

# M310F-A Multi-parameter Analyzer

## Features

- LCD display screen, 3.5 inches.
- Multi-reading feature allows auto-read, timed-read and continuous-read.
- Automatic/Manual temperature compensation ensures accurate results.
- Auto-hold feature senses and locks the measurement endpoint.
- Data capacity of up to 500 sets for each parameter (GLP-compliant).
- Support for USB communication.
- Auto-power off feature effectively extends the battery service life.
- Reset feature automatically resumes all settings back to factory default options.
- IP65 waterproof. The portable meter is suitable for fields measurements and out door measurements.

## pH

1. 1-5 points calibration with Standard Recognition.
2. Selectable pH buffer groups, including NIST, DIN, GB, USA.
3. Automatic electrode diagnosis with pH slope and offset display.

## Ion

1. 1-5 points calibration.
2. Selectable measurement unit, including  $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{g/L}$ ,  $\text{mmol/L}$ ,  $\text{pX}$ ,  $\text{ppm}$ ,  $\text{ppb}$ , etc.
3. Measurement modes are supported, including Direct Reading mode, Standard Addition mode, Sample Addition mode and GRAN mode.
4. Over 10 methods are built-in, including  $\text{F}^-$ ,  $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ,  $\text{NO}_3^-$ ,  $\text{BF}_4^-$ ,  $\text{NH}_4^+$ ,  $\text{K}^+$ ,  $\text{Na}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Pb}^{2+}$ ,  $\text{Ag}^+$  and etc., user-defined method is supported.

## Conductivity

1. 1-3 points calibration with Standard Recognition.
2. Settable parameters, including cell constant, temperature compensation coefficient, and TDS factor.
3. Temperature compensation type (none, linear, pure water).

## Includes

1. E-301-QC 3 in 1 pH composite electrode
2. DJS-1VTC EC electrode
3. NIST pH standard solution(4.01, 7.00, 10.01) , 50ml/vial
4.  $1413\mu\text{S/cm}$  EC standard solution, 50ml, 1 vial
5. Electrode holder
6. Silicone rubber case
7. Wristbands
8. Carrying Case



## Specifications

<b>Model</b>		<b>M310F-A</b>
<b>Parameters</b>		<b>pH/EC/ISE/Temp. (mV/pX/Resistivity/TDS/Sal.)</b>
<b>pH</b>	<b>Range</b>	<b>-2.00 to 20.00 pH</b>
	<b>Resolution</b>	<b>0.1, 0.01 pH</b>
	<b>Accuracy</b>	<b>±0.01 pH</b>
	<b>Calibration Points</b>	<b>Up to 5</b>
	<b>Standard Customization</b>	<b>Yes</b>
	<b>Standard Recognition</b>	<b>NIST, GB, USA and DIN buffers</b>
	<b>Slope Limit</b>	<b>Yes</b>
<b>mV</b>	<b>Range</b>	<b>-2000.0 to 2000.0 mV</b>
	<b>Resolution</b>	<b>0.1</b>
	<b>Accuracy</b>	<b>±0.3 mV or ±0.1%</b>
<b>pX</b>	<b>Range</b>	<b>-2.00 to 20.00 pX</b>
	<b>Resolution</b>	<b>0.1, 0.01 pX</b>
	<b>Accuracy</b>	<b>±0.01 pX</b>
	<b>Calibration Points</b>	<b>Up to 5</b>
<b>ISE</b>	<b>Range</b>	<b>1.000e-9 to 9.999e+9</b>
	<b>Units</b>	<b>mol/L, mmol/L, g/L, mg/L, µg/L, ppm, ppb</b>
	<b>Resolution</b>	<b>Up to 4 significant digits</b>
	<b>Accuracy</b>	<b>±0.5%</b>
	<b>Calibration Points</b>	<b>Up to 5</b>
<b>Conductivity</b>	<b>Range</b>	<b>0.000 µS/cm to 500 mS/cm</b>
	<b>Resolution</b>	<b>0.001µS/cm minimum, various with range selection</b>
	<b>Accuracy</b>	<b>±1.0% FS</b>
	<b>Reference Temperature</b>	<b>20, 25 °C</b>
	<b>Calibration Points</b>	<b>Up to 3</b>
	<b>Standard Recognition</b>	<b>84µS/cm, 1413µS/cm, 12.88mS/cm</b>
<b>Resistivity</b>	<b>Range</b>	<b>5.00 Ω·cm~20.00 MΩ·cm</b>
	<b>Resolution</b>	<b>0.01 Ω·cm minimum</b>
	<b>Accuracy</b>	<b>±1.0% FS</b>
<b>TDS</b>	<b>Range</b>	<b>0.00 ppm~300ppt</b>
	<b>Resolution</b>	<b>0.01 ppm minimum, various with range selection</b>
	<b>Accuracy</b>	<b>±1.0%FS</b>
<b>Salinity</b>	<b>Range</b>	<b>0.0~80.0 ppt</b>
	<b>Resolution</b>	<b>0.1ppt</b>
	<b>Accuracy</b>	<b>±2ppt</b>
<b>Temperature</b>	<b>Range</b>	<b>-5 to 110 °C, 23 to 230 °F</b>
	<b>Unit</b>	<b>°C, °F</b>
	<b>Resolution</b>	<b>0.1</b>
	<b>Accuracy</b>	<b>±0.2°C</b>
<b>Measurement</b>	<b>Reading Mode</b>	<b>Auto Read (Fast, Medium, Slow), Timed, Continuous</b>
	<b>Reading Prompts</b>	<b>Reading, Stable, Locked</b>
	<b>Temp. Compensation</b>	<b>ATC, MTC</b>
<b>Data management</b>	<b>Data Storage</b>	<b>500 results each</b>
	<b>GLP Features</b>	<b>Yes</b>
<b>Inputs</b>	<b>pH Electrode</b>	<b>BNC(Q9)</b>
	<b>Conductivity with Temp. Probe</b>	<b>5-pin aviation connector</b>

Outputs	USB	PC, printer
Display options	Backlight	Yes
	Auto Shutdown	300, 600, 1200, 1800, 3600 sec., off
	IP Rating	IP65
	Date and Time	Yes
Inputs	Power	Rechargeable Lithium battery, AC Adapter, 100-240V AC input, DC5V output
	Dimensions	80×225×35 mm
	Weight	400g (0.88 lb)
	Dimensions (Carton)	490×410×220 mm
	Weight (Gross)	5.5 kg