



# inoLab<sup>®</sup> 7000 Series

MEASUREMENT OF pH, ISE, CONDUCTIVITY AND DISSOLVED OXYGEN -  
ACCURATE, COMPLIANT AND SENSITIVE



a xylem brand

# inoLab® 7000 Series

Accurate. Compliant. Sensitive.

The inoLab® family: Advanced measuring technology offers new functions including automatic AutoRead or CMC (Continuous Measurement Control) making measurements more convenient and reliable than ever.

The user interface, large display and keypad with tactile feedback provide an exceptional user experience and error-free operation.

pH Cond

Accurate measurements ...

... with the inoLab® 7110 series.



pH Cond D.O.



Compliant documentation ...

... with the inoLab® 7310 series.



pH ISE

Sensitive determinations ...

... with the inoLab® pH/ION 7320.



For more detailed information please order free of charge our catalog **"Lab and Field Instrumentation"** or visit our web site : [www.inolab.de](http://www.inolab.de)  
(For convenience use our QR code).

# Accurate measurements ...

... with the inoLab® 7110 series.



**Meters for everyone who simply need accurate results.**

The inoLab® 7110 series is perfectly suited for routine measurements in general laboratory applications. Whether measuring pH or conductivity in environmental, chemical, pharmaceutical, medical or food & beverage industries, this series offers advanced features in a simple to use package. The intuitive user interface and easy to clean housing and keypad are ideal for all environments.

### Accurate measurements

The AutoRead function makes achieving repeatable results simple. The meter recognizes when a stable measurement value has been reached. Increased accuracy is ensured with the adjustable calibration timer reminding the user to calibrate periodically.

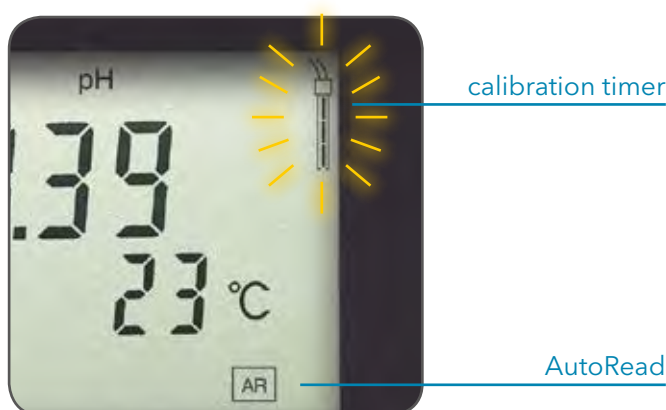
### Easy to operate

The keypad offers intuitive operation and the large and clearly arranged display provides all necessary information at-a-glance.

All meters are available in application sets that include sensors, electrode stand and power supply.

## inoLab® 7110 series

- AutoRead function ensures repeatable results
- Intuitive user interface
- Easy calibration including calibration timer



Model	Description	Order No.
inoLab® pH 7110 SET 2	Easy-to-operate basic pH/mV benchtop meter with DIN socket for routine measurement. For AC and battery operation. Meter with universal power supply, stand and operation manual. Combined pH electrode SenTix® 41, buffer 4, 7 and 10.01, 3 mol/l KCl.	1AA112
inoLab® Cond 7110 SET 1	Easy-to-operate basic conductivity benchtop meter for routine measurement. For AC and battery operation. Set including conductivity cell. Meter with universal power supply, stand and operation manual. Incl. 4-electrode graphite conductivity cell TetraCon® 325,0,01 mol/l KCl conductivity standard.	1CA101

# Compliant documentation ...

... with the inoLab® 7310 series.

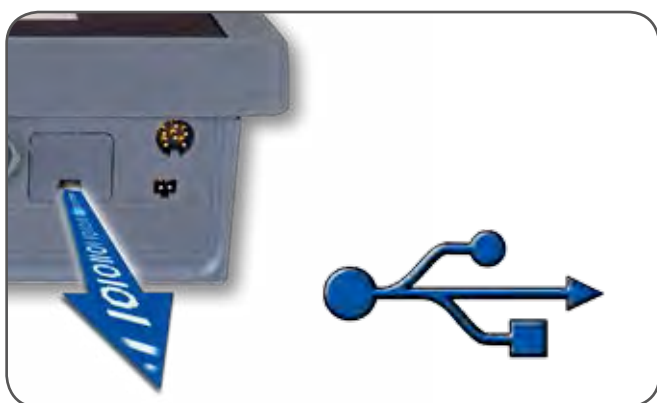


## Precision meters plus documentation

The 7310 series for the measurement of pH, conductivity or amperometric dissolved oxygen is designed for all applications in laboratories where documentation supporting AQA (Analytical Quality Assurance) and GLP (Good Laboratory Practice) is required. These meters offer all the features of the 7110 series plus additional documentation functions.

### inoLab® 7310 series

- USB interface for fast data transfer
- Data output via optional integrated printer



Complete data transfer in .csv format

### Documentation via USB

With the USB interface, the inoLab® 7310 easily connects to a PC for convenient transfer of current or stored data. An integrated data logger with adjustable intervals provides automatic recording of all measurement data. Date, time, and ID number supports GLP. Additionally, the user can enter the sensor serial number for complete documentation. All data can be transferred in an easy-to-process .csv format; an Addin tool for Microsoft® Excel supplied by WTW allows import of formatted measurement and calibration records directly into Excel spreadsheets.

Model	Description	Order No.
inoLab® pH 7310P BNC	Convenient, menu controlled pH mV meter for measurements/documentation according GLP/AQA, with integrated thermal printer. Single meter with universal power supply, stand and operation manual. CD-ROM including software and USB cable.	1AA320P
inoLab® pH 7310 SET 4	Convenient, menu controlled pH mV meter for measurements/documentation according GLP/AQA. Set including combined pH electrode. Meter with universal power supply, stand and operation manual. Combined pH electrode SenTix® 81, buffer 4, 7 and 10.01, 3 mol/l KCl, software and USB cable.	1AA314





#### Documentation via built-in printer

The inoLab® 7310P option offers a built-in printer for printing of measurement and calibration results on high quality paper with a readability of up to 7 years.

#### Convenient to operate

The graphic display is easy-to-read for convenient and secure operation - at a glance all critical information is presented.



CMC function

#### pH measurement

Data optimization is achieved with the new CMC function that monitors the calibration range and indicates if the measurement range is between calibration points.

All meters are available in application sets including sensors, electrode stand and power supply.

Model	Description	Order No.
inoLab® Cond 7310 SET 1	Precise and convenient conductivity meter, menu controlled, for measurements/documentation according GLP/AQA. For AC and battery operation. Set including conductivity cell. Meter with universal power supply, stand and operation manual. Incl. 4-electrode graphite conductivity cell TetraCon® 325, 0.01 mol/l KCl conductivity standard, software and USB cable.	1CA301
inoLab® Oxi 7310 SET 1	Professional dissolved oxygen meter, menu controlled, for measurements/documentation according GLP/AQA. Set including galvanic D.O. sensor. Meter with universal power supply, stand and operation manual, galvanical D.O. sensor CellOx® 325, polishing stripe, electrolyte, cleaning solution replacement cape, CD-ROM incl. software, USB cable.	1BA301

# Sensitive determination ...

... with the inoLab® pH/ION 7320.



## inoLab® pH/ION 7320

- Two channel Meter for simultaneous measurement of pH, ion concentration or ORP
- Built-in incremental methods
- CMC for monitoring the measurement range at pH



## Two channels for special tasks:

The inoLab® pH/ION 7320 is a modern two channel pH/mV/ISE benchtop meter for fast, precise and secure determination of pH, ORP and ion concentrations. When measuring pH the built-in CMC function provides secure measurement by visual comparing of calibration and measurement range.

### Sensitive determination of ion concentration

Users of ion sensitive measurement functions can select between the 2 to 7 point direct potentiometry and various incremental methods. The meter can measure with half cells and separate reference electrode as well as with combined ISE electrodes. A user selectable AutoRead criterion enhances the accuracy of the measurement results. All results can be transferred via the built-in USB interface or the optional built-in printer.

Model	Description	Order No.
inoLab® pH/ION 7320 BNC	Precise, menu controlled pH/mV/ISE benchtop meter, with two BNC inputs, for measurements/documentation according GLP/AQA. Meter with universal power supply, stand and operation manual, software and USB cable.	1GA340
inoLab® pH/ION 7320P BNC	Precise, menu controlled pH/mV/ISE benchtop meter, with two BNC inputs, for measurements/documentation according GLP/AQA with integrated thermal printer. Meter with universal power supply, stand and operation manual, software and USB cable.	1GA340P

# Technical Data

(All values  $\pm 1$  digit)

Model	inoLab® pH 7110	inoLab® pH 7310 inoLab® pH/ION 7320	inoLab® Oxi 7310	inoLab® Cond 7110	inoLab® Cond 7310
Temperature compensation	Automatic/manual	Automatic/manual	Automatic	Automatic/none	Automatic/none
Calibration points	1 to 3	1 to 5 pH 2 to 7 ISE	1	1	1
Calibration records	1	10	10	1	10
Calibration timer	•	•	•	•	•
Memory entries	-	500/5000*	500/5000*	-	500/5000*
Interface	-	Mini USB-B	Mini USB-B	-	Mini USB-B
GLP/AQA supporting	-	•	•	-	•
Display	LCD	backlit b/w graphic	backlit b/w graphic	LCD	backlit b/w graphic
Printer option	-	•	•	-	•
Additional	-	CMC, input serial number of sensor	input serial number of sensor	-	input serial number of sensor
Power supply	Battery or universal power supply	Battery or universal power supply	Battery or universal power supply	Battery or universal power supply	Battery or universal power supply

\* manual/automatic

Model	inoLab® pH 7110	inoLab® pH 7310	inoLab® pH/ION 7320
pH	-2.0 ... 20.0 $\pm 0.1$ pH -2.00 ... 20.00 $\pm 0.01$ pH -2.000 ... 19.999 $\pm 0.005$ pH	-2.0 ... 20.0 $\pm 0.1$ pH -2.00 ... 20.00 $\pm 0.01$ pH -2.000 ... 19.999 $\pm 0.005$ pH	-2.0 ... 20.0 $\pm 0.1$ pH -2.00 ... 20.00 $\pm 0.01$ pH -2.000 ... 19.999 $\pm 0.005$ pH
mV	$\pm 1200.0$ mV $\pm 0.3$ mV $\pm (2000 \pm 1)$ mV	$\pm 1200.0$ mV $\pm 0.3$ mV $\pm (2500 \pm 1)$ mV	$\pm 1200.0$ mV $\pm 0.3$ mV $\pm (2500 \pm 1)$ mV
ISE (mg/l, $\mu$ mol/l, mg/kg, ppm, %)	-	-	0.000 ... 9.999 10.00 ... 99.99 100.0 ... 999.9 1000 ... 999999
Temperature	-5.0 ... 105.0 °C $\pm 0.1$ °C	-5.0 ... 105.0 °C $\pm 0.1$ °C	-5.0 ... 105.0 °C $\pm 0.1$ °C
CMC	-	yes	yes

Model	inoLab® Cond 7110	inoLab® Cond 7310
Conductivity	0.00 ... 1000 mS/cm $\pm 0.5$ % of value 0.000 ... 1.999 $\mu$ S/cm, K= 0.01 cm <sup>-1</sup> 0.00 ... 19.99 $\mu$ S/cm, K= 0.1 cm <sup>-1</sup>	0.00 ... 1000 mS/cm $\pm 0.5$ % of value 0.000 ... 1.999 $\mu$ S/cm, K= 0.01 cm <sup>-1</sup> 0.00 ... 19.99 $\mu$ S/cm, K= 0.1 cm <sup>-1</sup>
Resistivity	0.00 ... 199.9 M $\Omega$ cm	0.00 ... 199.9 M $\Omega$ cm
Cell constants	fixed: 0.01 cm <sup>-1</sup> with calibration: 0.450 ... 0.500 cm <sup>-1</sup> , 0.800 ... 0.880 cm <sup>-1</sup> adjustable: 0.090 ... 0.110 cm <sup>-1</sup> 0.250... 2.500 cm <sup>-1</sup>	0.01 cm <sup>-1</sup> 0.450 ... 0.500 cm <sup>-1</sup> , 0.800 ... 0.880 cm <sup>-1</sup> 0.090 ... 0.110 cm <sup>-1</sup> 0.250... 25.000 cm <sup>-1</sup>
Salinity	0.0 ... 70.0 (acc. IOT)	0.0 ... 70.0 (acc. IOT)
TDS	1 ... 1999 mg/l	1 ... 1999 mg/l, 0 ... 199.9 g/l
Temperature	-5.0 ... 105.0 °C $\pm 0.1$ °C	-5.0 ... 105.0 °C $\pm 0.1$ °C
T <sub>ref</sub>	20 °C/25 °C	20 °C/25 °C
Temperature compensation	none, nI, 0.000 ... 3.000 %/K	none, nI, 0.000 ... 10.000 %/K

Model	inoLab® Oxi 7310
Dissolved Oxygen Concentration*	0.00 ... 20.00 mg/l $\pm 0.5$ % of value 0 ... 90 mg/l $\pm 0.5$ %
Saturation*	0.0 ... 200.0 % $\pm 0.5$ % of value 0 ... 600 % $\pm 0.5$ of value
Partial pressure*	0 ... 200.0 hPa, 0 ... 1250 hPa $\pm 0.5$ % of value
Temperature	0.0 ... 50.0 °C $\pm 0.1$ °C
Built-in pressure sensor	yes

\* depends on DO sensor