

E-chem series of pH & Conductivity Meters



Areas of application:

The E-chem series of high precision, laboratory pH and conductivity meters meet the highest international GLP standards. The series comprises three different models:-

- E512 three decimal place pH meter.
- E515 auto ranging conductivity meter.
- E522 combined pH/conductivity meter.

E-chem Series

Features

These meters all meet the highest of international GLP standards. Features include automatic calibration, automatic temperature compensation, data storage, timed measurement, clock display, RS232 output, function setting and self-diagnosis as standard.

- Automatic recognition of 13 kinds of pH buffer solutions. User can choose any one from four series of standard buffer solutions: Europe & USA, NIST, Chinese and user-defined series.
- High purified water and ammonia added purified water pH measurement modes can be set up. These modes offer greater measuring accuracy and are especially suited for electric power and petrochemical industry applications.
- Redox potential mode for ORP value.
- Adopts advanced automatic frequency and voltage regulation technology to enlarge the measuring range of the conductivity electrode with only one-point calibration.
- Automatic switching of conductivity measuring range. The meter has non-linearity automatic temperature compensation for high purified water less than $10\mu\text{S}/\text{cm}$ which greatly improves measuring accuracy.
- Automatic recognition of 8 kinds of conductivity standard solution. User can choose from two series of standard buffer solutions: Europe & USA and Chinese.
- Innovative technology to improve meter's response speed and result accuracy.
- Dustproof and waterproof meter to IP54 standards.
All sockets are protected by silica gel caps



E522 precision pH/conductivity meter

The E522 is a combined pH/Conductivity meter that offers all of the features of the two individual parameter meters, E512 and E515. If you need to measure both pH and Conductivity, the E522 is a very economic option. Each instrument is supplied complete with electrode stand, quality electrodes and standard solutions.

Working specification:

Measuring range pH: -2.000 to 19.999

Accuracy: +/- 0.002 pH

Measuring range mV: -1999.9 to 1999.9

Accuracy: +/- 0.03% FS

Temperature compensation for pH from 0 to 100°C

Measuring range Conductivity: 0.00 to 200.0 mS/cm

Extended range to 2000 mS/cm with $k=10$ cell.

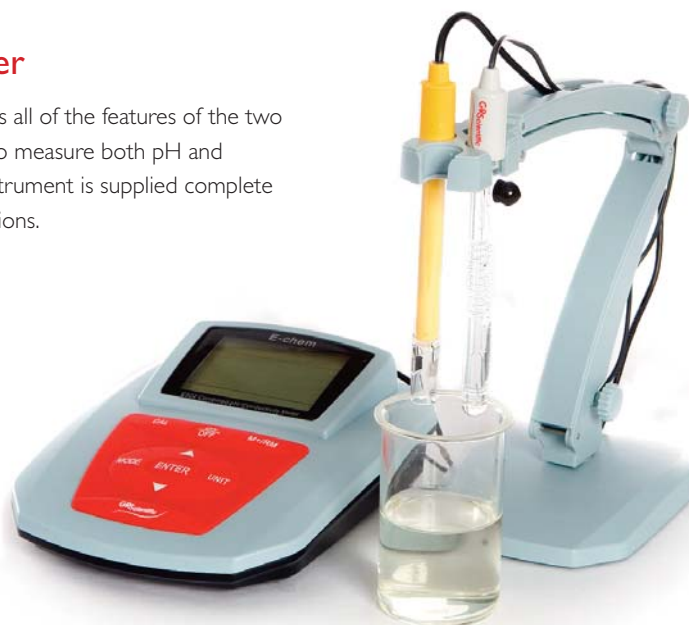
TDS range: 0 to 100g/L

Salinity range: 0 to 100ppt

Resistivity range: 0 to 100 M Ω ·cm

Accuracy: +/- 0.05% FS

Temperature compensation for Conductivity from 0 to 50°C



E512 research level pH meter



The E512 is a three decimal place pH meter that offers easy to use operating procedures with full GLP compliant features for monitoring system performance. It also offers mV and Redox measurement options. For worldwide application, it holds a number of buffer set values for routine calibration. Each instrument is supplied complete with electrode stand, quality electrodes and standard solutions.

Working specification:

Measuring range pH: -2.000 to 19.999

Accuracy: +/- 0.002 pH

Measuring range mV: -1999.9 to 1999.9

Accuracy: +/- 0.03% FS

Temperature compensation for pH from 0 to 100°C

E515 autoranging Conductivity meter

The E515 Conductivity meter is an autoranging instrument that covers all application requirements. It also has measuring modes for resistivity, salinity and Total Dissolved Solids. The meter is GLP compliant and is supplied complete with electrode stand, quality electrodes and standard solutions.

Working specification:

Measuring range Conductivity: 0.00 to 200.0 mS/cm

Extended range to 2000 mS/cm with k=10 cell.

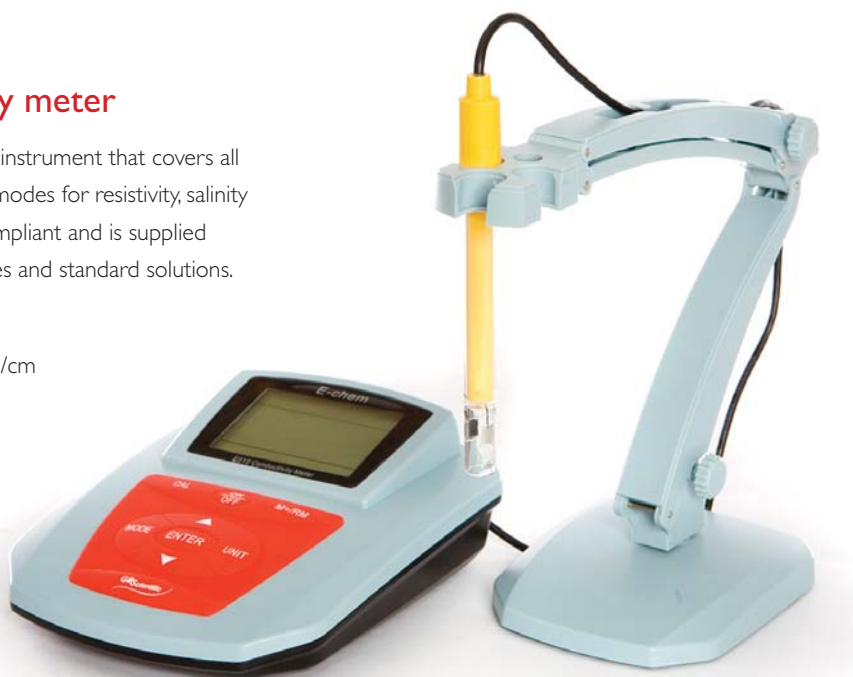
TDS range: 0 to 100g/L

Salinity range: 0 to 100ppt

Resistivity range: 0 to 100 M Ω cm

Accuracy: +/- 0.05% FS

Temperature compensation from 0 to 50°C



Technical Specifications

		E512	E515	E522
Specification Parameters				
pH	-2000 to 19.999 pH	✓	-	✓
mV	±1999.9 mV	✓	-	✓
Conductivity	0 to 2000 mS/cm, (Six ranges)			
	1 to 20.0 µS/cm	-	✓	✓
	20.0 to 200.0 µS/cm	-	✓	✓
	200 to 2000 µS/cm	-	✓	✓
	2.00 to 20.00 mS/cm	-	✓	✓
	20.00 to 200.0 mS/cm	-	✓	✓
	200 to 2000 mS/cm (with K=10 probe)	-	✓	✓
Resistivity	0 to 100 MΩ ·cm	-	✓	✓
TDS	0 to 100 g/L	-	✓	✓
Salinity	0 to 100 ppt	-	✓	✓
Temperature	-10 to 110°C	✓	✓	✓
Accuracy				
pH	±0.002 pH	✓	-	✓
mV	±0.03% full scale	✓	-	✓
Conductivity	±0.5% full scale	-	✓	✓
Temperature	±0.4°C	✓	✓	✓
Other Parameters				
Data storage	900 groups	✓	✓	✓
Communication	RS232	✓	✓	✓
Power	DC9V/300mA	✓	✓	✓
Dimensions	160×190×70 mm	✓	✓	✓
Weight	880 g	✓	✓	✓

For additional technical information, specifications, MSDS data, user manuals, and exhibition news, visit our website at:

www.grscientific.com

Ordering Information

Part No:	41-512 pH meter
Product:	Model E512 pH meter complete with plastic pH/ATC three-in-one combination electrode, glass pH combination electrode, temperature electrode, electrode holder; pH buffer solutions (pH 4.00,7.00,10.01), 9V power adapter; RS232 communication cable, communication software CD and operation manual.
Part No:	41-515 Conductivity meter
Product:	Model E515 precision conductivity meter; conductivity electrode, electrode holder; 1413µS/cm conductivity standard solution and operation manual 9V power adapter; RS232 communication cable, communication software CD and operation manual.
Part No:	41-522 Combined pH/conductivity meter
Product:	Model E522 pH/Conductivity meter; pH combination electrode, temperature probe, conductivity electrode, electrode holder; pH buffer solutions (pH 4.00,7.00,10.01), 1413µS/cm conductivity standard solution and operation manual
Part No:	Product:
41-201T-M	Plastic pH/ATC combined electrode
41-2503-C	Glass pH combined electrode
41-MP500	Temperature electrode
41-2401-M	Glass conductivity electrode
41-602	Electrode holder

About G.R. Scientific

Key personnel at G.R. Scientific are recognised experts in titration technology and electrochemistry. They have designed and manufactured titrators since the early 1980's and are widely regarded as some of the leading specialists in this technology.



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