

## Application Range Ion-Selective Measurements

● recommended by WTW

○ suitable

Application Range	inoLab®				Handheld meters
	pH/ION 735	pH/ION 740	pH 740, pH/Cond 740, Multi 740	pH/ION/Cond 750	pH/ION 340i, Multi 350i
Occasional, simple ISE measurement	○	○	●	○	●
Routine and standard measurement	●	●	○	●	○
Advanced methods and procedures	●	●	-	●	-
<i>see page</i>	24	25	13, 50	25, 52	27, 55

## Laboratory Ionmeters

inoLab® pH/ION 735

**inoLab**  
innovations that make sense

- Incremental Methods
- Advanced Incremental Methods
- Menu-driven user interface

### pH, mV and Concentration Measurements with a single Instrument

Whether routine measurements or demanding analysis: the pH/ION 735 is the ideal precision instrument for all uses. A graphical user interface makes high-resolution pH and ion measurement easy and comfortable. 5-point calibration for pH and up to 7 calibration points for ion measurements guarantees a high-precision measurement by calculating non-linear calibration curves. The Model pH/ION 735 has user defined method capability as well as preprogrammed incremental techniques.

For those who need to document their results: a datalogger with storage for 4,500 entries, bi-directional RS 232 interface, real-time clock, and GLP-supporting calibration protocols, as well as date, time and selectable sample identification number identify all data sets.

This instrument is also available with a built-in printer.



**inoLab® pH/ION 740**

- Advanced incremental methods
- Free software downloads
- Comprehensive documentation options

**flexible and powerful**

High-performance pH/mV/ion meter with graphic display and digital recorder function for pH, temperature and ion-selective measurement, automatic temperature compensation, high resolution (0.001 pH), MultiCal® calibration system, built-in measurement storage with GLP-conform documentation and digital interface. PC keyboard interface for connecting an external keyboard or barcode reader, and software for direct control by PC is included. With a built-in printer option available.

**inoLab® pH/ION/Cond 750**

- Two galvanically isolated pH/mV/ISE inputs
- Menu-operated with back-lit graphic display
- One pH and one ISE calibration record per each input

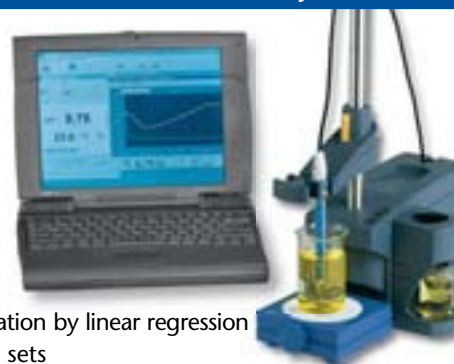
**Premium class from WTW:**

Two galvanically isolated inputs allow independent measurements of pH-value, ORP or ion concentration. For accurate measurements along the characteristic curve of the electrode it is possible to carry out calibrations with up to seven standard solutions. The calculation of the calibration curve by using a modified Nikolski algorithm also takes the non-linear parts of the curve in to account. The following methods are used to evaluate the ionic concentration:

- Known addition/known subtraction
- Sample addition/sample subtraction
- Double known addition
- Blank value correction
- Known addition with blank value correction
- Reference measurement

**Features**

- 5-point pH calibration by linear regression
- Selectable buffer sets
- Graphic evaluation possible
- Built-in digital recorder
- Connection for barcode reader or PC keyboard
- User Selectable Languages
- Multi-Level GLP Functions (password-protected operator levels)
- Free-of-charge downloads for MultiLab® pilot or terminal
- Four to seven point ISE calibration with a modified nikolski algorithm
- Known addition, double-known addition and known subtraction
- Sample addition/subtraction
- Blank value addition



Parameter

pH

ORP

ISE

Oxygen (D.O.)

Conductivity

Multi-parameter

BOD/Respiration

Photometers

Turbidity

Colony Counter

Software/Printers

A further highlight of this instrument is the possibility of conductivity measurement. Not only can specific resistance, salinity, and TDS be determined but also sample specific temperature coefficients. A wide range of additional functions like data administration, PC-operation by MultiLab® pilot, GLP-compliant calibration and data recording allow an easy integration into modern laboratory environment.

*For further details see page 52.*

## Technical Data inoLab® pH/ION 735 and 740

Model	pH/ION 735	pH/ION 740
<b>Range/Resolution</b>	<p><b>pH</b> -2.000 ... +20.000 pH</p> <p><b>mV</b> -999.9 ... +999.9 mV</p> <p>-2000 ... +2000 mV</p> <p><b>Temperature</b> 23.0 ... 221 °F (-5 ... +105 °C/0.1 °C)</p> <p><b>Conc..</b> 0.000 ... 10.000 mg/l</p> <p>0.00 ... 100.00 mg/l</p> <p>0.0 ... 1000.0 mg/l</p> <p>0 ... 2000 mg/l</p>	<p>-2.000 ... +20.000 pH</p> <p>-999.9 ... +999.9 mV</p> <p>-2000 ... +2000 mV</p> <p>23.0 ... 221 °F (-5 ... +105 °C/0.1 °C)</p> <p>Measuring range 1 (Resolution): 0,000 ... 9,999 (0,001) mg/l</p> <p>Measuring range 2: 0,00 ... 99,9 (0,01) mg/l</p> <p>Measuring range 3: 0,0 ... 999,9 (0,1) mg/l</p> <p>Measuring range 4: 0 ... 1999 mg/l</p>
<b>Accuracy (±1 digit)</b>	<p>±0.004 pH</p> <p>±0.01 pH</p> <p>±0.2 mV, ±1 mV</p> <p>±0.1 K</p>	<p>±0,004 pH</p> <p>±0,01 pH</p> <p>±0,2 mV, ±1 mV</p> <p>±0,1 K</p>
<b>Calibration</b>	<p><b>MultiCal® automatic calibration:</b></p> <p><b>AutoCal</b> 2-/3-/4-/5-point</p> <p><b>AutoCal-Tec</b> 2-/3-/4-/5-point</p> <p><b>ConCal®</b> 1-/2-point</p> <p><b>ISECal</b> 2- to 7-point</p> <p>Special functions:</p> <p>Known addition (single)</p> <p>Known subtraction</p> <p>Sample addition</p> <p>Sample subtraction</p> <p>Blank value addition</p> <p>Blank value correction</p>	<p><b>MultiCal® automatic calibration:</b></p> <p>2-/3-/4-/5-point</p> <p>2-/3-/4-/5-point</p> <p>1-/2-point</p> <p>2- to 7-point</p> <p>Special functions:</p> <p>Known addition (single and double)</p> <p>Known subtraction</p> <p>Sample addition</p> <p>Sample subtraction</p> <p>Blank value addition</p> <p>Blank value correction</p>

## Technical Data inoLab® pH/ION/Cond 750

Model	pH/ION/Cond 750
<b>Range/Resolution</b>	<p><b>pH</b> -2 ... 20.000 pH</p> <p>-2.00 ... 20.00 pH</p> <p><b>mV</b> -999.9 ... +999.9 mV</p> <p>-2000 ... +2000 mV</p> <p><b>Conc. (mg/l)</b> 0.000 ... 10.000</p> <p>0.00 ... 100.00</p> <p>0.0 ... 1000.0</p> <p>0 ... 2000</p> <p><b>Temperature:</b> 23 ... 221 °F (-5 ... +105 °C)</p>
<b>Accuracy (±1 digit)</b>	<p><b>pH</b> ±0.004 pH</p> <p>±0.01 pH</p> <p><b>mV</b> ±0.2 mV, ±1 mV</p>
<b>Temperature compensation</b>	<p><b>Automatic</b> ±0.2 mV, ±1 mV</p> <p>23.0 ... 221 °F (-5 ... +105 °C)</p> <p>23.0 ... 212 °F (-5.0 ... 100 °C)</p> <p><b>Manuell</b> -4 ... 266 °F (-20 ... +130 °C)</p> <p><b>NTC</b> 30 KOhm: ±0.1</p> <p><b>Pt 1000</b> ±0.1 K</p>
<b>Calibration</b>	<p><b>MultiCal® automatic calibration:</b></p> <p><b>AutoCal</b> 2-/3-/4-/5-point</p> <p><b>AutoCal-Tec</b> 2-/3-/4-/5-point</p> <p><b>ConCal®</b> 1-/2-point</p> <p><b>ISECal</b> 2- to 7-point</p> <p>Special functions:</p> <p>Known addition (single and double)</p> <p>Known subtraction</p> <p>Sample addition</p> <p>Sample subtraction</p> <p>Blank value addition, Blank value correction</p>

## Ordering Information

inoLab® Laboratory Ionmeters – with wide-range power supply 100-240 VAC (50/60 Hz) included		□ Order No.	▲ Order No.
pH/ION 735P	inoLab® pH/ION 735P with built-in printer for GLP-conform documentation	1G21-210	1G21-110
pH/ION 740P	inoLab® pH/ION 740P with built-in printer for GLP-conform documentation; extended measuring and storage options	1G31-210	1G31-110
pH/ION/Cond 750	Flexible and powerful precision bench-top pH/mV/Ion/conductivity-meter with two inputs, single instrument	1K30-210	1K30-110



□ with BNC plug  
▲ with DIN plug