

# Portable Weather Station

Model ES-W4003



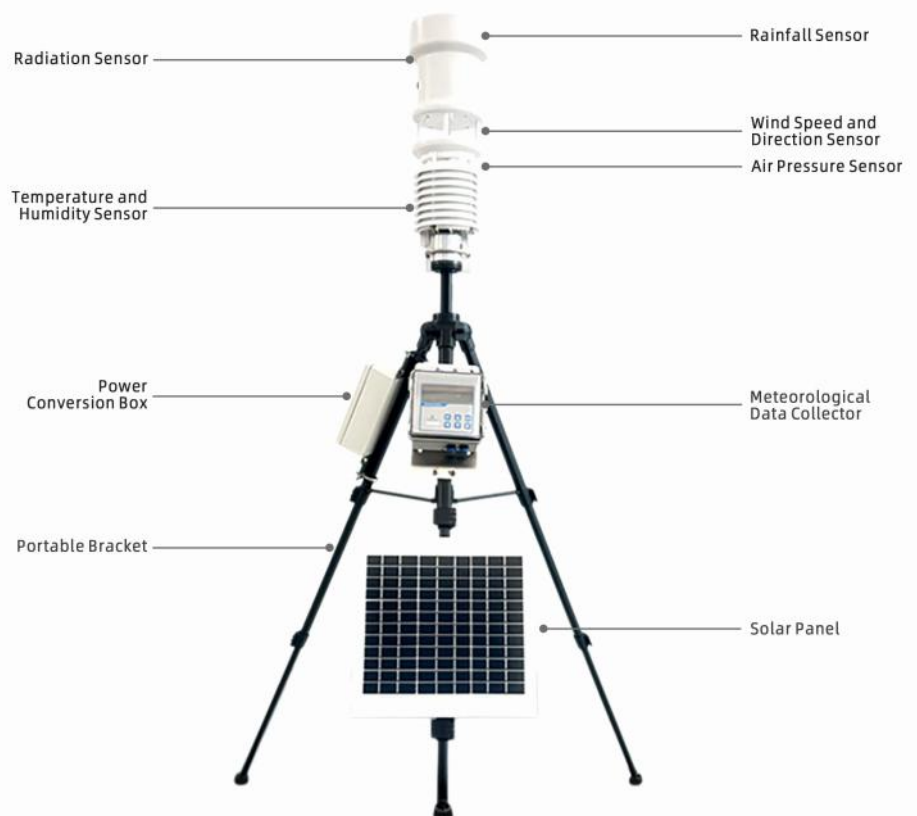
## Introduction

ES-W4003 portable automatic weather station is a mobile observation system that is easy to carry, use, and provides high measurement accuracy, integrating multiple meteorological elements. The system adopts a novel integrated structural design and is well-made. It can collect information on temperature, humidity, wind direction, wind speed, solar radiation, rainfall, air pressure, illuminance, soil temperature, soil moisture, dew point, and other data, and generate announcements and trend analyses. The system is available in both wired and wireless versions, and with the help of software, it can achieve remote network data transmission and real-time network weather monitoring. It is a small automatic weather station with excellent cost performance.

## Main features

- Integrated design, multi-parameter monitoring
- Portable stand for various occasions
- No mechanical rotation or wear
- Imported UV-resistant and anti-aging materials
- Electronic compass, never lose your way
- Heating function, unaffected by extreme cold
- Supports GPS, BeiDou, and base station positioning methods
- Can generate visual trajectory maps
- Anti-interference shielded cable
- Data viewing methods: A. Export to local storage SD card; B. View data remotely on PC or mobile device.
- Foldable stand and quick-installation accessories allow for installation within 10 minutes without additional tools.

## Typical structure



## Specification

| ITEMS                 | Range                                                           | Resolution    | Accuracy     |
|-----------------------|-----------------------------------------------------------------|---------------|--------------|
| Ambient temperature   | -50-90°C                                                        | 0.1°C         | ±0.3°C       |
| Ambient humidity      | 0-100%RH                                                        | 1%RH          | ±3%RH        |
| Dew point             | -50-50°C                                                        | 0.1°C         | ±0.3°C       |
| Wind direction        | 0-359°                                                          | 0.1m/s        | ±3°          |
| Wind speed            | 0-60m/s                                                         | 0.1hPa        | ≤(0.3+0.03V) |
| Air pressure          | 300-1100hPa                                                     | 0.1 0.2 0.5mm | ±0.3hPa      |
| Rainfall              | 0-999.9mm                                                       | 1w/m2         | ±4%          |
| Radiation             | 0~2500w/m2                                                      | 1w/m2         | ≤5%          |
| Ultraviolet radiation | 0-1000w/m2                                                      | 1Lux          | ≤5%          |
| Illuminance           | 0~200000Lux                                                     | 0.1h          | ≤5%          |
| Sunshine duration     | 0-24h                                                           | 0.1°C         | ±0.1h        |
| More parameters       | *Please consult our sales manager for more functions customized |               |              |

## Equipment Configuration Details

| ITEMS                                | Remarks                                                                                                                                                                                                                     |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Weather instrument                | 1 set: Simultaneously measures seven parameters: air temperature, humidity, atmospheric pressure, wind speed, wind direction, rainfall, and illuminance. (Customized models are configured according to actual parameters.) |
| 2. Extendable/folding tripod         | 1 set: Base mounting; tripod extension height (120CM-190CM)                                                                                                                                                                 |
| 3. Main data acquisition unit (box)  | 1 set: Chassis including protective cover, main data acquisition unit, power module; main acquisition board with surge protection design.                                                                                   |
| 4. Card reader                       | 1 set: Used to read historical data stored on the data acquisition unit's built-in SD card.                                                                                                                                 |
| 5. Solar panel                       | 1 set: Standard 20W battery board.                                                                                                                                                                                          |
| 6. Sensor arm                        | 1 piece: Used to fix other single sensors (optional).                                                                                                                                                                       |
| 7. Portable battery/built in battery | 1 set: 12V 20Ah.                                                                                                                                                                                                            |
| 8. Trolley case                      | 1 set: Aviation aluminum case material, can be used as a portable case or logistics box.                                                                                                                                    |
| 9. Optional accessories              | Sensor crossarm, pull rope (three pieces)                                                                                                                                                                                   |

