

Weather Station for Drones

»Product Introduction

The HB-UAVWSE UAV-specific weather station can measure meteorological parameters such as wind speed, wind direction, temperature, humidity, and atmospheric pressure. It is designed for data acquisition systems and platforms specifically built for low-altitude meteorological parameters.

Designed and manufactured for installation on unmanned aerial vehicle (UAV) platforms, this device features an integrated structure and prioritizes characteristics such as light weight, compact size, low aerodynamic drag, and low power consumption; it can operate normally in light rain.

This weather station can be mounted on top of a drone. It is constructed from lightweight and durable engineering plastics (ASA) and carbon fiber. Users can select individual sensing modules based on their specific requirements or combine them in any configuration.



»Technical Indicators

Parameters	Range	Accuracy	Resolution
Wind Speed	0–50 m/s	±3%	0.1 m/s
Wind Direction	0–359°	±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)	1 hPa
Operating Range	-40 ℃ ~ 80 ℃ / 0 - 100%RH		
Digital Output	RS232, RS485, TTL (Choose one)		
Baud Rate	4800 – 19200		
Protocols	ModBus-RTU, ModBus-ASCII, NMEA-0183		
Posture Localization	GPS / Electronic Compass / Gyroscope		
Power	VDC: 7-24V		
Size/Weight	Φ66.6×64 mm (No Pole) / 74 g		
Color/Material	White / ASA / Carbon Fiber (Pole)		

*Optional

»Applications

- Meteorological Measurement on UAV Platforms
- Low-Altitude Atmospheric Monitoring
- Wind and Weather Data Acquisition During Flight



»Key Features

- Integrated structure designed and manufactured for UAV platforms
- Lightweight, compact, with low aerodynamic drag and low power consumption
- Can operate normally in light rain
- Constructed from lightweight and durable engineering plastics (ASA) and carbon fiber
- Sensing modules selectable individually or combined in any configuration

»Product Showcase



