

Di-LOG

...measurably better

operating manual

DL7102

Humidity & Temp. Meter
& Wet Bulb Temperature
Dew Point Temperature



CE

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 uses a humidity & temperature semiconductor sensor. This operation manual contains general information and specification.

Features

Fast Response Time %RH:

10S (90% at 25°C 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 x W x D): 225 x 45 x 34mm

Weight:

200g

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°C 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

Specifications

Auto Power Off:

Meter automatically shuts down after approx. 15 minutes of inactivity (Sleep Mode). To override Auto Power Off function (Non-Sleep Mode): First press hold/backlight button, then press power button. After the full display appears, release both buttons. Icon "☺" will not be shown on the LCD. The unit will not auto power off.

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

Specification

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)

Controls and Inputs



Controls and Inputs

1. Humidity / Air Temperature Probe : Humidity & and Temperature Semiconductor Sensor inside.
2. LCD Display: 4-1/2 dual digits LCD display with units of °C, °F, %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. °C, °F, Dew Point, Wbt Select Button:
Press °C, °F Dew Point, Wbt select Button to enter select °C, °F, 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 backlight function on or off.
7. Battery Compartment.

Humidity & Air Temp. Measurements

1. Hold the probe in the area to be tested & allow adequate time for readings to stabilise.
2. Press °C, °F, dew point, WBT select Button to enter select °C, °F, 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:

Do not expose the sensor to direct sunlight.

Do not touch or manipulate the sensor.

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).

Notes

Warranty & Maintenance

24 Month Warranty

Di-Log instruments are subject to stringent quality controls. If in the course of normal daily use a fault occurs we will provide a 24 month warranty (only valid with invoice).

Faults in manufacture and materials defect will be rectified by us free of charge, provided the instrument has not been tampered with and returned to us unopened.

Damage due to dropping abuse or misuse is not covered by the warranty.

Outside the warranty period we offer a full repair and re-calibration service.

Maintenance

WARNING Do not attempt to repair or service you meter unless you are qualified to do so and have the relevant calibration, performance test and service information. To avoid electrical shock or damage to the meter do not get water inside the case.

Periodically wipe the case with a damp cloth and mild detergent. Do not use chemical solvent.

Di-Log Test Equipment

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Voltage 16th Edition Phase Rotation Clamp
kHz
Resistance Continuity Loop
Phase Rotation Portable