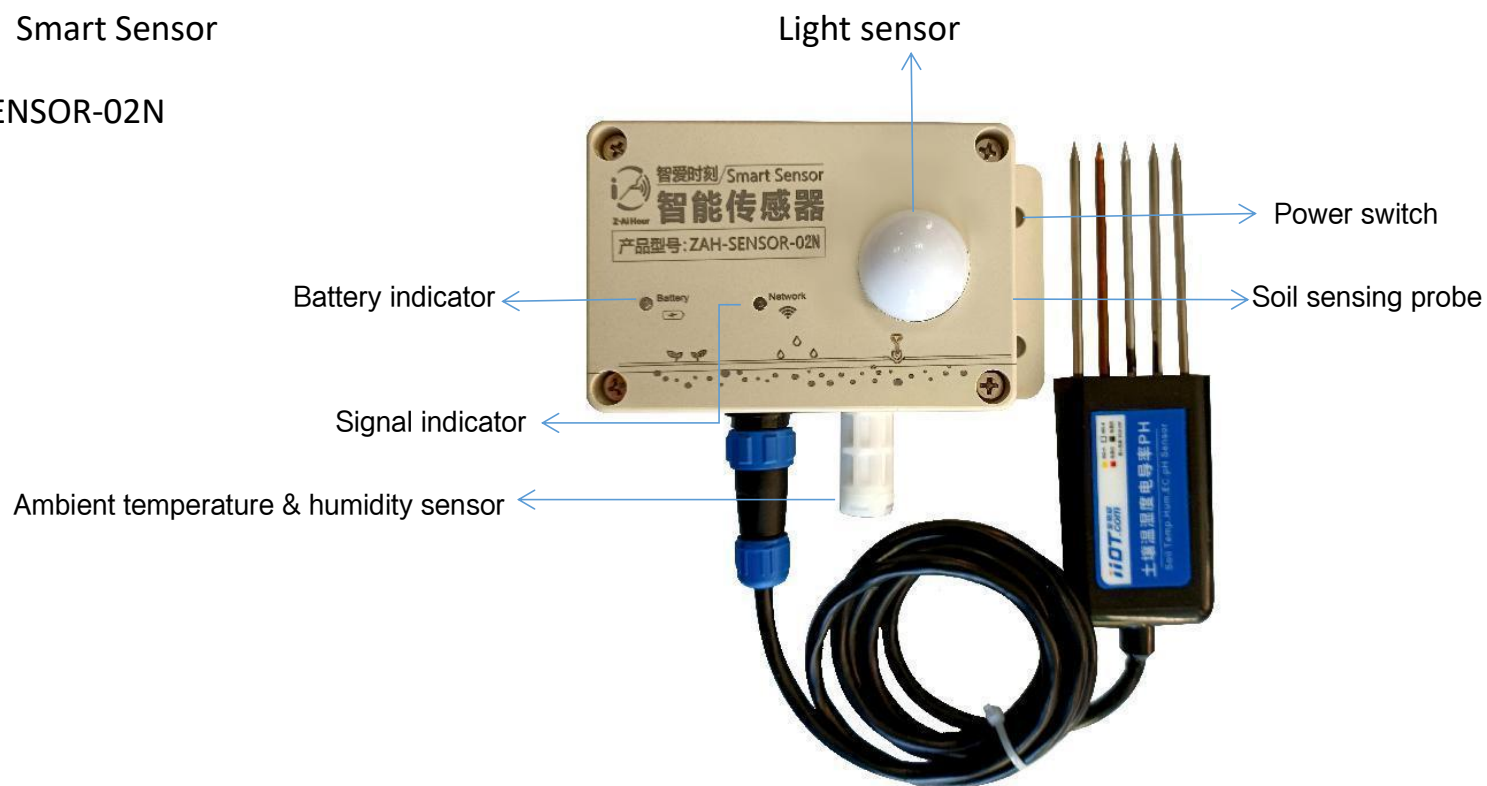


## Operation Manual

Brand: Z-Ai Hour

Product Name: Smart Sensor

Model: ZAH-SENSOR-02N



## Technical Parameters:

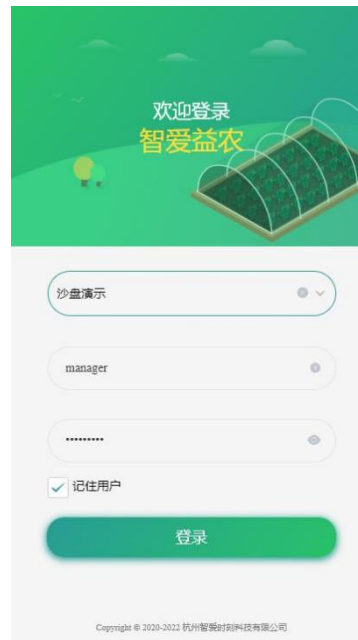
- ✧ Temperature measurement range: -40~125°C; Accuracy:  $\pm 0.3$  °C.
- ✧ Humidity measurement range: 0~100%RH; Accuracy:  $\pm 3\%$  RH.
- ✧ Illumination measurement range: 0~60000Lux; Accuracy: less than 1Lux.
- ✧ Carbon dioxide concentration measurement range: 400~60000ppm; Accuracy: 1 ppm.
- ✧ Soil temperature measurement range: 0~80°C; Accuracy:  $\pm 0.5$  °C
- ✧ Soil moisture measurement range: 0~100%RH; Accuracy:  $\pm 3\%$  RH
- ✧ Soil pH value measurement range: 3~10; Accuracy:  $\pm 0.5$
- ✧ Soil Ec value measurement range: 0~10000us/cm; Accuracy:  $\pm 5\%$
- ✧ The remotely controlled output terminal can connect to a maximum of 750W AC or 150W DC
- ✧ Support connections with different types of sensors and communication modules; Interface expansion: UART, SPI, I<sup>2</sup>C, RS485
- ✧ Protection grade: IP65; Waterproof plastic shell; Size: 133mm×69mm×50mm
- ✧ Operating temperature: -10~60°C
- ✧ Transmission power: 23dBm; Antenna interface: 50 ohm/SMA-K
- ✧ Transmit frequency band: 433MHz / 800MHz / 900MHz
- ✧ Input charging voltage: DC12V; Power interface: DC005; Operating current: 30mA

## Announcements

- Do not bend or break the antenna, or place the device in an iron container. Keep the device in an open environment; otherwise, the device may fail to connect to the server.
- Put the device in a dry environment to prevent water vapor from affecting the circuit boards inside the device.

## Instructions

1. Power switch is on the side of the device. Press it once to turn on the power. If the red indicator lights up, indicating that the power is connected. Press it again to turn off the power.
2. After the power is turned on, the device will be connected automatically to the server, and the network indicator will flash bluelight. It will stop after the indicator continues to flash for 4-5 seconds, indicating that network is successfully connected. If the indicator continues to flash for more than 5 seconds, that meansthe network connection fails. Consider placing the device in an open place and then restarting the device to try to access the network.
3. When power supply is connected, the battery indicator is red. If the device is fully charged, the battery indicator will turn to green.
4. Insertthe soil sensing probe into the soil.
5. Search the subscription of "Z-Ai Hour" on WeChat, and select the corresponding program from the subscription to check the information data.



## **FCC Requirement**

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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.

Note: 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.