

# A120/130/131 Laboratory pH/ORP/Ion Meter



## Measurement Parameters

- A120: pH, mV, relative mV, temperature
- A130: pH, mV, relative mV, ion concentration, water hardness, temperature
- A131: Ion concentration, water hardness, mV, temperature

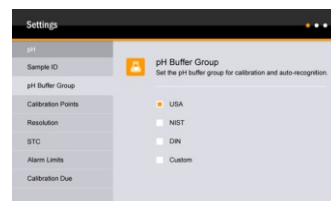
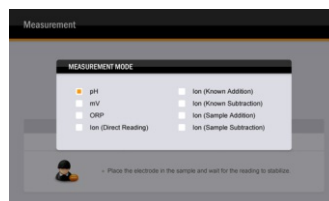
## Features

### pH

- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and offset
- Solution temperature coefficient compensates for the pure water samples and references the pH to 25°C

### ORP

- 1 point offset calibration allows adjusting the displayed value to a known standard
- Relative and absolute millivolt modes ensure the reliable ORP measurements



### Ion Concentration

- 2 to 5 points calibration, including the 8 concentration points can be selected
- Electrode management is capable of storing and recalling up to 3 electrode slopes
- Automatic electrode diagnosis shows the calibration points and slopes
- Selectable ion measurement methods (direct reading, known subtraction, sample addition, sample subtraction) and concentration units (ppm, mg/L, mol/L or mmol/L)

### Water Hardness

- 2 to 5 points calibration from low to high concentrations
- Selectable measurement units (German degree, English degree, French degree, mmol/L and mg/L) are used for professional water hardness measurements

### General Features

- Automatic temperature compensation ensures accurate readings over the entire range
- Auto-Read function senses and locks the measurement endpoint
- Timed Interval Readings sends the measurement data to a PC or printer
- Limit Alarm automatically alerts when reading exceeds the specified range
- Calibration due alarm prompts user to calibrate the meter regularly
- Password protection prevents the unauthorized calibration and settings
- Expanded memory stores or recalls up to 1000 data sets
- Reset function automatically resumes all settings back to the factory defaults



## Specifications

Model		A120	A130	A131	
pH	Range	-2.000~20.000pH	•	•	—
	Resolution	0.001, 0.01, selectable	•	•	—
	Accuracy	±0.002pH	•	•	—
	Calibration Points	1 to 5 points	•	•	—
	pH Buffer Options	USA, NIST, DIN, 5 custom buffers	•	•	—
ORP	mV Range	±2000.0mV	•	•	•
	Relative mV Range	±2000.0mV	•	•	—
	Resolution	0.1mV	•	•	•
	Accuracy	±0.2mV	•	•	•
	Calibration Points	1 point	•	•	—
Ion	Range	0.001~30000 (depending on the range of ISE)	—	•	•
	Resolution	0.001, 0.01, 0.1, 1	—	•	•
	Accuracy	±0.5% F.S. (monovalent), ±1% F.S. (divalent)	—	•	•
	Measurement Units	ppm, mg/L, mol/L, mmol/L	—	•	•
	Calibration Points	2 to 5 points (0.001, 0.01, 0.1, 1, 10, 100, 1000, 10000)	—	•	•
	Measurement Methods	Direct reading, known addition, known subtraction, sample addition, sample subtraction	—	•	•
Water Hardness	Electrode Management	1 to 3 electrodes	—	•	•
	Range	0.05~200mmol/L, 0~1122°dH, 0~1404°e, 0~2000°FH, 0~8000mg/L (Ca <sup>2+</sup> )	—	•	•
	Resolution	0.001, 0.01, 0.1, 1	—	•	•
	Accuracy	±1% F.S.	—	•	•
Temperature	Calibration Points	2 to 5 points (0.01, 0.1, 1, 10, 100mmol/L)	—	•	•
	Range	0~105°C/32~221°F	•	•	•
	Resolution	0.1°C/0.1°F	•	•	•
	Accuracy	±0.5°C/±0.9°F	•	•	•
Other Specifications	Offset Calibration	1 point, reading ±10°C	•	•	•
	Temperature Compensation	0~100°C, manual or automatic	•	•	•
	Solution Temperature Coefficient	25°C	•	•	—
	Stability Criteria	Standard or high-accuracy	•	•	•
	Calibration Due Alarm	1 to 31 days or off	•	•	•
	Interval Readings	10, 30, 60 seconds, 10, 30 minutes or off	•	•	•
	Password Protection	4 digits	•	•	•
	Memory	1000 data sets	•	•	•
	Communication Interface	USB	•	•	•
	Connector	BNC, 3.5 mm jack socket	•	•	•
	Display	7 inches TFT LCD	•	•	•
	Power Requirements	DC12V, using AC power adapter, 220V/50Hz	•	•	•
Dimensions	240(L)×220(W)×80(H)mm	•	•	•	
Weight	1.7kg	•	•	•	

## Ordering Information

- A120/130-**CN**: Meter, E201-BNC plastic body pH electrode, temperature probe, pH buffer sachets, electrode holder and power adapter
- A120/130-**UK**: Meter, P11 glass pH electrode, temperature probe, pH buffer sachets, electrode holder and power adapter
- A131: Meter, ion selective electrode, temperature probe, standard solutions (100/1000ppm), ionic strength adjuster, electrode holder and power adapter