Air Quality Monitoring Solution

Measure item	Measure range	Resolution	Accuracy	Model
Wind speed	0-45m/s	0.1m/s	± (0.3±0.03V) m/s	CDF-10A
Wind direction	0-360º	1°	±3°	CDF-11A
Atmospheric temperature	-50-+100℃	0.1℃	±0.5℃	
Atmospheric humidity	0-100%RH	0.1%RH	±3%	CDW-33A
Atmospheric pressure	10-1100hPa	0.1hpa	±0.3hPa	
PM2.5 dust sensor	0-1000ug/m3	0.1ug/m3	±3%FS@25℃	CDW-21A
CO_2	0-5000ppm	1ppm	±3%	CDW-12A
Rainfall	0-8mm/min	0.2mm	±4%	CDY-12A
Noise sensor	30-130dB	0.1dB	±3dB@23±5℃	CDW-13B
SO_2	0-20ppm,0-2000ppm	0.1ppm	≤0.02%FS/℃	CDW-16A
NH_3	0-50ppm,0-100ppm,0-500ppm	0.1ppm	≤0.02%FS/℃	CDW-17A
CO	0-1000ppm，0-2000ppm	0.1ppm	±3%FS	CDW-19A

Air Quality Weather Station

CDF-10A Wind Speed

CDF-11A Wind Direction

- Wind direction and speed have a direct impact on the dispersal and transport of pollutants and can help predict the extent and speed of dispersal of pollutants. Wind measurements also provide key input parameters for air quality models.

CDW-21A Dust Sensor

- Dust is an important component of particulate matter in the air. Through the measurement of dust, the concentration level of particulate matter in the air can be accurately understood, and dust is an important component of particulate matter in the air. Through the measurement of dust, the concentration level of particulate matter in the air can be accurately understood.

CDW-33A Atmospheric Temperature& Humidity & Pressure

- Temperature measurement affects the volume and density of gas, thus affecting the concentration of pollutants. When humidity is high, some pollutants may be more easily adsorbed in water vapor, changing their propagation and distribution in the air. Changes in air pressure will affect the flow and diffusion of air, and then affect the propagation range and concentration distribution of pollutants.

Air Quality Weather Station

CDW-12A CO2 Sensor

- CO_2 concentration is one of the important indicators to evaluate indoor air quality, and CO_2 measurement is of great significance for monitoring global climate change and atmospheric environment.

CDY-12A Rainfall

- The amount of rain affects the dispersion and deposition of pollutants in the air. Large rainfall can wash the particles and pollutants in the air, so that they settle to the ground with the rain, thereby reducing the concentration of pollutants in the air to a certain extent.

CDW-13B Noise Sensor

- Noise measurements can help determine the location and activity patterns of pollution sources, and both noise and air quality can have an impact on people's physical and mental health.

CDW-16A SO2 Sensor

- SO_2 is a common atmospheric pollutant, a direct hazard to human health, SO_2 is one of the main components of acid rain, SO_2 concentration changes can also reflect the dynamic changes in the atmospheric environment and air quality trends.

Air Quality Weather Station

CDW-17A NH3 Sensor

- NH_3 is a pungent odor gas that irritates the respiratory tract and eyes of the human body. NH_3 measurements play a vital role in accurately assessing air quality, protecting human health, maintaining ecological balance and promoting the green development of related industries.

CDW-19A CO Sensor

- CO is a toxic gas, has serious harm to the human body, the concentration level of CO can reflect the efficiency and pollution of the combustion process,CO measurement for the protection of public health, optimize traffic and industrial production management and a comprehensive understanding and improvement of air quality are of great significance.