

# Wireless Multi-channel Thermometer and Hygrometer Sensor

Model: DP50

## Contents

|                      |   |
|----------------------|---|
| 1. Introduction..... | 3 |
| 2. Get Started ..... | 4 |
| 2.1 Parts List.....  | 4 |
| 3. Overview.....     | 5 |
| 4. Setup Guide ..... | 7 |

|   |   |
|---|---|
| 4.1 Install batteries .....               | 7   |
| 5. Sensor Placement.....                  | 11  |
| 6. Setup Guide (using with Wi-Fi gateway) | 14  |
| 6.1 Pair with Gateway .....               | 14  |
| 6.2 Wi-Fi Connection for the Gateway      | 15  |
| 7. View Online Data on WS View .....      | 16  |
| 8. Specification.....                     | 18  |
| 9. Warranty Information                   | <b>Fehler! Textmarke nicht definiert.</b> |

## **1. Introduction**

Thanks for purchasing this DP50 wireless thermometer and hygrometer sensor. This device measures temperature and humidity and supports up to 8 channels(one unit for one channel, optional sensors sold separately). The data can be streamed by DP1500 Wi-Fi Gateway(sold separately) and can be viewed on our WS View mobile application after the Wi-Fi configuration done.

To ensure the best product performance, please read this manual and retain it for future reference.

## **2. Get Started**

### **2.1 Parts List**

One Multi-channel Temperature and  
Humidity sensor

One User Manual

### 3. Overview



Figure 1: Multi-channel Thermo-Hygro Sensor

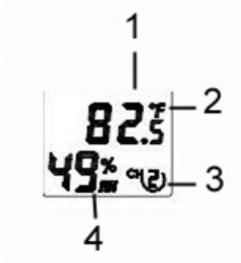


Figure 2: Sensor LCD display

- (1) temperature
- (2) temperature units (°F vs. °C)
- (3) channel number

(4) relative humidity

## **4. Setup Guide**

### **4.1 Install batteries**

1. Remove the battery door on the back of the transmitter(s) by sliding down the battery door, as shown in **Fehler!**

**Verweisquelle konnte nicht gefunden werden.**<sup>3</sup> .

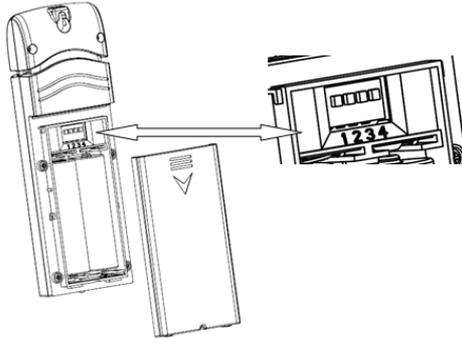


Figure 3: Battery installation

2. Before inserting the batteries, find the dip switches above the battery

compartment and set the temperature units and channel number:

**Temperature Units:** To change the transmitter display units of temperature measure (°F vs. °C), change Dip Switch 4, as referenced in Figure 3.

**Channel Number:** This device supports up to eight sensors. To set each channel number, change Dip Switches 1, 2 and 3, as referenced in Figure 4.

Switch in down position.    Switch in up position.

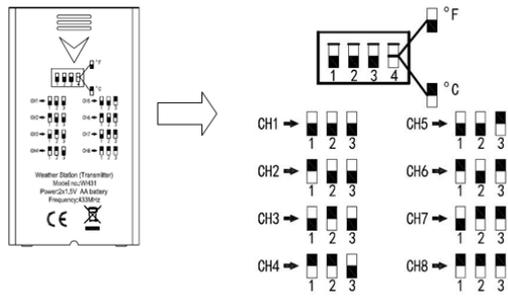


Figure 4: Dip Switch diagram

3.Insert two AA batteries.

4.Verify the correct channel number (CH) and temperature units of measure (°F vs. °C) are on the display.

5.Close the battery door.

Repeat for the additional remote transmitters(sold separately), verifying each remote is on a different channel.

## **5. Sensor Placement**

The best mounting location for the indoor sensor is in a location that never receives direct sunlight, not even through windows.

Also, do not install in a location where a nearby radiant heat source (radiator, heaters, etc.) will affect it. Direct sunlight and radiant heat sources will result in inaccurate temperature readings.

The unit is weatherproof, but besides heeding the placement instructions above, you should also attempt to mount the unit under cover (eave or awning or similar).

To mount or hang the unit on a wall or wood beam:

- Use a screw or nail to affix the remote sensor to the wall, as shown on the left side of figure 5, or

- Hang the remote sensor using a string, as shown in right side of figure 5.

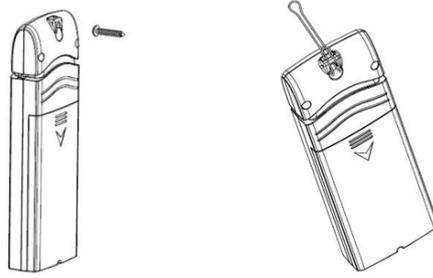


Figure 5: Indoor sensor mounting

**Note:** Make sure the sensor is mounted vertically and not lying down on a flat surface. This will insure optimum reception. Wireless signals are impacted by distance, interference (other weather stations,

wireless phones, wireless routers, TVs and computer monitors), and transmission barriers, such as walls. In general, wireless signals will not penetrate solid metal and earth (down a hill, for example).

## **6. Setup Guide (using with Wi-Fi gateway)**

If you want to view the multi channel sensor data on your mobile application, you need to pair this device with our DP1500 Wi-Fi Gateway(sold separately).

### **6.1 Pair with Gateway**

If the DP1500 has been in operation, and

you have never had any DP50 multi-channel temperature and humidity sensor(s) setup before, just power up the sensor(s) and DP1500 will pick multi-channel temperature and humidity data automatically.

If a DP50 sensor has been hooked on DP1500 before, and you have a new DP50 sensor to replace the old one, unplug DP1500 from USB socket and power up again, then the new sensor will be learned and old sensor will be erased.

## **6.2 Wi-Fi Connection for the Gateway**

For this part, please refer to the manual of

the DP1500 Wi-Fi gateway.

Any question, please contact the customer service.

## **7. View Online Data on WS View**

When the Wi-Fi configuration is done, you can view the local data of your multi temperature and humidity sensor(s) on the WS View application.

| Back             | Live Data | More                 |
|------------------|-----------|----------------------|
| CH1 Temperature  | 27.2 °C   | CH1 Humidity<br>58 % |
| CH2 Temperature  | 29.2 °C   | CH2 Humidity<br>54 % |
| CH3 Temperature  | 29.2 °C   | CH3 Humidity<br>55 % |
| CH4 Temperature  | 29.3 °C   | CH4 Humidity<br>53 % |
| CH5 Temperature  | 29.4 °C   | CH5 Humidity<br>54 % |
| CH6 Temperature  | 29.2 °C   | CH6 Humidity<br>54 % |
| CH7 Temperature  | 29.2 °C   | CH7 Humidity<br>53 % |
| CH8 Temperature  | 29.4 °C   | CH8 Humidity<br>53 % |
| Firmware Version |           |                      |

## **8. Specification**

Power: 2 AA batteries(not included)

Sensor Size: 123x42x14mm

Frequency: 868 Mhz

Temperature range:-10°C – 60°C (14°F - 140°F)

Temperature resolution:0.1°C, or 0.1°F

Temperature accuracy:  $\pm 1^\circ\text{C}$

Humidity range: 10% ~ 99%

Humidity resolution:1%

Humidity accuracy:  $\pm 5\%$

Sensor reporting interval: 48 seconds

Note: A low battery icon will display on the APP to indicate the battery status of the sensor(s).