

Small Weather Station

»Product Introduction

The HY-SA6E Compact Automatic Weather Station is an all-in-one, multi-parameter weather station capable of measuring various meteorological parameters, including air temperature, relative humidity, wind speed, wind direction, atmospheric pressure, precipitation, radiation*, illuminance*, UV radiation*, visibility*, ambient noise*, PM2.5*, and PM10* (items marked with * are optional). It features a low-power chip and supports an optional MINI visibility detection module, making it suitable for smart city monitoring systems.



»Technical Indicators

Parameters	Range	Accuracy	Resolution
Wind Speed	0–70 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)	1 hPa
Rainfall	0–400 mm	Daily Total: Within ±5%	0.01 mm
Elevation *	-500 m ~ 9000 m	±5%	1 m
Radiation *	0–2000 W/m²	±5% (Vertical Illumination)	0.1 W/m²
Illuminance *	0–200000 lux	±5% (Vertical Illumination)	0.1 lux
PM2.5, PM10 *	0–2000 μg/m³	±5%, 8%	PM2.5: 0.1 μg/m³; PM10: 1 μg/m³
Visibility *	10 m–10 km (Can be expanded to 80 km)	±10% (≤1500 m), ±20% (>1500 m)	1 m
Noise *	30–110 dB	±3 dB	1 dB
Lightning Detection *	0–40 km	±2 km	1 km
Digital Output	RS232, RS485, SDI-12 (Choose one)		
Baud Rate	1200–115200		
Protocols	ModBus-RTU, ModBus-ASCII, NMEA-0183		
Protection	IP65		
Operating Range	-40 ℃ ~ +80 ℃, 0–100%RH		
Power/Consumption	VDC: 12–24, 0.7 W (Max)		
Size/Weight	Φ110 mm × 225 mm / 0.38 kg (The height depends on the module)		
Color/Material	White / ASA		

»Applications

- Smart Cities
- Home Weather Stations
- Agricultural Environmental Monitoring



»Key Features

- All-in-one, multi-parameter compact automatic weather station
- Standard measurement of temperature, humidity, wind speed/direction, pressure, and rainfall
- Optional modules: radiation, illuminance, UV radiation, visibility, ambient noise, PM2.5/PM10, and lightning detection
- Low-power chip design
- Supports an optional MINI visibility detection module for smart city monitoring systems



»Product Showcase



