

Solar PV Industry Solution



Measure item	Measure range	Resolution	Accuracy	Model
Wind speed	0-45m/s	0.1m/s	$\pm (0.3 \pm 0.03V)$ m/s	CDF-10A
Wind direction	0-360°	1°	$\pm 3^\circ$	CDF-11A
Atmospheric temperature	-50-+100°C	0.1°C	$\pm 0.5^\circ\text{C}$	
Atmospheric humidity	0-100%RH	0.1%RH	$\pm 3\%$	CDW-33A
Atmospheric pressure	10-1100hPa	0.1hpa	$\pm 0.3\text{hPa}$	
Photovoltaic panels temperature sensor	-50-+100°C	0.1°C	$\pm 0.5^\circ\text{C}$	CDW-14A
Total solar radiation	0-2000W/m ²	1W/m ²	$\pm 3\%$	CDG-11B
Rainfall(optional)	0-8mm/min	0.2mm	$\pm 4\%$	CDY-12A
Hall current sensor(optional)	0-500V	1V	$\pm 0.5\%$	
Hall voltage sensor(optional)	0-150A	0.1A	$\pm 0.5\%$	CDP-1T0A

Solar PV Industry Weather Station



CDF-10A Wind Speed

CDF-11A Wind Direction

- Wind measurements are critical. Through accurate measurement of wind speed and direction, the optimal installation Angle and orientation of photovoltaic panels can be determined to minimize wind resistance and improve power generation efficiency.



CDW-33A Atmospheric Temperature & Humidity & Pressure

- The measurement of temperature, humidity and pressure provides the photovoltaic industry with comprehensive information on environmental parameters, helping to improve the performance, reliability and service life of photovoltaic systems.



CDW-14A Solar Pv Temperature

- The efficiency of solar panels is affected by temperature. When the temperature is too high, its efficiency may decrease. By measuring the temperature of the solar panel, the power generation performance under different temperature conditions can be accurately evaluated, and corresponding measures can be taken to optimize the power generation efficiency.

Solar PV Industry Weather Station



CDG-11B Total solar radiation

- The total solar radiation measurement data is the basis for determining the scale and layout of the power station. Through the measurement and analysis of the long-term total solar radiation in a specific region, the solar energy resource potential of the region can be accurately evaluated, so as to rationally plan the installed capacity of the power station.



CDY-12A Rainfall

- A large amount of rainfall may cause water accumulation in photovoltaic power plants, causing soaking and damage to equipment. Through rainfall measurement, timely warning and protective measures can be taken, such as strengthening the operation of the drainage system, transferring vulnerable equipment in advance, etc., to ensure the safety of the photovoltaic system.



CDP-1T0A Hall Current Sensor & DC Voltage Sensor

- It is used to measure the current output of the photovoltaic array to evaluate the power generation performance and working status of each photovoltaic module. By monitoring different series currents, component faults, such as short circuit, open circuit or performance attenuation, can be found in time.