

Miniature Automatic Weather Station

Product Introduction



HY-WDC6E Miniature Automatic Weather Station is an all-in-one weather station capable of simultaneously measuring key meteorological parameters such as air temperature, humidity, wind speed, wind direction, atmospheric pressure,rainfall, solar radiation,illuminance,PMs, noise,Lightning and visibility.

The HY-WDC6E features a low-power chip with a power consumption of only 0.2 W, making it suitable for low-power environments powered by solar energy or batteries. It has a compact and small design and can be equipped with optional solar radiation and solar irradiance detection modules, making it suitable for use in agricultural meteorological systems. The housing is made of white ASA material.

Applications

It is primarily used in smart cities, home weather stations, and agricultural environmental monitoring.





Technical Indicators

Project	Range	Accuracy	Resolution
Wind Speed	0–40m/s	±3%	0.1m/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	300–1100hPa	±0.5hPa（0～+40℃）；±1hPa（Full Temperature Range）	0.1hPa
Rainfall	0–400mm	Daily Accumulation：Within ±5%	0.01mm
Radiation*	0–2000W/m²	±5%（@ Vertical Illumination）	0.1W/m²
Illuminance*	0–200000lux	±5%（@ Vertical Illumination）	0.1lux
PM2.5、PM10*	0–2000μg/m³	±5%/8%	1μg/m³
Lightning Detection*	0–40km	±2km	1km
Digital Output	RS232、RS485、SDI-12（Choose one）		
Baud Rate	1200–115200		
Protocol	ModBus-RTU、ModBus-ASCII、NMEA-0183		
Operating Range	-40 ℃ ～ +80 ℃； 0－100%RH		
Power	VDC：12–24V；1.8W（Max），0.12W（General）		
Size/weight	Φ82mm ×（120–298）mm（Due to differences in parameters and modules）；0.38kg		
Color/Protection	White；IP65		
Material	ASA		

Product Showcase



