remove protective cap.
2. Set the power switch to the desired %RH or °C or °F range.
3. Read the display.
4. Cover sensor head to extend sensor life when not in use.

SPECIFICATIONS

GENERAL

Display: 3½ digit liquid crystal display (LCD) with maximum reading of 1999.

Low battery indication: The "E" is displayed when the battery voltage drops below the operating level.

Measurement rate: 2.5 times per second, nominal.

Accuracy: Stated accuracy at 23°C ± 5°C, < 75% relative humidity.

Temperature Coefficient: 0.1 times the applicable accuracy specification per °C from 0°C to 18°C and 28°C to 55°C.

Operating environment: 0°C to 55°C at < 75% relative humidity.

Storage environment: -20°C to 55°C at < 80% relative humidity.

Battery: Standard 9V battery (NEDA 1604, IEC 6F22 006P).

Battery Life: 200 hours typical with carbon zinc battery.

Dimensions (HxWxD): 7.0"x2.58"x1.38" (178x65.5x35mm)

Weight: 5.8oz (165g) including battery.

ELECTRICAL TEMPERATURE

Temperature Scale: Celsius

Temperature Sensor: Thermistor

Measurement Range: 0°C to 60°C / 32°F to 140°F

Resolution: 0.1°C/°F

Accuracy: ±2.0°C on 0°C to 10°C

±0.5°C on 10°C to 45°C

±2.0°C on 45°C to 60°C

±4.0°F on 32°F to 50°F

±1.0°F on 50°F to 113°F

±4.0°F on 113°F to 140°F

RELATIVE HUMIDITY

Humidity Sensor: Electronic capacitance polymer film sensor. (The sensor is unaffected by water condensate, is immune to most reagent vapors)

Measurement Range: 10% to 90% RH

Resolution: 0.1% RH

Accuracy: ±2.5% RH (10% to 90% RH)

±5.0% RH (< 10%, > 90% RH)

Sensor Response Time for 90% of Total Range: 60sec typical

Sensor Stability: ±2% RH, 2 years typical

Sensor Hysteresis (excursion of 10% to 90% to 10% RH): ±1% RH typical

Sensor Temperature Dependence: Negligible between 0°C to 50°C

SPECIAL CONSIDERATIONS

- Before a reliable measurement can be made, the measuring hygrometer and medium to be measured must be in temperature and humidity equilibrium.

- Temperature measurement errors

Due to too short measurement time, sunshine during the measurement, heating, cold outer walls, air draft (e.g. fans), radiating hand and / or body heat etc.

- Humidity measurement errors

Due to steam, water splashes, dripping water or condensation (not water condensate) on the sensor etc. However, repeatability and long-term stability are not impaired by this.

- Contamination

By dust in the air or measurements in powdery substances. This can be largely avoided by using a corresponding filter. The filter must be cleaned or replaced periodically depending upon the degree of contamination of the measuring site.

OPERATOR MAINTENANCE

Battery Replacement

Power is supplied by a 9 volt "transistor" battery. (NEDA 1604, IEC 6F22). The "E" appears on the LCD display when replacement is needed. To replace the battery, remove the two screws from the back of the meter and lift off the battery cover. Remove the battery from battery contacts.

Cleaning

Periodically wipe the case with a damp cloth and detergent, do not use abrasives or solvents.

LIMITED ONE YEAR WARRANTY

BK PRECISION warrants to the original purchaser that its product, and the component parts thereof, will be free from defects in workmanship and materials for a period of one year from the date of purchase.

BK PRECISION will, without charge, repair or replace, at its option, defective product or component parts upon delivery to an authorized **BK PRECISION** service contractor or to the factory service department, accompanied by proof of the purchase date in the form of a sales receipt.

Exclusions: This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. It is void if the serial number is altered, defaced or removed.

BK PRECISION shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific rights and you may have other rights which vary from state-to-state.

For your convenience, we suggest you contact your **BK PRECISION** distributor, who may be authorized to make repairs or can refer you to the nearest service contractor.

If warranty cannot be obtained locally, please send the unit to **BK PRECISION** Service Department, 1031 Segovia Circle Placentia, CA 92870, properly packaged to avoid damage in shipment.

BK PRECISION Test Instruments only warrants products sold in the U.S.A. and its overseas territories. In other countries each distributor warrants the **BK PRECISION** products which it sells.

CUSTOMER SUPPORT 1-800-462-9832

Precision offers courteous, professional technical support before and after the sale of their test instruments. The following services are typical of those available from our toll-free telephone number:

- Technical advice on the use of your instrument.
- Technical advice on special applications of your instrument.
- Technical advice on selecting the best instrument for a given task.
- Instrument for information on optional accessories for your instrument.
- Information on instrument repair and recalibration services.
- Replacement parts ordering.
- Information on other **BK PRECISION** instruments.
- Requests for a new **BK PRECISION** catalog.
- The name of your nearest **BK PRECISION** distributor.

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