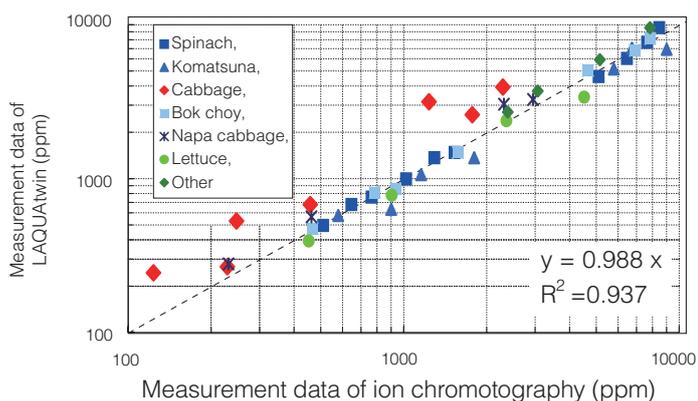




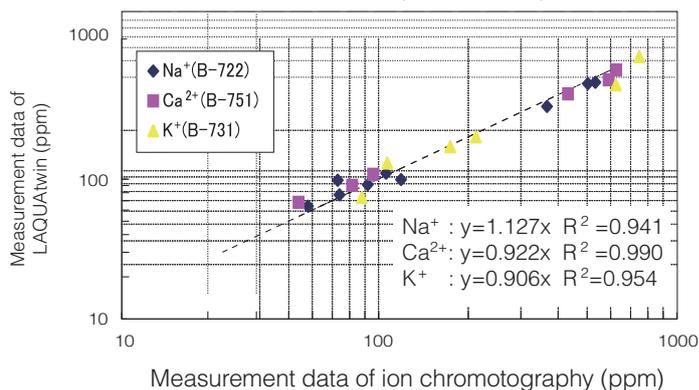
	Salt (NaCl)	Sodium Ion (Na ⁺)	Potassium Ion (K ⁺)	Nitrate Ion (NO ₃ ⁻)	Calcium Ion (Ca ²⁺)
Model	Salt-22 Sal Temp	Na-11 Na ⁺ Temp	K-11 K ⁺ Temp	NO3-11 NO ₃ ⁻ Temp	Ca-11 Ca ²⁺ Temp
Features	WATER PROOF MICRO VOLUME 2 PT CAL	WATER PROOF MICRO VOLUME 2 PT CAL	WATER PROOF MICRO VOLUME 2 PT CAL	WATER PROOF MICRO VOLUME 2 PT CAL	WATER PROOF MICRO VOLUME 2 PT CAL
Part No.	3200689158	3200689159	3200689160	3200689162	3200689161
Measurement Principle	Ion Selective Electrode				
Minimum Sample Volume	0.3 ml (0.05 ml with Sampling Sheet B)				
Measurement Range	0.1 to 10% by weight	2 to 9900 ppm (mg/L) (0.1 to 430 mmol/L)	4 to 9900 ppm (mg/L) (0.1 to 250 mmol/L) 2 to 5000 kg/10a (soil/ water ratio 1:5)	NO ₃ ⁻ : 6 to 9900 ppm (mg/L) (0.1 to 160 mmol/L) NO ₃ :N: 1.4 to 2200 ppm (mg/L)	4 to 9900 ppm (mg/L) (0.1 to 250 mmol/L)
Resolution	0.00 to 0.99%: 0.01% 1.0 to 9.9%: 0.1%	0 to 99 ppm: 1 ppm 100 to 990 ppm: 10 ppm 1000 to 9900 ppm: 100 ppm			
Accuracy	± 10% of actual value				± 20% of actual value
Maximum Calibration Points	2				
Temperature Display / Resolution	0 to 50.0 °C / 0.1 °C				
Functions	Automatic Standard Recognition • Changeable Low and High Calibration Values • Temperature Compensation • Temperature Calibration • Multiplication Compensation (0.01 to 9.90) • Auto Hold / Auto Stable • Automatic Power Off (30 mins.) • Low Battery Indicator • IP67 Water / Dust Proof • Replaceable Sensor				
Display	Custom (Monochrome) Digital LCD with Backlight				
Operating Temperature / Humidity	5 to 40 °C / 85% or less in relative humidity (no condensation)				
Battery Life	Approx. 400 hrs. continuous use without backlight				
Material	ABS epoxy body / flat glass sensor				
Dimensions	164 x 29 x 20 mm (excluding projections)				
Mass	Approx. 55g (including sensor and batteries)				
Accessories included	150 & 2000 ppm Standard Solutions (14 ml each) • Sampling Sheet B (5pcs) CR2032 Batteries (2) • Dropper • Instruction & Quick Manuals • Storage Case				

Correlation between LAQUAtwin measurement data and ion chromatography

Crops (NO₃⁻)



Isotonic drink, mineral water drinks and mineral water (Na⁺, K⁺, Ca²⁺)



*When measuring Ca²⁺, samples are pretreated in order to match the conditions of the ion chromatography.

Solutions & Accessories

LAQUAtwin Replacement Sensors		
Part No.	Model	Description
3200459834	S010	pH Sensor (for B-711, B-712, B-713, pH-11, pH-22 & pH-33)
3200459866	S021	Salt Sensor (for B-721 & Salt-22)
3200459867	S022	Sodium Ion Sensor (for B-722 & Na-11)
3200459868	S030	Potassium Ion Sensor (for B-731 & K-11)
3200459870	S040	Nitrate Ion Sensor (for B-741, B-742, B-743, NO3-11, NO3-11C & NO3-11S)
3200459869	S050	Calcium Ion Sensor (for B-751 & Ca-11)
3200459672	S070	Conductivity Sensor (for B-771, EC-11, EC-22, & EC-33)
3200597237	S071	Salt EC Sensor (for Salt-11)



LAQUAtwin Replacement Sensors

LAQUAtwin Standard Solutions (6 x 14ml bottles per pack)		
Part No.	Model	Description
5505293441	USA-2	Buffers, pH 4/7, Model B-713, pH-11
5505293442	USA-3	Buffers, pH 4/7/10, Model pH-22
5505293443	USA-5	Buffers, pH 1.68/4/7/10/12.5, Model pH-33
3999960110	514-22	1413 µS/cm Conductivity Standard Solution (for B-771, EC-11, EC-22, EC-33)
3999960111	514-23	12.9 Conductivity Standard Solution (for B-771, EC-11, EC-22, EC-33)
3999960112	514-05	0.5% NaCl Standard Solution (for Salt-11 & Salt-22)
3999960113	514-50	5.0% NaCl Standard Solution (for Salt-11 & Salt-22)
3999960114	514-20	Conditioning Solution (For Conductivity & Salt Sensors)
3200457723	Y022H	2000ppm Sodium Ion Standard Solution (for B-722 & Na-11)
3200457724	Y022L	150ppm Sodium Ion Standard Solution (for B-722 & Na-11)
3200457719	Y031H	2000ppm Potassium Ion Standard Solution (for B-731 & K-11)
3200457720	Y031L	150ppm Potassium Ion Standard Solution (for B-731 & K-11)
3200053433	Y041	5000ppm Nitrate Ion Standard Solution (for N03-11C)
3200053514	Y042	300ppm Nitrate Ion Standard Solution (for N03-11C & N03-11S)
3200053532	Y043	2000ppm Nitrate Ion Standard Solution (for B-743 & N03-11)
3200053535	Y044	30ppm Nitrate Ion Standard Solution (for N03-11S)
3200053536	Y045	150ppm Nitrate Ion Standard Solution (for B-743 & N03-11)
3200457727	Y051H	2000ppm Calcium Ion Standard Solution (for B-751 & Ca-11)
3200457728	Y051L	150ppm Calcium Ion Standard Solution (for B-751 & Ca-11)



pH Buffers Conductivity Standard Solutions NaCl Standard Solutions

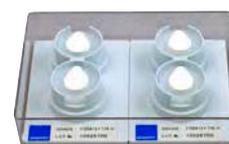


Sodium Ion Standard Solutions Potassium Ion Standard Solutions Calcium Ion Standard Solutions



Nitrate Ion Standard Solutions

LAQUAtwin Accessories		
Part No.	Model	Description
3200053858	Y046	Sampling Sheet B (100pcs) for minute samples (≥ 0.05 ml)
3200459736	Y048	Sampling Sheet Holder (use with sampling sheet B for samples with particulates)



Sampling Sheet B

Nitrate Ion Meter for crop N03-11C (Part No. 3200689163)



Accessories included:
Standard solution for crops (300ppm & 5000ppm) (14mL), 2 CR2032 batteries, Instruction manual, 5 Pipettes, Cleaning solution bottle (250mL), Crop sample press, 3 Medical cups, Quick manual, Carrying case

Nitrate Ion Meter for soil N03-11S (Part No. 3200689164)



Accessories included:
Standard solution for soil (30ppm, 300ppm) (14mL), 2 CR2032 batteries, Instruction manual, 5 Pipettes, Cleaning solution bottle (250mL), 3 Extraction bottles (100mL), 2 sets of spoons for soil sampling, Tweezers, Sampling sheetB, 2 Sampling sheet holders, Quick manual, Carrying case



Water Quality Analyzers

With over 60 years of engineering excellence, HORIBA's diverse range of water quality analyzers and electrodes are ideal for everyday laboratory needs through to the most demanding of applications. Visit our website for a wealth of useful information and water quality measurement tips to help you obtain the best results in your work.



Benchtop Meters

Developed using extensive feedback from users, our new LAQUA meters deliver the best solution for water quality analysis. Our LAQUA website features an online 'Selection Guide' to enable you to find the perfect LAQUA meter and electrode for your need.



Handheld Meters

In the lab, in the field or anywhere you need it. LAQUA Handheld meters are designed for use with one hand and with an IP67 waterproof rating and shock-resistant casing. Meters can be used for long periods, even in dark places, making it ideal for field measurements in rivers and lakes.



Electrodes

Various electrodes to match any application. A wide range of products for both benchtop and portable systems are available, including easy and reliable standard models, application-focused models for small samples or large containers, and special electrodes for specific sample characteristics.



Application Notes

LAQUAtwin pocket meters offer quick and convenient alternative to analyze important parameters with high accuracy. Several application notes are available at (<http://goo.gl/znwE6j>) detailing the use of LAQUAtwin and the results achieved for the respective applications. Additional application notes will be added when available.

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- Instruction manual downloads
- Measurement tips, etc.

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- IQ/OQ/PQ support*
- SOP guidance
- FAQ

*Optional services