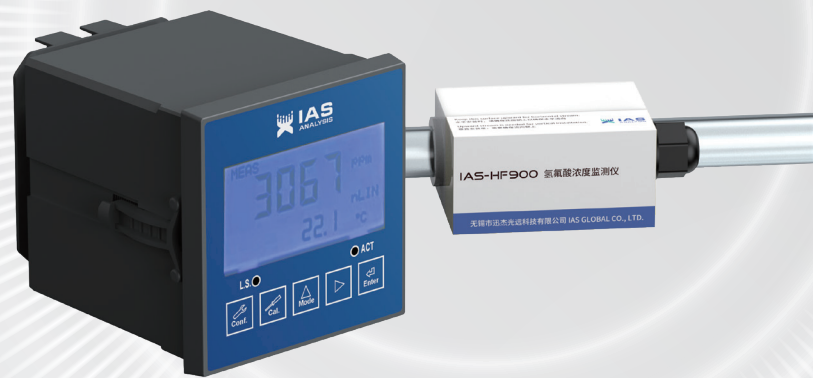


# IAS-HF900

## HF Chemical concentration monitor



The IAS-HF900 series HF concentration analyzer is an advanced instrument designed by our company for critical cleaning and etching processes. With the development of 65nm and 45nm devices, chemical solutions traditionally used in RCA cleaning require increasingly precise low-concentration control. The HF900 employs sensors to achieve high-precision, high-speed measurement of low-concentration hydrofluoric acid, making it ideal for single-tank and wafer cleaning applications.

### Product Features



#### Precise measurement of low-concentration HF

High-precision measurement capability with repeatability accuracy up to  $\pm 0.5\%$  of full scale, meeting the control demands of increasingly precise semiconductor etching processes.



#### Multiple measurement modes with integrated temperature compensation algorithms

Temperature-compensated HF concentration measurement based on the temperature characteristics of substances. Additionally, the equipment can function as a conductivity meter, supporting low-concentration dilution control for other chemical solutions.



#### Multi-interface compatibility design

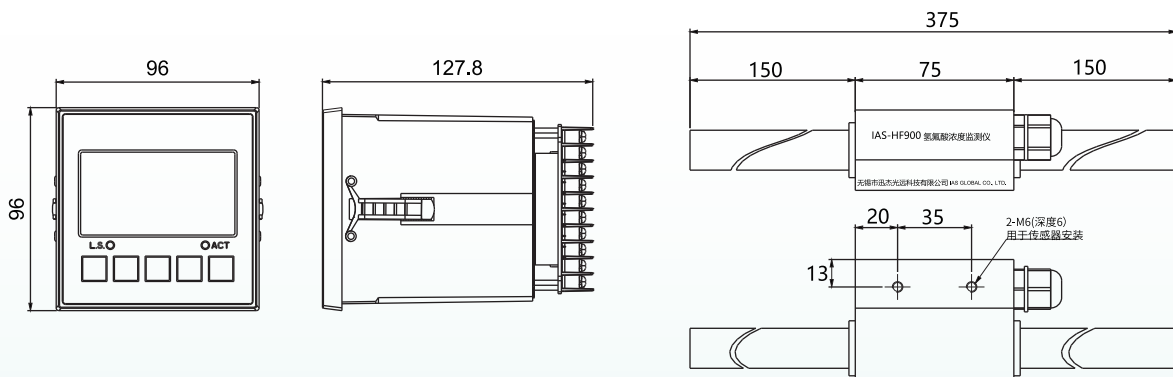
Integrated RS-485 communication interface alongside analog interfaces, enabling real-time viewing of measurement data, querying, and modification of equipment parameters via remote communication.

## Technical Specifications



Model	IAS-HF900	
Measurement Method	Conductivity/Concentration Conversion Method	
Electrode Coefficient	Approximately 4.99	
Temperature Sensor Specifications	Platinum resistance 1000Ω /0°C Temperature coefficient 3750ppm /°C standard	
Measurement Range	Full-Scale Measurement Range	
	HF	0ppm to 20,000 ppm
	Conductivity	0mS/cm to 50.00 mS/cm
	Temperature	0°C to 100°C
Repeatability	HF Repeatability Range: Within ±0.5% of full scale 0 to 5,000 ppm: ±25 ppm 0 to 10,000 ppm: ±50 ppm 0 to 15,000 ppm: ±75 ppm 0 to 20,000 ppm: ±100 ppm	
Accuracy	Within ±0.5% of full scale	
Signal Output	Two channels of 4-20mA, maximum load resistance: 500Ω	
Relay Output	Three relay outputs, programmable to correspond to high/low points, alarm points, cleaning points, and time relays for any channel' s measured value	
Communication Output	RS-485 input/output	
Calibration Function	Concentration and conductivity: Calibrated based on electrode coefficient Temperature: Calibrated by comparison with a standard thermometer	
Transmission Hold	Selectable between holding the previous value or an optional value (only previous value hold is available in maintenance mode)	
Self-Diagnostic Function	Sensor diagnostics (temperature sensor short-circuit or disconnection), out-of-range measurement, converter errors	
Temperature Compensation	User-defined temperature coefficient (reference temperature: 25°C, temperature coefficient: 0-3%/°C)	
Temperature Compensation Range	HF: 0°C to 80°C Conductivity: 0°C to 100°C	
Environmental Conditions	Temperature: -5°C to 45°C, Relative Humidity: 20% to 85% (no condensation)	
Power Supply	24VDC ±10%, 10W (max)	
Protection Structure	Indoor use, panel-mounted, panel box: ABS, terminals: PA66, panel: IP65 dustproof and waterproof structure	
Weight	Approximately 400 g	
Compliance Standards	Meets relevant certification requirements, such as SEMI S2, F47, CE, UL, etc.	
Compatible Sensor	IAS-HF900	

## Structural Diagram



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