

Weather Station

User Manual



Please read this manual thoroughly before using and save it for future reference.

Weather Station

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FUNCTIONS

- Weather forecast.(WIFI)
- Automatic time calibration.(WIFI)
- Today Highest and Lowest Temperature.(WIFI)
- UV rays.(WIFI)
- Wind speed.(0-180KM/H, 0-111mph)
- Wind direction.(0-359°)
- Rainfall data monitoring.
- Sunlight data monitoring.
- 12/24 hour time/month/day/week display.
- Alarm clock and snooze function.
- Indoor&outdoor temperature and humidity, °C to °F switchable.
- Temperature and humidity max/min record.
- Indoor&outdoor temperature and humidity change trend display.
- Indoor&outdoor temperature alert setting.
- Indoor humidity comfort indicator.
- Atmospheric pressure,moon phase.
- Past 12 hours pressure history curve BAR.
- 3-Level brightness backlight function.(DC power supply is valid)
- Battery low pressure indication.
- 7 Languages of week can be switched.
(EN→DE→FR→SP→IT→DU→DA)

- Power Supply:

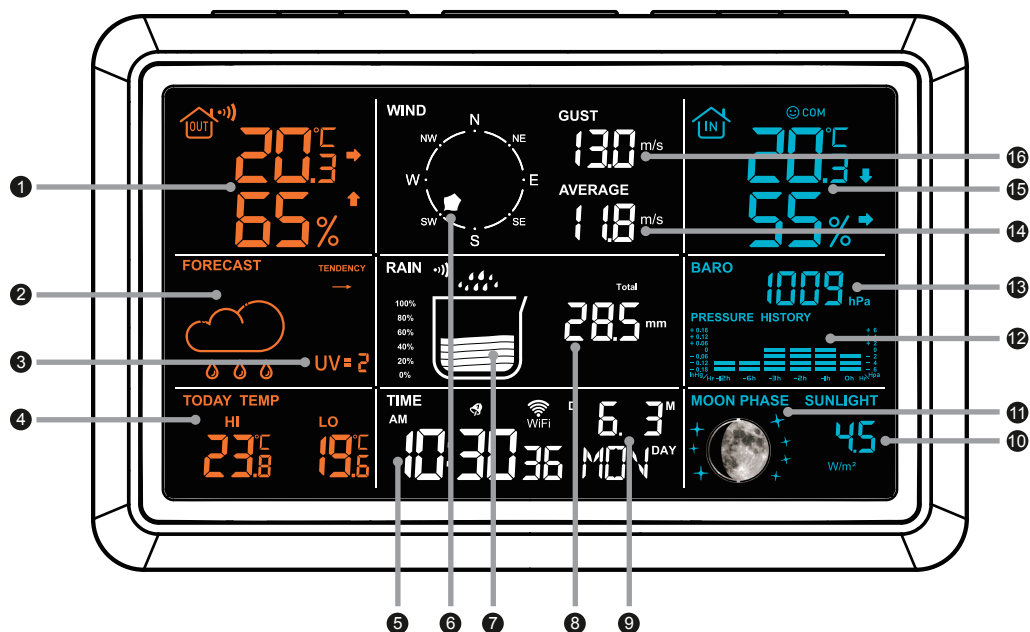
Weather Station: Adapter or 3 × LR6 AAA batteries;

Sensor: 3 × LR6 AA batteries;

- Connection Distance:

Weather station and sensor: 100M

SCREEN DISPLAY INTRODUCTION



1. Outdoor Temperature/Humidity

2. Weather Forecast

3. UV rays

4. Today Highest/Lowest
Temperature

5. Time Display

6. Wind Direction

7. Rain Bar

8. Rain Data

9. Date/Week

10. Sunlight

11. Moon Phase

12. Pressure Bar

13. Pressure Data

14. Average Wind Speed

15. Outdoor Temperature/
Humidity

16. Wind Speed

 : Battery Low Pressure Icon

MAX : Temperature and Humidity
MIN Max/Min Record

↓ → ↑ : Trend Arrow Indicator

☹️ 😊 ☹️ : Comfort Indication

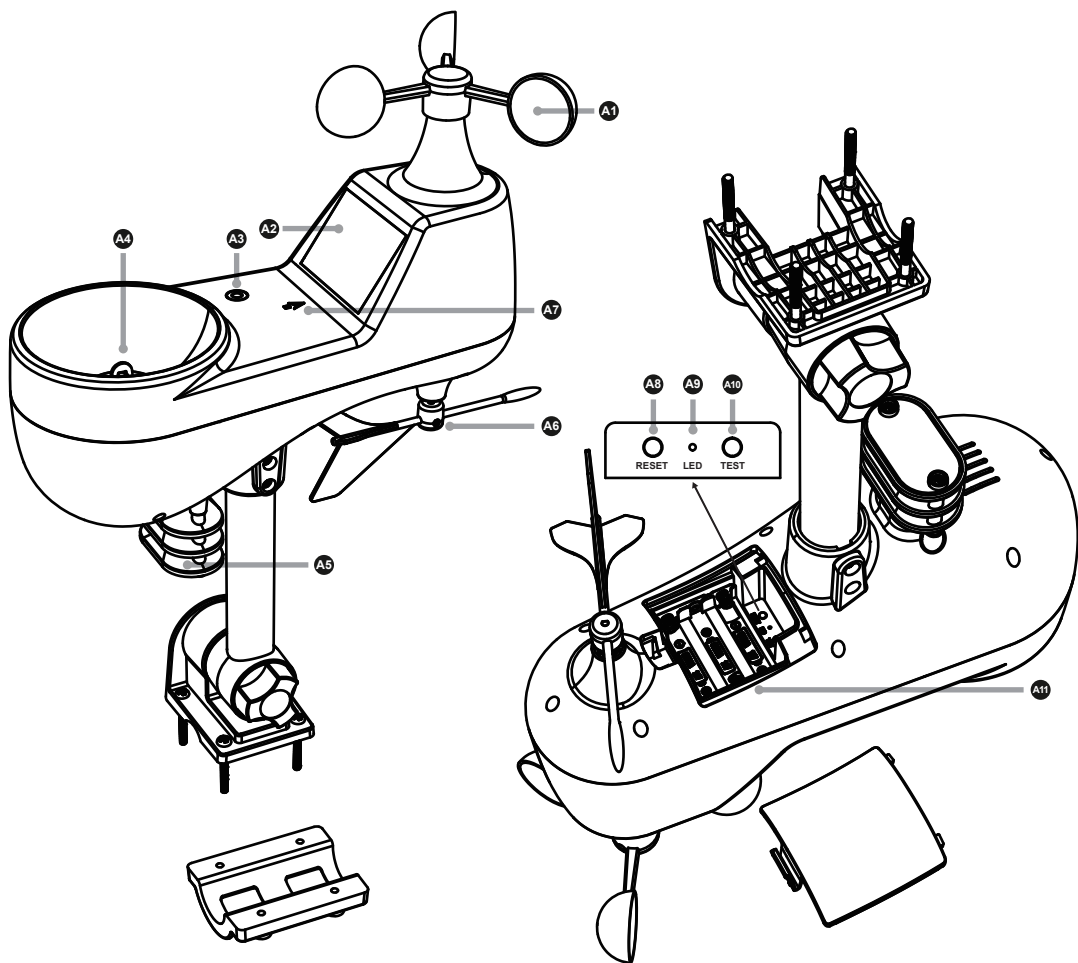
 : Rain Alert

 : Alarm Clock Icon


 : Snooze Icon

 : Temperature Alert Icon

SENSOR APPEARANCE



A1: Wind Cups

A2: Solar Panel

A3: Bubble Level

A4: Rain Funnel

A5: Temperature & Humidity

Induction Box

A6: Wind Direction Vane

A7: North Direction Mark

A8: Sensor Rest Button

A9: LED Indication

A10: Sensor Signal Button

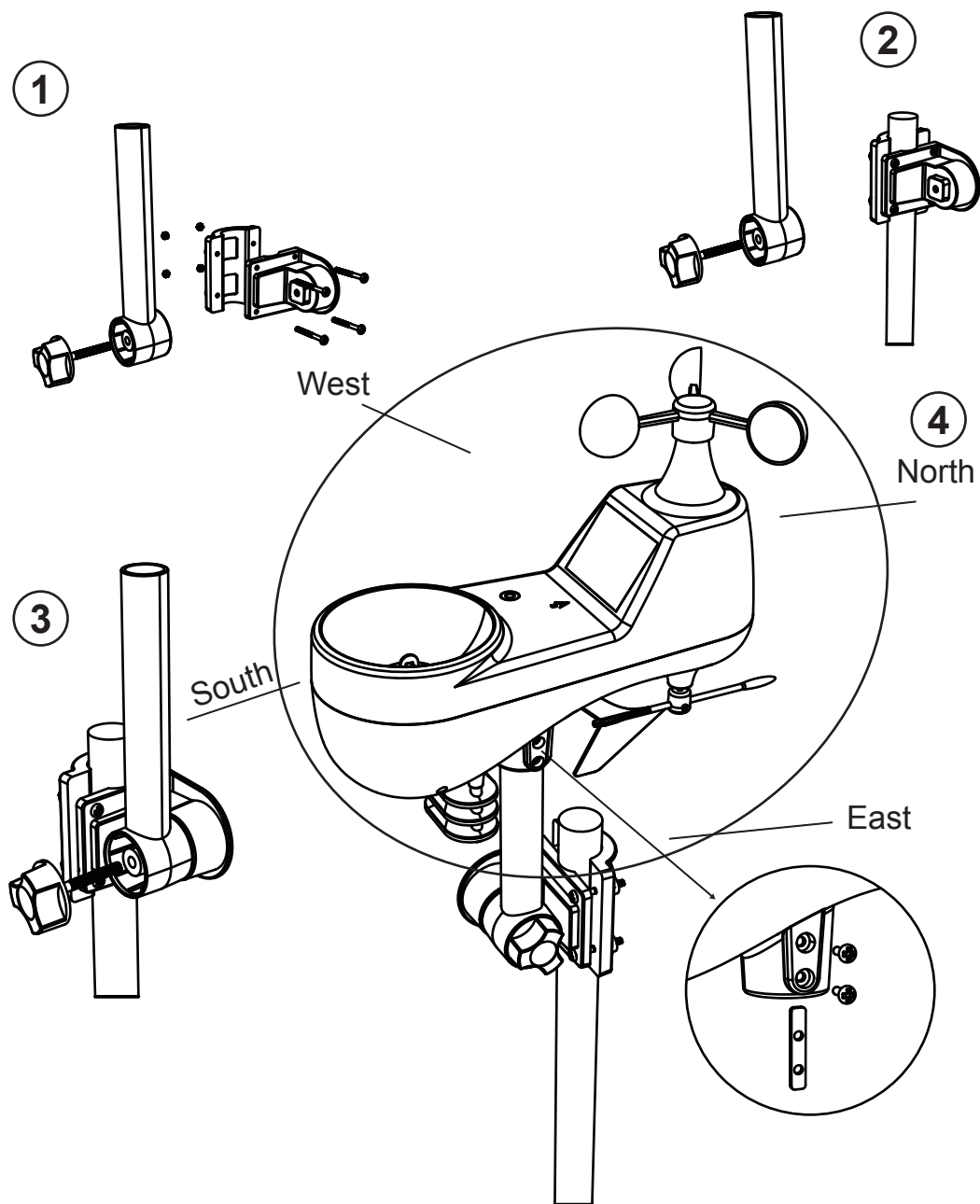
A11: Sensor Battery Cover

SENSOR INSTALLATION NOTES

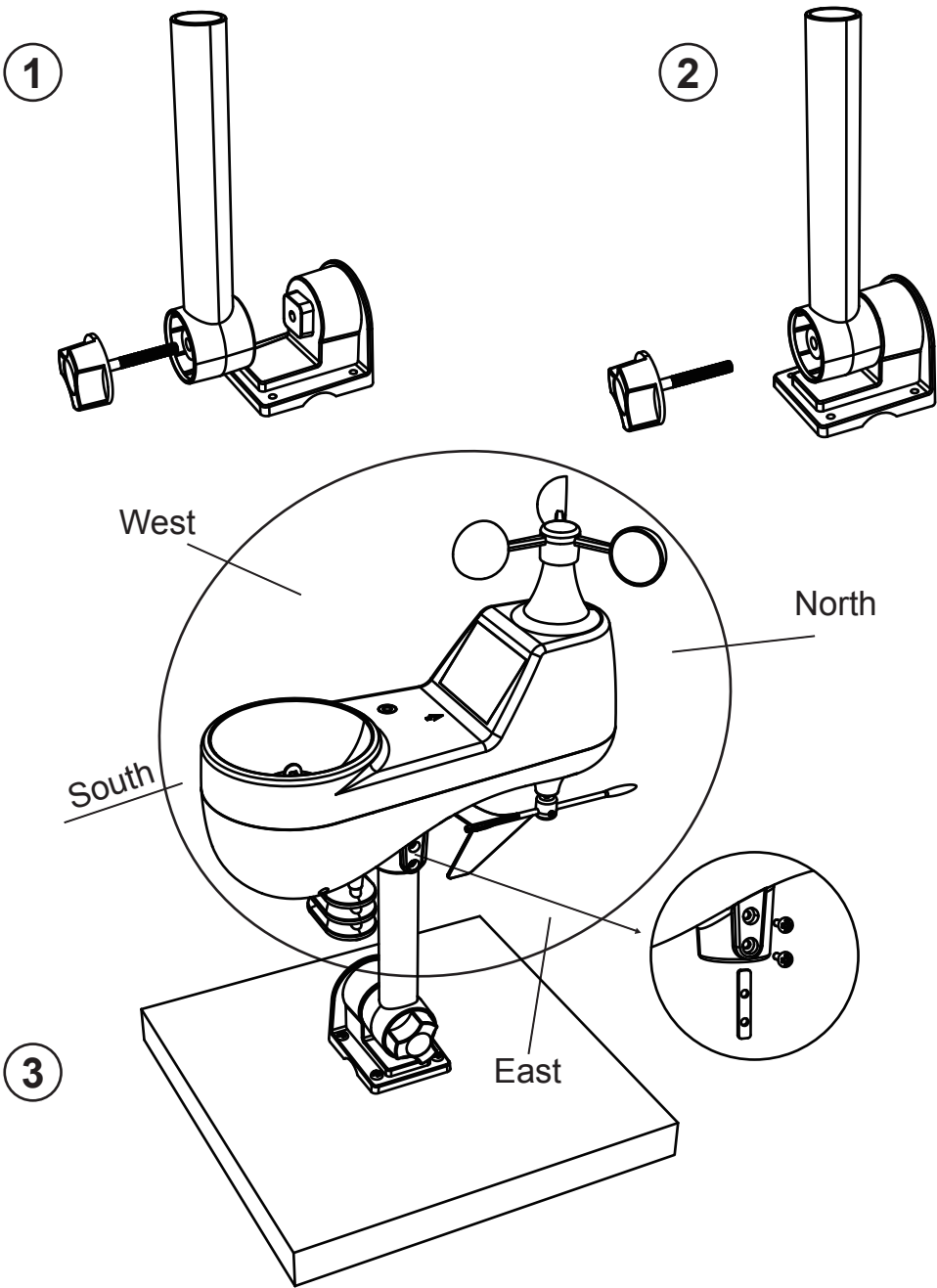
- Mount in an open area clear for 15 meters (50 feet) in all directions.
- The sensor needs to be mounted on a sturdy platform or bracket that is mounted 1.5 m (5 ft) above the ground.
- The base of the sensor is screwed to the platform and the support frame. Tighten the large nut that secures the support rod to the base.
- When installing, adjust the sensor body so that the solar panel faces south, otherwise the wind direction will be wrong. Note the "N" North Embossed Mark on the top of the sensor (requires a compass for proofreading, and the "N" North Emboss mark is identical to the "N" of the compass).
- When installing the sensor, use the top bubble level to ensure the sensor level, otherwise the accuracy of the rainfall reading will be affected.
- After completing the above two steps, lock the two hexagon socket screws on the side of the sensor body.
- When installing, the fixing screws of the wind cup and the wind direction cursor should be tightened and tightened.
- The rainforest structure of the sensor needs to be cleaned regularly (recommended cycle 1-3 months, depending on the frequency of rain):
 - a. Remove the rainwater funnel (turn the rain sand funnel according to the direction of rotation shown).
 - b. Gently remove debris or insects from the rain sensor.
 - c. Remove debris from the rainwater funnel itself, especially debris from the funnel drain.
 - d. Remove the debris from the drain.
 - e. Reinstall the rainwater bucket.
 - h. Note: Do not apply oil to the rain sensor.
- Make sure the wireless sensor is installed within 100 meters of the weather station (empty, unobstructed). According to the thickness of the obstacle between the wireless sensor and the weather station, the distance should be shortened as much as possible (the distance after the wireless signal penetrates the obstacle will be shortened), otherwise the data transmission may be disturbed.

SENSOR INSTALLATION METHOD

Method 1: install on the pole



Method 2: install on the ground



PRECAUTIONS BEFORE USE

1. Before use, please download the Tuya Smart APP from the mobile app store and register as a user.

APP ICON:

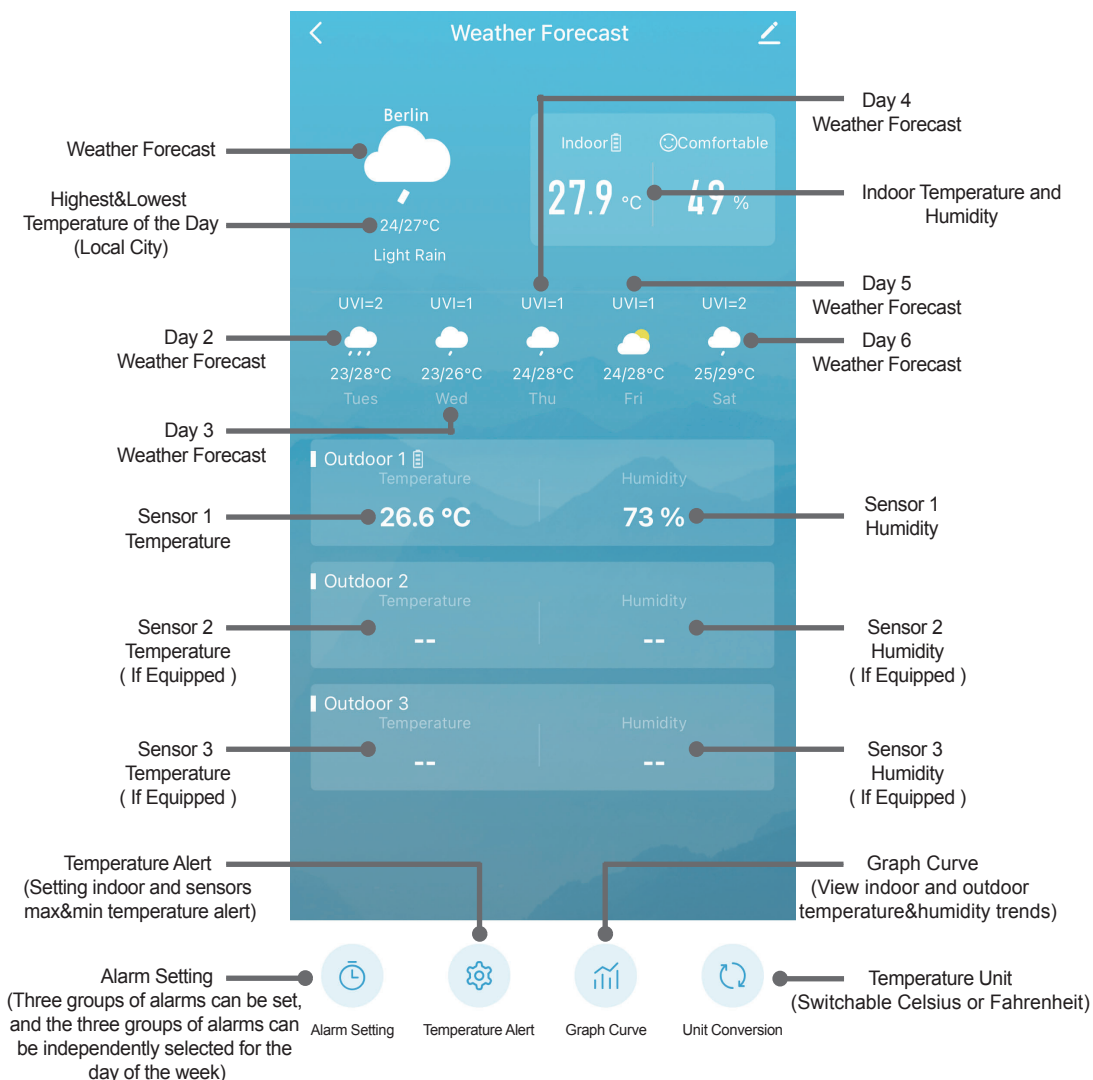


2. WIFI function is only used when the weather station is powered by adapter; Please make sure that your phone is properly connected to 2.4GHz network or 2.4/5GHz hybrid network, and do not connect to a wireless network that only supports 5GHz, and turn on bluetooth.
3. After power on, weather station enter the 3-minute sensor reception; If the weather station receives data from the sensor within 3 minutes, it will exit the receiving mode. If need to receive sensor data again, press the button **DOWN** for more than 3 seconds to enter manual receiving mode.

WIFI RECEPTION

1. Before connecting, please make sure your phone is connected to WIFI and Bluetooth has turned on.
2. Press the button **WIFI** for more than 3 seconds to enter the WIFI manual reception mode, the WIFI bottom dot (●) of the signal(📶) is flashing.
3. Open the Tuya Smart APP, click the **Add Device** button to enter the device searching.
4. If the device is found, the Weather Forecast icon will appear; click the icon to enter the WIFI account and password settings and click the **Next** button add device; and then click the **Done** button to finish WIFI reception.
5. After connected to the WIFI, the APP will display local city name and weather conditions; weather station will synchronize the date/time on the Internet with the local weather conditions.
6. After the WIFI connection is successful, if the city displayed on the APP is not your city, press the button **WIFI** for more than 3 seconds to re-enter the WIFI connection again. (Workers forgot to restore the factory settings when they was testing the functions.)

APP OPERATION INTERFACE



WIRELESS SENSOR CONNECTION

1. After power on, weather station enter the 3-minute sensor reception; If the weather station receives data from the sensor within 3 minutes, it will exit the receiving mode.
2. If the weather station does not receive the sensor signal within 3 minutes, the weather station needs to receive it manually.

3.How to manually connect the weather station and the sensor?

First,press the button **ALARM** for more than 3 seconds,the outdoor wireless receiving symbol will flash;

Second,press the button **TEST** in the sensor battery compartment.

4.If you cannot connect manually, please try the following steps:

- Make sure the batteries are positioned correctly;
- Replace the batteries;
- Restart the weather station and sensor;
- Select a different location for the weather station/sensor;
- Reduce the distance required for data transmission between the weather station and the sensor;
- Check for any nearby sources of interference.

SETTING TIME MANUALLY

1.Press the button **MODE** for more than 3 seconds to enter the setting mode; After entering setting mode,each time you press the button **MODE** to confirm and enter the next setting item.

2.Setting sequence:

12/24H Format → Order of Day&Month → Year → Month → Date → Hour → Minute → °C/°F → hPa/inHg → mm/inch → mph/m/s/kmh → Week Language → Exit.

3.Each time you press the **UP** or **DOWN** buttons, the set item will be added or subtracted by one step.

4.20 seconds without any buttons operation, it will save the setting data and exit setting mode.

ALARM SETTING

SETTINGS ON APP

1.Open Tuya Smart APP and enter my device "Weather Forecast".

2.Press the Alarm Setting button at the bottom to enter the alarm setting.

3.There are 3 groups of alarms that can be set, and each group of alarms can choose the day of the week; after setting,click **Confirm** to save and exit the settings,click the switch button on the right to set the alarm ON/OFF.

SETTINGS ON WEATHER STATION

- 1.The default time for alarm1 is 6:00, alarm2 is 8:00.
- 2.Press the button **MODE** to display alarm1 and alarm2 time.
- 3.Press the button **ALARM** to turn the alarm ON or OFF; When the alarm is turned on, the alarm icon will be displayed on the screen.
- 4.How to set alarm time?
For alarm1,press the button **MODE** to check alarm1 time,and then press the button **MODE** for more than 3 seconds to enter the alarm1 setting; the setting sequence: Hour → Minute → Exit. The setting method of alarm2 is the same as alarm1.
- 5.20 seconds without any buttons operation, it will save the setting data and exit setting mode.
- 6.When the alarm sounds, the alarm icon flashes.

SNOOZE

- 1.When the alarm sounds, press the **SNOOZE** button to enter the 5 minute snooze mode.
- 2.When the alarm sounds,press any button except **SNOOZE** button to stop the alarm.

TEMPERATURE DESCRIPTION

- 1.Indoor temperature range: -9.9°C ~ 50°C (14.0°F ~ 122°F).
- 2.Outdoor temperature range: -40°C ~ 60°C (-40°F ~ 140°F).
- 3.Temperature accuracy: 0 ~ 40°C: ±1°C, Other range: ±2°C.
- 4.Temperature resolution: 0.1°C(°F)
- 5.Default unit: °C.(Press the button **MODE** for more than 3 seconds to enter the setting mode, please refer to **P10** for the operation sequence; When switching to °C and °F, press the **UP** or **DOWN** button to switch the temperature unit; or swich on the Tuya Smart APP.)
- 6.When the detected temperature exceeds the measurement range of the weather station, the temperature will be displayed as LL.L or HH.H.

TEMPERATURE ALERT

SETTINGS ON APP

- 1.After the weather station connected to WIFI,open the Tuya Smart APP, click on the bottom of the **Temperature Alert** to enter the setting.
- 2.Click the item you want to set, adjust the max and min temperatures, click the switch button and click the **Confirm** button to turn on the alert.

SETTINGS ON WEATHER STATION

- 1.Press the button **ALERT** to ON/OFF the temperature alert; the alert is on when the alert icon display on screen.
- 2.Temperature alert setting:
Press the button **ALERT** for more than 3 seconds to enter temperature alert setting,press the button **UP** or **DOWN** to set the value you need.
- 3.Temperature alert setting order:
Outdoor Hi Temperature → Outdoor Lo Temperature → Indoor Hi Temperature → Indoor Lo Temperature → Rain Alert→ Exit.
- 4.When the temperature alert is turned on, the temperature alert icon will be displayed on the weather station screen.
- 5.When the temperature reaches the setting of alert, the weather station will sound alarm (alarm sound for 5 seconds every minute) and the alert icon will flash, press any keys to turn off alarm sound,but the icon still flash.Until the temperature is no longer within the alert range, the alert icon stop flash.

HUMIDITY DESCRIPTION

- 1.Indoor&outdoor humidity range: 20%RH~95%RH.
- 2.Humidity accuracy: 40%RH~80%RH: $\pm 5\%$ RH, Other range: $\pm 8\%$ RH.
- 3.Humidity resolution: 1%RH
- 4.If the detected indoor or outdoor humidity is lower than 20%RH, it will still be displayed as "20%RH", and if it is higher than 95%RH, it will still be displayed as "95%RH".

MAX/MIN TEMPERATURE HUMIDITY

- 1.Press the button **MEM** every time to check the MAX&MIN temperature and humidity record.

2. Press the button **MEM** for more than 3 seconds to clear the record of MAX/MIN temperature and humidity; temperature displays "--.-" for 3 seconds, and then return to the current temperature display.
3. The MAX/MIN temperatures and humidity are recorded for the day. The datas will be cleared and recorded again at 0:00 am every day.

TEMPERATURE AND HUMIDITY TREND

1. The arrows indicate whether the measured temperature or humidity is decreasing, increasing or unchanged.
2. The weather station evaluates the measurements for the last hour. The arrow for a given sensor and value will point up or down if the change in the last hour is at least 1°C or 5%RH.

WEATHER FORECAST

The rainfall part of the weather station is not divided into large and small, and the LCD display has only one rain symbol; Different rainfall and more weather can be displayed in the Tuya Smart APP.

Sunny	Partly Cloudy	Cloudy	Thundershower	Thunderbolt	Thunderstorm
Light Rain	Moderate Rain	Heavy Rain	Rainstorm(Icon Flashes)	Shower	Heavy Shower
Light Snow	Moderate Snow	Heavy Snow	Snowstorm(Icon Flashes)	Snow Shower	Heavy Snow Shower
Sleet	Fog	Haze	Sand Blowing	Sandstorm(Icon Flashes)	

The weather icon will be **flashed** on weather station screen as below: Rainstorm/Snowstorm/Sandstorm.

PRESSURE DESCRIPTION

1. Pressure range: 850 hPa/mb ~ 1100 hPa/mb (25.1 inHg ~ 32.48 inHg).
2. Pressure accuracy: ± 5 hPa/mb / 0.15 inHg.
3. Pressure resolution: 1 hPa/mb & 0.01 inHg.
4. Default unit: hPa. (Press the button **MODE** for more than 3 seconds to enter the setting mode, please refer to **P10** for the operation sequence; When switching to hPa and inHg, press the **UP** or **DOWN** button to switch the unit.)
5. The air pressure history bar is displayed in the past 1 hour, the past 2 hours, the past 3 hours, the past 6 hours, the air pressure trend in the past 12 hours.
6. In the past 1 hour/2 hours/3 hours/6 hours/12 hours, the air pressure strip defaults to 4 items default.
7. How to explain the changes in the pressure history bars:
For example: after 1 hour of power, the air pressure changes to +2 hPa, the pressure history bar -1h position will be added one piece, there will be 5 strips in the pressure history bar -1h position.

WIND AND RAIN DESCRIPTION

1. Wind speed range: 0 ~ 180 km/h (0 ~ 111 mph).
2. Wind direction range: 0 ~ 359°.
3. Default unit of wind speed: km/h. (Press the button **MODE** for more than 3 seconds to enter the setting mode, please refer to **P08** for the operation sequence; When switching to km/h and mph, press the button **UP** or **DOWN** to switch the unit.)
4. Rain data range: 0 ~ 9999 mm (0 ~ 393.6 inch)
5. Default unit of rain: mm. (Press the button **MODE** for more than 3 seconds to enter the setting mode, please refer to **P10** for the operation sequence; When switching to mm and inch, press the button **UP** or **DOWN** to switch the unit.)
6. Press the button **RAIN** to switch rainfall display mode:
1 Hour → 24 Hours → Today → Yesterday → 7 Days → Month → Year → Total.

7. Press the button **RAIN** for more for more than 3 seconds to clear the rainfall datas.
8. The maximum record of rainfall is 9999mm/393.6inch; the rainfall display flashed after the record reaches the maximum value, it must be cleared manually to update the data again.

RAIN ALERT

1. The rainfall alert refers to the **24Hour** rainfall alert. (The rainfall alert default value: 50mm/2inch)
2. Press the button **ALERT** to ON/OFF the temperature and rain alert.
3. Press the button **ALERT** for more than 3 seconds to enter the alert setting,press the button **UP** or **DOWN** to set the value you need.
4. Alert setting order:
Outdoor Hi Temperature → Outdoor Lo Temperature → Indoor Hi Temperature → Indoor Lo Temperature → Rain Alert→ Exit.
4. When the alert is turned on, the alert icon will be displayed on the weather station screen.
5. When the rainfall reaches the setting of alert, the weather station will sound alarm (alarm sound for 5 seconds every minute) and the alert icon will flash, press any keys to turn off alarm sound,but the icon still flash.Until the value is no longer within the alert range, the alert icon stop flash.

COMFORT INDICATION

The climate level at the measuring point is shown on the display with a smiley icon:

icon	temperature	condition	relative humidity
	20 - 28 °C	and at the same time	40 - 70 %
	-	or	<40 %
	-	or	> 70 %

MOON PHASE

The moon phase level is displayed in the MOON PHASE column. The moon phase level is divided into 12 levels, as shown in below:



New Moon → Crescent Moon → First Quarter Moon → Waxing Gibbous Moon → Full Moon → Waning Gibbous Moon → Last Quarter Moon → Waning Moon

BACKLIGHT

- 1.Adapter power: press the button **SNOOZE/LIGHT** to set the backlight level (high, medium, low, off).
- 2.Battery powered: to switch on the short-term backlight for 8 seconds, press the **SNOOZE/LIGHT** button.

BATTERY CHANGE

- 1.Replace the batteries in the wireless sensor if the battery symbol appears on the display next to the transmitter readings.
- 2.Replace the batteries in the indoor unit if the battery symbol appears on the indoor display.
- 3.Please note: after replacing the batteries, contact between the outdoor transmitters and the station must be re-established - so proceed as when you first start the unit or start a manual search for a transmitter.

PROBLEM SOLVING

Q1.How to change the city name on the APP after you connected network if not your city?

Please press the button **WIFI** for more than 3 seconds to re-enter the WIFI reception; for detailed operation, please refer to **Page 08**.(Workers forgot to restore the factory settings when they was testing the functions.)

Q2.What should you do if the sensor is not connected?

First,press the button **ALARM** for more than 3 seconds,the outdoor wireless receiving symbol will flash;

Second,press the button **TEST** in the sensor battery compartment.

If you still cannot connect manually, please refer to the fourth point of wireless sensor connection on **P10** to try again.

FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.