

# A Series 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

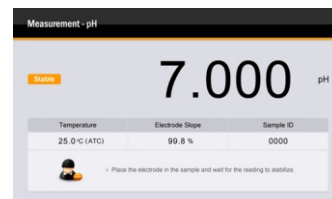
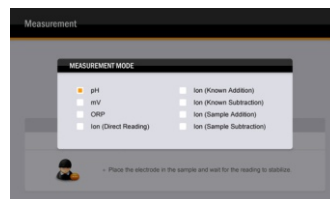
## Features

### pH

- 1 to 5 points calibration with automatic recognition for USA, NIST and DIN buffers
- Automatic electrode diagnosis shows the pH slope and zero 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

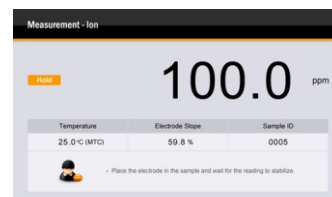
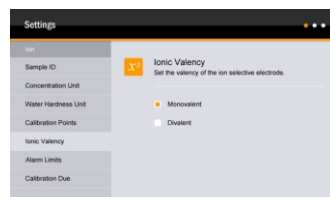
- 2 to 5 points calibration, including the selection of 8 concentration points
- Electrode management is capable of storing and recalling up to 3 electrode slopes
- Automatic electrode diagnosis shows the calibration points and electrode slopes
- Selectable ion measurement methods (direct reading, known addition, known subtraction, sample addition, sample subtraction) and concentration units (ppm, mg/L, mol/L, 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, 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 reminds the 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                            | -2.000~20.000 pH   | •    | •    | —    |
|                      | Resolution                       | 0.001, 0.01, selectable  | •    | •    | —    |
|                      | Accuracy                         | ±0.002 pH  | •    | •    | —    |
|                      | Calibration                      | 1 to 5 points  | •    | •    | —    |
|                      | pH Buffer Options                | USA, NIST, DIN, 5 custom buffers   | •    | •    | —    |
| ORP                  | mV Range                         | ±2000.0 mV   | •    | •    | •    |
|                      | Relative mV Range                | ±2000.0 mV   | •    | •    | —    |
|                      | Resolution                       | 0.1 mV   | •    | •    | •    |
|                      | Accuracy                         | ±0.2 mV  | •    | •    | •    |
|                      | Calibration                      | 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                      | 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 | —    | •    | •    |
|                      | Electrode Management             | 1 to 3 electrodes  | —    | •    | •    |
| Water Hardness       | Range                            | 0.05~200 mmol/L, 0~1122°dH, 0~1404°e, 0~2000°FH, 0~8000 mg/L (Ca <sup>2+</sup> )       | —    | •    | •    |
|                      | Resolution                       | 0.001, 0.01, 0.1, 1  | —    | •    | •    |
|                      | Accuracy                         | ±1% F.S.   | —    | •    | •    |
|                      | Calibration                      | 2 to 5 points (0.01, 0.1, 1, 10, 100 mmol/L)   | —    | •    | •    |
| Temperature          | Range                            | 0~105°C/32~221°F   | •    | •    | •    |
|                      | Resolution                       | 0.1°C/0.1°F  | •    | •    | •    |
|                      | Accuracy                         | ±0.5°C/±0.9°F  | •    | •    | •    |
|                      | Offset Calibration               | 1 point, reading ±10°C   | •    | •    | •    |
| Other Specifications | 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               | 12V DC power adapter   | •    | •    | •    |
|                      | Dimensions                       | 240(L)×220(W)×80(H)mm  | •    | •    | •    |
|                      | Weight                           | 1.7 kg   | •    | •    | •    |

## Ordering Information

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