

## Operation instruction of detachable temperature and humidity meter

**NUKALA.CO**  
Non-Destructive Test (NDT) Equipment



تأمین تجهیزات و مواد مصرفی تست های غیر مخرب ایران  
۰۲۱-۷۱۰۵۱۸۸ ۰۹۱۲۰۲۴۶۲۷۰



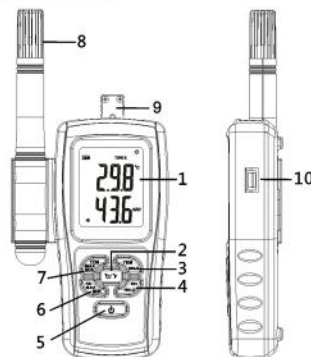
Manual version: GM1361-EN-01

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## A. Introduction

This unit features stable performance, reliable safety, low power consumption and high precision, be widely applied in the fields of manufacturing, laboratory, logistics, food and hygiene, air-conditioning engineering and environment protection.

## B. components



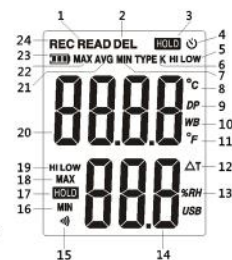
1. LCD
2. Switch key between temperature units
3. Hold key for temperature reading/Up key
4. Hold key for humidity reading/Down key
5. On/off and backlight key
6. Key to pick up max and/or min humidity reading
7. Key to pick up max and/or min temperature reading
8. Temperature/humidity sensor
9. K-type heat couple
10. Interface with humidity and temperature sensor

## C. LCD

1. Data access
2. Data deleting
3. Temperature reading lock

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4. Auto turning off
5. Alarming for over high/low temperature value preset
6. Heat coupling
7. Minimum temperature value
8. Celsius temperature
9. Dew point temperature
10. Wet Bulb temperature
11. Fahrenheit temperature
12. Record interval
13. Humidity unit
14. Humidity display
15. Sound alarm
16. Minimum humidity
17. Humidity lock
18. Maximum humidity reading
19. Over high/low humidity alarm
20. Temperature display
21. Average temperature
22. Maximum temperature value
23. Battery volume
25. Data record



## D. Operation instruction

### 1. Power on/off

Press "⏻" key to turn the unit on, and long press on the "⏻" key to turn the unit off.

### 2. Backlight

In turning on, short press on the "⏻" key to activate the backlight.

### 3. Temperature unit switch

Short press on "°C/°F" key to switch the temperature unit between Celsius and Fahrenheit.

### 4. Reading lock

Short press on "TEM HOLD" key to lock or unlock the temperature reading

### 5. Review the maximum/minimum/average readings

Repeatedly press the Tem Max Min key to show the maximum/average/minimum/current temperature readings in turn. Repeatedly press the RH Max Min key to show the maximum/minimum/current relative humidity readings in turn.

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## 6. Selection of thermocouple temperature/environment temperature/dew temperature/wet Bulb temperature.

Long press on the key Tem Max/Min until the Type K flashes, then press °C/°F key to show in sequence of Type K temperature/environment temperature /DP/WB, and press Tem Max/Min to select the desired item.

## 7. Up/low limit alarm setting

Long press on Tem Hold to enter into alarm setting for over high/low temperature until the HI or LOW appears on LCD, press °C/°F key to switch between the Low and the HI. The Low indicates the low limit setting and the HI the high limit setting. Short press on Tem Hold to increase the value set while short press on RH Hold key to decrease the value set. Long press on the 2 two keys to increase or decrease the value set in a quicker way. Press the Tem Max/Min key to confirm the settings. Long press on RH Hold key to set the over high/low RH alarm value until the HI or LOW appears on LCD, then set the value as the Temperature alarm settings above and confirm with RH Max/Min key.

## 8. Alarming alert

Whenever the value picking up is beyond the alarm limits the unit displays HI if the value is bigger or equal to the high limit or the unit displays LOW if the value is smaller or equal to the low limit. The unit has a sound alarm function; it beeps if the value is beyond the limits preset. Anytime when the unit is powered on it defaults the sound alarm function with an icon appears at the left bottom corner of the LCD. To delete this function, long press the °C/°F key in the interface of measurement.

## 9. Interface selection

Long press RH MAX MIN key until REC/READ/DEL flashes at one time or one of the above characters flashes. Short press °C/°F key to one interface said above and short press RH MAX MIN to confirm the interface selected.

REC/READ/DEL flashing at a time indicates the normal measuring interface, and short press on RH MAX MIN key to confirm entering into the interface with the flashing character disappearing.

REC flashing indicates automatic record interface and the time interval of record appears at the bottom of the LCD and "RH MAX MIN" icon displays on LCD. Use up/down key to increase or decrease the time interval setting (interval unit is second). Short press on RH MAX MIN key to confirm automatic record interface with the REC character displaying and the relative humidity value re-appears at the bottom of the LCD and the values will be recorded at the interval preset. In the automatic record interface, the interval time will display in a short time while using the up/down key to adjust the time interval and after that the relative humidity value re-appears on the LCD. (up to 999 pieces of records)

READ flashing indicates data access interface and the value at the bottom of the LCD is the number of the data to be read. Short press on RH MAX MIN key to enter into data access interface with the READ character displaying on LCD and the relative humidity data re-displays at the bottom of the LCD; at this time when using up/down key to adjust the number to retrieve the other data saved. The data number appears in a short time while the up/down key is in operation and then the unit restore relative humidity display.

DEL flashing indicates interface of deleting data recorded and the number at the bottom of the LCD is the data to be deleted. It displays "---" if there is no data saved then. Short press on RH MAX MIN key is to enter into deleting data interface, the DEL character shows on LCD with humidity value at the bottom of the LCD. Select the number of the data to be deleted with up/down key. There is a short time display of the number of the data to be deleted once the up/down key is pressed, and then the humidity value display re-displays. Short press on °C/°F key is to delete the data of selected number. Long press on °C/°F key will delete all the data recorded, and "0" will display at the bottom of the LCD in a short time and then "---" replace it at that position.

## 10. Automatic power off

After power on, there is an icon denoting automatic power off appearing at the top left corner, and the unit will power off automatically if there is no any

further operation on the key within 2 minutes. If you want to delete this function, long press the °C/°F key and power on the unit at the same time until the icon of automatic power off is on, then release the key and the icon disappears indicating the automatic power off function is deleted.

## 11. Calibration of the RH reading

If there is any error in RH readings, you may press the RH Hold KEY to power on the until the RH% appearing, then release the RH Hold key with the humidity value to be calibrated appearing on the top of the LCD and the value after calibration appearing at the bottom of the LCD. Calibrate the value with up/down key and confirm/save the calibration with pressing °C/°F key with returning to normal measuring interface.

## E. Technical parameters

Items	Measuring range	Resolution	Precision	Response time
Temperature on thermocouple	-50 ~ 1200°C	0.1°C	±2.0°C or ±0.4%	30S
Environment temperature	-10 ~ 50°C	0.1°C	±1.0°C	30S
Environment RH	0~99.9%RH	0.1%RH	±5%	6S
Dew point temperature	-20 ~ 50°C	0.1°C	±2°C	30S
Wet bulb temperature	-20 ~ 50°C	0.1°C	±2°C	30S

Operation environment	-10°C - 50°C (14°F - 122°F) ≤80%RH non-condensing
Storage environment	-20°C - 60°C (-4°F - 140°F)
Sampling frequency	2.0times/sec
Powered by	4*1.5V Batteries

### Specific Declarations:

Our company shall hold no any responsibility resulting from using output from this product as an direct or indirect evidence. We reserves the right to modify product design and specification without notice.

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