

Integrated Weather Station Designed for Drones

» Product Introduction

The HY-UAVW6E is a compact meteorological monitoring device designed specifically for low-altitude drone operations, integrating multi-parameter monitoring capabilities for wind speed, wind direction, visibility, temperature, humidity, and atmospheric pressure.

Featuring a lightweight, low-power design, it can be directly mounted on various drone platforms to provide real-time meteorological data, ensuring flight safety and improving operational efficiency.



» Application

- Drone inspections: In scenarios such as power line inspections, oil and gas pipeline inspections, and forest fire prevention, drones monitor wind speed and visibility in real time to mitigate the risks posed by severe weather.
- Emergency Response: Conduct meteorological assessments at disaster sites (such as earthquakes and floods) to provide environmental data support for rescue drones.



- Agricultural Plant Protection: Precisely monitor temperature, humidity, and wind speed in the treatment area to optimize pesticide spraying efficiency and prevent drift.
- Low-Altitude Logistics/Mapping: Ensures real-time meteorological safety along flight paths and enhances mission reliability.

Technical Specifications

Parameters	Range	Accuracy	Resolution
True/Relative Wind Speed	0–60 m/s	±3%	0.1 m/s
True/Relative Wind Direction	0–359°	±3°	1°
Pitch and Roll Angles (3D Anemometers Only)*	±60°	±3°	1°
Temperature	-50–+80 ℃	±0.2 ℃（25 ℃ Typical，-20~+50 ℃）、Full Range ±0.5 ℃	0.01 ℃
Humidity	0–100 %RH	±3%RH（≤80%RH）、±5%RH（>80%RH）	1%
Pressure	300–1100 hPa	±0.5 hPa（0~+40 ℃）、±1 hPa（Full Temperature Range）	0.1 hPa
PM2.5、PM10 *PM1.0	0–1000 μg/m³	±10%	1 μg/m³
Visibility *	10–10 km（Can be expanded to 80 km）	±10%（≤1500 m），±20%（>1500 m）	1 m
Digital Output	RS485		
Operating Range	-40 ℃ ～ +80 ℃； 0 - 100%RH		
Power	18650 Li-ion Battery		
Storage	16 GB TF Card Storage		
Positioning *	GNSS • Compass • Gyroscope		
Size/Weight	342-182 mm /（0.38–1.2）kg		
Mounting *	Quick-Assembly Parts (Customization)		

Product Showcase

