

REMOVABLE AND FOLDABLE PORTABLE WEATHER STATION



Product Introduction

Zhice Yunlian portable weather station is an integrated ultrasonic portable meteorological device equipped with a retractable tripod. It features a lightweight, commissioning-free design, enabling full on-site setup and installation immediately.

The device integrates an ultrasonic wind measurement module with no traditional wind cup rotating structure, and can collect basic meteorological data 24/7, including wind speed, wind direction, temperature & humidity, and atmospheric pressure. It has a built-in LCD screen for on-site data reading, and a built-in 4G communication module to remotely upload data to the cloud platform. Monitoring modules for rainfall, particulate matter (PM), radiation and more can be expanded as required.

Application Scenarios

Flood control and emergency rescue

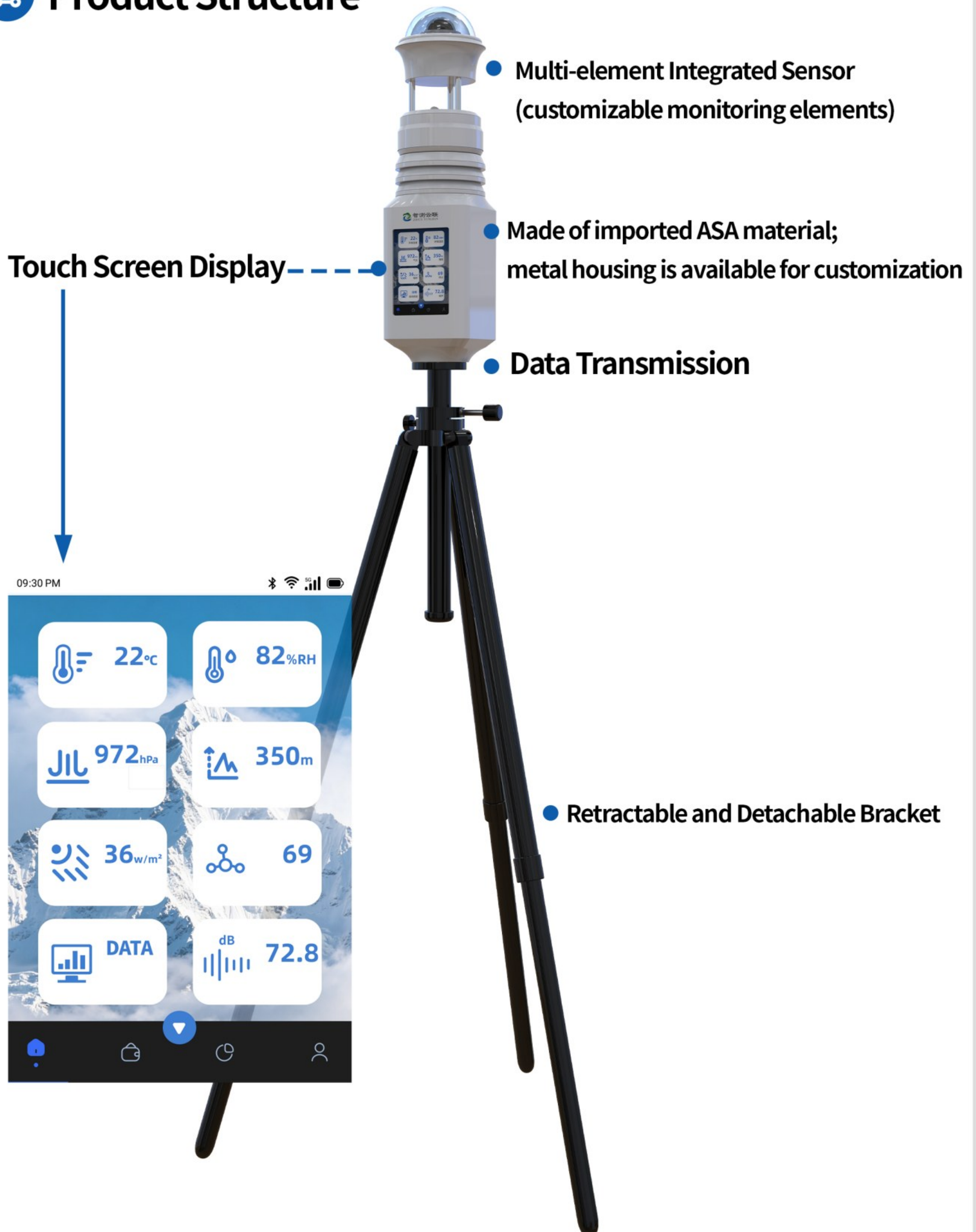
Meteorological support for sports events such as marathons and auto racing

Field geological exploration

Surprise environmental inspection and patrol

Field monitoring for agricultural and forestry scientific research

Product Structure



⇒ Data Transmission

Transmission Method	Type	Internet Required	LAN Support	Offline Adaptability
RJ45/RS485 Wired	Wired	Optional	Yes	Supported (only for local LAN data collection)
USB Direct Connection	Wired	No	No	Fully compatible; historical data can be exported directly to an on-site computer
LoRa Wireless Transparent Transmission	Wireless	No	Yes	Fully compatible for offline local networking data collection
Bluetooth	Wireless	No	No	Fully compatible; supports on-site data reading within a short distance of 10~50 meters
4G Wireless Transmission	Wireless	Yes	No	Offline not supported; data cannot be uploaded to the cloud when the network is disconnected

📦 Product Specifications

Category	Parameter Name	Specification Details
Basic	Measurement Technology	Adopts top-hidden ultrasonic probe, based on continuous frequency-variable ultrasonic signal + relative phase detection principle. It avoids interference from snow accumulation and natural wind shielding, ensuring measurement accuracy and reliability.
	Integrated Measurement Elements	Integrated sensor design, monitors multiple indicators simultaneously in real time
Structure	Equipment Bracket	Retractable aluminum alloy bracket, adjustable height according to site requirements to ensure measurement accuracy
	Transportation Protection	Equipped with standard shock-absorbing protective trolley case for easy portability and transportation, effectively protecting the device from damage during transit
	Total Weight of Equipment	≤5KG, lightweight design, can be easily carried and moved by a single person
	On-site Deployment Efficiency	Operated by 1 person, full deployment process completed within ≤5 minutes, fast and efficient
Performance	Power Supply Mode	Powered by 12000mAh large-capacity lithium battery, with built-in power display function to check remaining power in real time
	Battery Continuous Working Time	Continuous working time ≥32 hours, meets the demand of long-time field operation
	Overall Power Consumption	Only 1.75W, low power consumption design greatly extends outdoor battery life
	Local Data Storage	Storage capacity ≥500,000 entries, supports long-term continuous data recording and subsequent analysis
Qualification	Enterprise Qualifications	1. Certified with ISO quality management system, environmental management system and occupational health management system2. Owns computer software copyright registration certificate3. National Class 3A credit enterprise, guarantees product quality and corporate credibility





Introduction to the upper computer software

Function Category	Specific Description
Core Functions	Realize integrated management of data reception, storage, viewing and analysis in the PC standalone environment
Data Reception and Processing	1. Support data reception via serial port, as well as data processing and visual display 2. Compatible with communication methods such as JSON string and MODBUS485
Parameter Configuration	1. Allow independent setting of data storage time 2. Support custom collection time in MODBUS485 collection mode
Monitoring Parameter Management	Support users to independently add, delete and modify monitoring parameters, including information such as parameter protocols, names and icons
Data Processing Expansion	1. Equipped with data post-processing function 2. Support external running of JAVASCRIPT scripts



Introduction to Cloud Platform

Function Category	Specific Description
Architecture & Access Method	Adopts a CS architecture software platform, supporting direct access and observation via mobile phones and PC browsers without additional software installation
Account & Device Management	Supports multi-account and multi-device login, meeting the collaborative management needs of multiple users and terminals
Data Display Function	1. Provides dashboards for real-time data display and historical data display 2. Supports data curve analysis 3. Supports map display and device information viewing
Data Storage & Stability	Implements cloud data storage based on cloud servers, featuring stability, reliability, easy scalability and load balancing
Alarm & Threshold Management	Supports SMS alarm function, allowing custom alarm threshold settings to respond to abnormal data in a timely manner
Data Processing & Output	1. Supports data export in table format 2. Has data post-processing function 3. Supports external running of JAVASCRIPT scripts to enhance customization capabilities
Data Forwarding Function	Supports data forwarding via multiple protocols, including HJ-212 protocol, TCP forwarding, HTTP protocol, etc.

