

# Portable Multi Parameter Conductivity pH-Meter Bench Top Combination Meter



pH-Meter



Basic Meter



Combination Meter



Conductivity

# Electrochemistry

## The Perfect Combination

A new line of electrochemistry instruments has been developed, finding the right balance between a state-of-the-art design, innovative ideas in pH and conductivity measurement and easy use.

A famous Swiss producer has developed, exclusively for these instruments, a complete laboratory line of pH electrodes for every type of application.

All buffer solutions and calibration standards will be delivered with a NIST-certificate.

## Electrochemistry

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Professional Benchtop Multi Meter

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## Portable pH-Meter EC-20-pH • EC-25-pH

An elegant and ergonomic case, with a practical soft rubber and IP57 protection, contains the best of technology. A large display (backlight for EC-25-pH) shows all information that you need. All the functional parameters of connected electrode, during measurement or calibration, are constantly checked and inform the operator for easy trouble-shooting. Only 4 keys (6 for EC-25-pH) allow the user to control all functions in an intuitive and easy way.



EC-25-pH

### EC-20-pH • EC-25-pH

- Display of pH/mV and temperature Parameter simultaneously
- Selectable resolution: 0.1/0.01 pH
- Automatic calibration up to 3 points (2 Standard pH-Puffer Sets)
- Manual calibration up to 2 points (user-defined pH-Puffer)
- Stability parameter (Low-Med-High) for high accuracy measurements
- Large Display (backlit on EC-25) with indication of calibration buffers and measurements stability
- Memory with re-call of last calibration and information about electrode life Date and time on EC-25
- Waterproof IP57-protection
- Sturdy carrying case with all accessories to be used as a small portable lab
- Software PC-Link (included)



EC-20-pH

### ... additionally for EC-25-pH

- GLP
- CAL DUE: set of calibration frequency for high quality of measurements
- Data logger (automatic or manual)  
500 data sets with date and time
- USB port and software PC-Link to download data (included)



## Portable pH-Meter EC-20-pH • EC-25-pH

### Various sets are available:

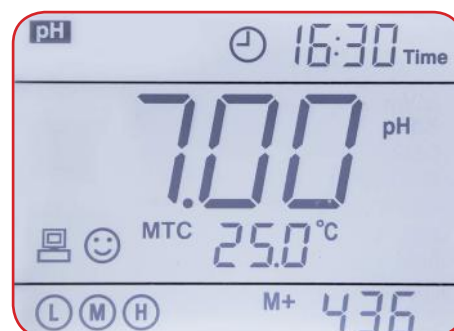
- EC-20-pH-0 Kit without pH electrode, with temperature sensor inside and BNC, colored pH buffer solution, carrying case and accessories.
- EC-20-pH-1 Kit included pH electrode 201T, cable S7/BNC, temperature probe NT55, colored pH buffer solution, carrying case and accessories.
- EC-25-pH-0 Kit without pH electrode, with temperature sensor inside and BNC, colored pH buffer solution, carrying case and accessories.
- EC-25-pH-1 Kit included pH electrode 201T, cable S7/BNC, temperature probe NT55, colored pH buffer solution, carrying case and accessories.



pH Electrode



EC-25-pH Kit



Large Display

| Technical Data                 | EC-20-pH                   | EC-25-pH                    |
|--------------------------------|----------------------------|-----------------------------|
| Meas. Range/Resolution         | 0 - 14 pH / 0,1 – 0,01     | -2 - 16 pH / 0,1 – 0,01     |
| Calibration points             | 1-3                        | 1-3                         |
| Buffer solutions               | USA, NIST and User defined | USA, NIST and User defined  |
| GLP                            | -                          | Yes                         |
| Indication of slope and offset | Yes                        | Yes with date and time      |
| CALDUE                         | Yes                        | Yes                         |
| mV measuring range             | ±1000 mV                   | ±1999mV                     |
| Resolution                     | 1 mV                       | 0,1mV(± 200 mV) 1 mV above  |
| Temperature measuring range    | 0...100,0 °C               | -10...100,0 °C              |
| Resolution/Accuracy            | 0,1 °C / ± 0,5 °C          | 0,1 °C / ± 0,5 °C           |
| Memory                         | -                          | Man/Auto 500 Data with time |
| IP-class                       | Waterproof IP 57           | Waterproof IP 57            |
| Warranty Instrument            | 5 Years                    | 5 Years                     |

## Basic Benchtop Meter EC-30-pH

The LCD back light display of the basic meter shows all information that you need about measurement, included icon for stability. Up to 3 point pH calibration with automatic recognition for USA buffers. Icon support all calibration editing function with alarm electrode diagnostics. Easy to use - Very competitive price - easy to calibrate.



EC-30-pH-0

Kit without pH-electrode, with Temperature sensor and BNC-plug, buffer solution pH4 and pH7, electrode holder.

EC-30-pH-1

Kit with pH-electrode 201T, cable S7/BNC, Temperature sensor NT55, buffer solution pH4 and pH7, electrode holder.



### Technical Data

pH measuring range  
Resolution  
mV measuring range  
Resolution  
Temperature range  
Resolution  
Calibration points

### EC-30-pH

0 - 14 pH  
0,1/0,01 pH  
± 2.000 mV  
1 mV  
0-100 °C  
0,1 °C  
1-3  
USA, NIST, 2 Custom  
BNC, Jack phono (ATC)  
adapter 5 V / DC  
155 x 180 x 60 mm, 500 g

## Professional Benchtop Meter EC-40-pH • EC-45-pH

The large color display easy on to read shows all information that you need about measurement, buffers used for calibration, electrode's life, GLP information and instrument's memory. Anyone can use this meter easily with its clear menu structure up to 8 languages.

### Easy to learn.

Up to 5 point pH calibration with automatic recognition for USA/NIST/DIN and User buffers. Icon support all calibration editing function with advanced electrode diagnostics.

### Easy to calibrate.

Only a few keys allow the user to control all functions in an intuitive and easy way. Both instruments can be delivered with a stirrer.

### EC-40-pH • EC-45-pH

- Display pH/mV and Temperature parameters simultaneously
- Resolution: 0,1/0,01 pH
- Automatic Calibration up to 3 point automatic recognized for USA/NIST buffers.
- Manual-Calibration up to 2 points (User defined pH Buffer)
- Large 2 color display with indication of Calibration Buffers and measurement's stability
- Instrument can be equipped with a magnetic stirrer
- IP54 rated housing handles splashes
- 3 years meter replacement warranty



### ... additional for EC-45-pH

- Selectable Resolution: 0,1/0,01/0,001 pH
- GLP and IQ-OQ manual available
- Automatic Calibration up to 5 point
- Memory with re-call of last calibration date and time and information of electrode's life
- CAL DUE: set of calibration frequency for high quality of measurements
- Stability Parameter (Low-Med-High) for high accuracy measurement
- Non-volatile memory holds up to 1000 data points with date/ time in automatic (Data logger) or manual
- 2x USB ports to transfer data at PC or printer and for external keyboard
- Software PC-Link to download data (included)

## Professional Benchtop Meter EC-40-pH • EC-45-pH

### Various sets are available:

|            |                                                                                                                                                                                             |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EC-40-pH-0 | Kit without pH electrode, with cable S7/BNC, temperature probe NT55, colored pH buffer solution pH 7 and pH 4, electrode holder                                                             |
| EC-40-pH-1 | Complete kit included pH electrode POLYMER. Cable S7/BNC, temperature probe NT55, colored pH buffer solution pH 7 and pH 4, electrode holder and accessories                                |
| EC-40-pH-2 | Kit without pH electrode, with cable S7/BNC, temperature probe NT55, colored pH buffer solution pH 7 and pH 4, electrode holder, <b>with magnetic stirrer</b>                               |
| EC-40-pH-3 | Complete kit included pH electrode POLYMER. Cable S7/BNC, temperature probe NT55, colored pH buffer solution pH 7 and pH 4, electrode holder, <b>with magnetic stirrer</b>                  |
| EC-45-pH-0 | Kit without pH electrode, with cable S7/BNC, temperature probe NT55, colored pH buffer solution pH 7 and pH 4, electrodes arm, power supply and accessories                                 |
| EC-45-pH-1 | Complete kit included pH electrode STANDARD, temperature probe NT55, S7/BNC 1 m cable, colored pH buffer solution pH 7 and pH 4, electrodes arm, power supply and accessories               |
| EC-45-pH-2 | Kit without pH electrode, with cable S7/BNC, temperature probe NT55, colored pH buffer solution pH 7 and pH 4, electrodes arm, power supply, <b>with magnetic stirrer</b>                   |
| EC-45-pH-3 | Complete kit included pH electrode STANDARD, temperature probe NT55, S7/BNC 1 m cable, colored pH buffer solution pH 7 and pH 4, electrodes arm, power supply, <b>with magnetic stirrer</b> |



#### Technical Data

|                                 | EC-40-pH                   | EC-45-pH                          |
|---------------------------------|----------------------------|-----------------------------------|
| Measuring range pH              | 0 – 14                     | -2 – 20                           |
| Resolution pH                   | 0,1 / 0,01                 | 0,001                             |
| Calibration Points              | 1 -3                       | 1-5, automatic Buffer recognition |
| Buffer recognized               | USA, NIST, 2 user defined  | DIN, NIST, USA, 5 user defined    |
| Temperature range               | 0 – 100 °C                 | -20 – 120 °C                      |
| Accuracy/Resolution Temperature | 0,1/±0,2 °C                | 0,1/±0,2 °C                       |
| Measuring Range mV (Redox)      | +/- 2000                   | +/- 2000                          |
| Accuracy/Resolution mV          | 0,1/1                      | 0,1/1                             |
| Temperature compensation        | Manual or automatic        | automatic                         |
| Memory                          | No                         | 1000 Data                         |
| Interface                       | BNC, ATC                   | 2 x USB, BNC, ATC                 |
| Protection class                | IP 54                      | IP 54                             |
| Power supply                    | AC/DC adapter 9 V / 300 mA | AC/DC adapter 9 V / 300 mA        |
| Dimensions                      | 200 x 220 x 100 mm, 950 gr | 200 x 220 x 100 mm, 950 gr        |



## Conductivity Portable Meter EC-20 cond • EC-25 cond

**A**n elegant and ergonomic case, with a practical soft rubber and IP57 protection, has inside the best of technology. A large display (backlight for EC-25 COND) shows all information that you need about the measurement, cell's life and instrument's memory. All the functional parameters of connected cell, during measurement or calibration, are constantly checked and inform the operator for easy trouble-shooting. Only 4 keys for COND 7 (6 for EC-25 cond) allow the user to control all functions in an intuitive and easy way. A practical USB port (EC-25-cond), covered to guarantee waterproof protection, allow to download data (with date of last calibration done) or power the instruments by Computer or with power supply 220V/USB included.



### EC-20 cond • EC-25 cond

- Display Conductivity and Temperature simultaneously
- Automatic calibration 1 to 3 points between 4 conductivity standard values
- Manual calibration on 1 point (User defined)
- Large Display (backlight for EC-25 cond) with indication of standards used for calibration and stability
- Automatic and manual compensation of temperature with reference value 15...30 °C
- Waterproof IP57 protection
- Strong carrying case with all accessories to be used as a small portable laboratory

EC-25 cond

### ... additional for EC-25 cond

- TDS measurement with adjustable factor
- GLP
- Memory recall of last calibration with control of cell constant, date and time
- CAL DUE : set of calibration frequency for high quality measurements
- Data logger, manual and automatic with 500 memory values with date and time
- USB port to download data and power by Computer or power supply (included)
- Software PC-Link to download data (included)



## Conductivity Portable Meter EC-20 cond • EC-25 cond

### Various sets are available:

- EC-20 cond 0** Kit without cell, with standard calibration solutions, carrying case and accessories
- EC-20 cond 1** Complete kit include cond. Cell 2301T with ATC, cable length 1m and BNC plug, standard calibration solutions, carrying case and accessories
- EC-25 cond 0** Kit without cell, with standard calibration solutions, power supply, software PC-Link, USB cable, carrying case with accessories
- EC-25 cond 1** Complete kit include cond. Cell 2301T with ATC, cable length 1m and BNC plug, Standard calibration solutions, power supply, software PC-Link to download data, USB cable, carrying case with accessories.



EC-25 cond



### Technical Data

Cond Meas. Range/  
Resolution  
Calibration points  
Calibration standards

Cell constant selectable  
Temperature range  
Resolution  
TDS measuring range  
Resolution

GLP  
CALDUE

Memory

Inputs

IP-class

Warranty Instrument

### EC-20 cond

0,0...199,9 mS  
0,1/1 µS 0,01/0,1 mS  
1-4  
84 µS - 1413 µS - 12,88 mS -  
111,9 mS and 1 user defined  
0,1 - 1 - 10 cm<sup>-1</sup>  
0 - 100 °C  
0,1 °C / ± 0,5 °C

Yes

BNC, Jack phono (ATC)  
Waterproof IP 57  
5 Years

### EC-25 cond

-0,0...199,9 mS  
0,1/1 µS 0,01/0,1 mS  
1-4  
84 µS - 1413 µS - 12,88 mS -  
111,9 mS and 1 user defined  
0,1 - 1 - 10 cm<sup>-1</sup>  
0 - 100 °C  
0,1 °C / ± 0,5 °C

Yes

BNC, Jack phono (ATC)  
Waterproof IP 57  
5 Years

## Basic Conductivity Benchtop Meter EC-30 cond

The LCD back light display easy on to read shows all information that you need about measurement, included icon for stability. Up to 4 point Conductivity calibration with automatic recognition.  
Easy to use - Very competitive price - easy to calibrate.

### EC-30 cond

- Display COND and Temperature parameters simultaneously
- Resolution: automatic scale
- Selectable cell constant allows for use with 2 plate cell
- Automatic calibration 1 to 4 points between 4 conductivity standard values
- Indication stability of the measurement with icon
- Non-volatile memory holds up to 25 data points
- IP54 rated housing handles splashes
- 3 years meter replacement warranty



EC-30 cond

### Various sets are available:

**EC-30 cond 0** Meter without cell, incl, Cal-standards 1413  $\mu\text{S}$  and 12,88 mS, Cellholder and accessories.

**EC-30 cond 1** Meter with Con-cell 2301T incl. ATC, Cable 1m, Calibration standards 1413  $\mu\text{S}$  and 12,88 mS, Cellholder and accessories.



#### Technical Data

|                                  | EC-30 cond                                                  |
|----------------------------------|-------------------------------------------------------------|
| COND measuring range             | 0... 200,0 - 2000 $\mu\text{S}$ / 2,00... 20,00 - 200,0 mS  |
| Resolution                       | 0,1 - 1 $\mu\text{S}$ / 0,01 - 0,1 mS                       |
| Calibration points               | 1...4                                                       |
| Calibration standards recognized | 84 $\mu\text{S}$ - 1413 $\mu\text{S}$ - 12,88 mS - 111,9 mS |
| Cell constant selectable         | 0,1 - 1 - 10 $\text{cm}^{-1}$                               |
| Temperature coefficient          | 0,00...9,99 % / °C                                          |
| Reference temperature            | 25 °C                                                       |
| Temperature measuring range      | 0...50,0 °C                                                 |
| Resolution / Accuracy            | 0,1 °C                                                      |
| Temperature compensation         | Automatic / manual 0...80 °C                                |
| Memory                           | 25 data                                                     |
| Display                          | LCD (Liquid Crystal Display) / backlight                    |
| Inputs                           | BNC and Jack phono (ATC)                                    |
| Power supply                     | AC/DC adapter 9 V / 300 mA                                  |
| IP protection class              | IP 54                                                       |
| Dimensions / weight instrument   | 160 x 190 x 70 mm / 750 g                                   |

## Professional Conductivity Benchtop Meter EC-40 cond • EC-45 cond

The large color display easy on to read shows all information necessary information about measurement, calibration, standards, cell condition, GLP. Anyone can use this meter easily with its intuitive menu available in up to 8 languages in the EC-45 cond. **Easy to learn.**

Up to 4 calibration points with buffer recognition. Icon support for all calibration functions and advanced electrode diagnostics. **Easy to calibrate.**

All functions can be controlled in an intuitive and easy way. Both instruments can be delivered with a stirrer.

### EC-40 cond

- Display COND/TDS and Temperature simultaneously
- Resolution: automatic scale
- Selectable cell constant allows for use with 2 plate cell
- Automatic calibration 1 to 4 points between 4 conductivity standard values
- Manual-Calibration up to 1 points (User defined)
- Large 2 color display with indication of Calibration Standards and measurement's stability
- Instrument can be delivered with a magnetic stirrer
- IP54 Protection
- 3 years instrument warranty



### ... additional for EC-45 cond

- Selectable cell constant allows for use with 2 or 4 plate cell
- GLP and IQ-OQ manual available
- Automatic and manual compensation of temperature with reference value 15...30 °C
- Memory with re-call of last calibration date and time and information of cell constant
- CAL DUE: set of calibration frequency for high quality of measurements
- Non-volatile memory holds up to 1000 data points with date and time in automatic (Data logger) or manual printer
- 2 x USB ports to transfer data and software PC-Link to download data (included)

## Professional Conductivity Benchtop Meter EC-40 cond • EC-45 cond

### Various sets are available:

- EC-40 cond 0 Kit without cell, with standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories
- EC-40 cond 1 Kit included cell 2301T, standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories
- EC-40 cond 2 Kit without cell, with standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories **with magnetic stirrer**
- EC-40 cond 3 Kit included cell 2301T, standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories **with magnetic stirrer**
- EC-45 cond 0 Kit without conductivity cell, standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories
- EC-45 cond 1 Kit included conductivity cell Glass-Pt VPT80/1, standard solution 1413  $\mu$ S and 12,88 mS, cell holder, power supply and accessories.
- EC-45 cond 2 Kit without cell, with standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories **with magnetic stirrer**
- EC-45 cond 3 Kit included cell Glass-Pt VPT80/1, standard solution 1413  $\mu$ S and 12,88 mS, cell holder and accessories **with magnetic stirrer**



#### Technical Data

|                                  | EC-40 cond                         | EC-45 cond                 |
|----------------------------------|------------------------------------|----------------------------|
| Cond. Measuring range            | 0,00 – 200 mS                      | 0,00...1000 mS             |
| Resolution cond                  | Automatic scale                    | Automatic scale            |
| Relative accuracy                | $\pm 0,5$ % value reading          | $\pm 0,5$ % value reading  |
| TDS Measuring range              | 0,1 mg/L...100 gr/L                | 0,1 mg/L...500 gr/L        |
| TDS factor                       | 0.40...1.00                        | 0.40...1.00                |
| Relative Accuracy                | $\pm 0,5$ % value reading          | $\pm 0,5$ % value reading  |
| Temperature range                | 0 – 100 °C                         | -20 – 200 °C               |
| Accuracy/Resolution Temp.        | 0,1/ $\pm 0,2$ °C                  | 0,1/ $\pm 0,2$ °C          |
| Temperature compensation         | Manual or automatic                | Manual or automatic        |
| Temperature calibration          | Yes                                | Yes                        |
| Calibration points               | 1...4                              | 1...4                      |
| Calibration standards recognized | 84, 1413 $\mu$ S / 12.88, 111.8 mS | 1 point user defined       |
| Indication of cell condition     | Yes                                | Yes                        |
| GLP                              | No                                 | Yes, with date and time    |
| CALDUE                           | No                                 | Yes                        |
| Memory                           | No                                 | 1000 Data                  |
| Interputs                        | BNC, ATC                           | 2 x USB, BNC, ATC          |
| Protection class                 | IP 54                              | IP 54                      |
| Power supply                     | AC/DC adapter 9 V / 300 mA         | AC/DC adapter 9 V / 300 mA |
| Dimensions                       | 200 x 220 x 100 mm, 950 gr         | 200 x 220 x 100 mm, 950 gr |



## Portable Multi Meter EC-20 multi • EC-25 multi

A newly designed portable meter with a large display (backlight for EC-25 multi) showing all functional parameter and information. Only 4 keys (6 for EC-25 multi) allows the user to control all functions in an easy and intuitive way.

The instrument is IP-57 protected and will be delivered in an elegant and sturdy case, to be used as a small portable lab.

### EC-20 multi

- Display pH/mV/Conductivity/TDS and Temperature parameters simultaneously

#### pH:

- Selectable resolution: 0,1/0,01 pH
- Automatic calibration up to 3 points with 2 selectable pH-buffer sets (USA and NIST)
- Manual calibration up to 2 points with User-defined pH-Buffer
- Stability parameter (Low-Med-High) for high accuracy measurement

#### Conductivity:

- Automatic calibration from 1 to 4 points between 4 conductivity standard values
- Manual calibration at 1 point (User defined)
- Automatic and manual compensation of temperature with reference value 15...30 °C
- Large Display (backlight for EC-25) with indication of standards used for calibration and stability
- Waterproof IP57 protection
- Strong carrying case with all accessories to be used as a small portable laboratory



EC-20 multi

### ... additional for EC-25 multi

- TDS measurement with adjustable factor
- GLP
- Memory recall of last calibration with control of cell constant, date and time
- CAL DUE: set of calibration frequency for high quality measurements
- Data logger, manual and automatic with 500 memory values with date and time
- USB port to download data and power by Computer or power supply (included)
- Software PC-Link to download data (included)

## Portable Multi Meter EC-20 multi • EC-25 multi

### Various sets are available:

- EC-20 multi 0** Kit without pH electrode, included cond. cell 2301 T with ATC, cable length 1m with BNC/Cinch plug, with temperature probe NT 55, BNC/S7 1mt cable, pH buffer and conductivity standard, carrying case and accessories
- EC-20 multi 1** Complete kit include pH electrode 201T and cond. Cell 2301T with ATC, both cable length 1m and BNC plug, standard calibration solutions, carrying case and accessories
- EC-25 multi 0** Kit without pH electrode, included cond. cell 2301 T with ATC, cable length 1m with BNC/Cinch plug, with temperature probe NT 55, BNC/S7 1mt cable, power supply, software PC-Link, pH buffer and conductivity standard, carrying case and accessories
- EC-25 multi 1** Kit include pH-electrode 201T and cell 2301T with ATC, cable length 1m and BNC plug, standard calibration solutions, power supply, software PC-Link, USB- cable, carrying case with accessories.



EC-25 multi



| Technical Data           | EC-20 multi                                         | EC-25 multi                 |
|--------------------------|-----------------------------------------------------|-----------------------------|
| pH meas. Range           | 0,00...14,00 pH                                     | -2,00...16,00 pH            |
| Resolution               | 0,1/0,01 pH                                         | 0,1/0,01 pH                 |
| Calibration points       | 1...3                                               | 1...3                       |
| Buffer recognized        | USA, NIST and user defined                          |                             |
| mV meas. range           | ±1.000 mV                                           | ±1.999 mV                   |
| Resolution               | 1 mV                                                | 0,1/1 mV                    |
| Cond Meas. Range/        | 0,0...199,9 mS                                      | 0,00...199,9 mS             |
| Resolution               | 0,1/1 µS 0,01/0,1 mS                                | 0,01/0,1/1 µS 0,01/0,1 mS   |
| Calibration points       | 1-4                                                 | 1-4                         |
| Calibration standards    | 84 µS -1413 µS-12,88 mS-111,9 mS and 1 user defined |                             |
| Cell constant selectable | 0,1 - 1 - 10 cm <sup>-1</sup>                       |                             |
| Temperature range        | 0 - 100 °C                                          | -10 - 110 °C                |
| Resolution               | 0,1 °C / ± 0,5 °C                                   | 0,1 °C / ± 0,5 °C           |
| TDS measuring range      | -                                                   | 0...100 g/l                 |
| Resolution               | -                                                   | 1% full scale               |
| GLP                      | -                                                   | Yes                         |
| CALDUE                   | Yes                                                 | Yes                         |
| Memory                   | -                                                   | Man/Auto 500 Data with time |
| Inputs                   | BNC, Jack phono (ATC)                               | BNC, Jack phono (ATC), USB  |
| IP-class                 | Waterproof IP 57                                    | Waterproof IP 57            |
| Warranty Instrument      | 5 Years                                             | 5 Years                     |

## Professional Benchtop Multi Meter EC-40 multi • EC-45 multi

The large color display easy on to read shows all information necessary information about measurement, calibration, standards, cell condition, GLP. Anyone can use this meter easily with its intuitive menu available in up to 8 languages in the EC-45-Multi. **Easy to learn.**

Up to 5-point pH-calibration and up to 4-point Conductivity calibration with automatic recognition of all standards. Icon support for all calibration functions and advanced electrode diagnostics. **Easy to calibrate**  
All functions can be controlled in an intuitive and easy way. Both instruments can be delivered with a stirrer.

### EC-40 multi • EC-40 multi

- Display pH/mV and Temperature, COND/TDS and Temperature simultaneously
- Resolution: 0,1/0,01 pH; Auto range for Cond
- Selectable cell constant allows for use with 2 plate cell
- Large 2 color display with indication of Calibration Buffers and measurement's stability
- Indication stability of the measurement with icon
- Instrument can be delivered with a magnetic stirrer
- IP54 protection
- 3 years instrument warranty



### ... additional for EC-45 multi

- Display pH/mV and Temperature, COND/TDS/Salinity/Resistivity and Temperature simultaneously
- Selectable Resolution: 0,1/0,01/0,001 pH; Auto range for COND
- GLP and IQ-OQ manual available
- Selectable cell constant allows for use with 2 or 4 plate cell
- Memory with re-call of last calibration date and time and information of electrode's life
- CAL DUE: set of calibration frequency for high quality of measurements
- Stability Parameter (Low-Med-High) for high accuracy measurement
- Non-volatile memory holds up to 1000 data points with date and time in automatic (Data logger) or manual
- 2x USB ports to transfer data at PC or printer and for external keyboard
- Software PC-Link to download data (included)



## Professional Benchtop Multi Meter EC-40 multi • EC-45 multi

Available sets

- EC-40 multi 0** Kit without pH electrode and cell, with cable S7/BNC, temp. probe NT55, pH buffer solution pH 7, pH 4, conductivity solution 1413  $\mu$ S and 12,88 mS, power supply and accessories
- EC-40 multi 1** Kit included pH electrode XS Polymer, cell 2301T with ATC. Cable S7/BNC, pH buffer solution pH 7 and pH 4, conductivity solution 1413  $\mu$ S and 12,88 mS, power supply and accessories
- EC-45 multi 0** Kit without pH electrode and cell, with cable S7/BNC, temp. probe NT55, pH buffer solution pH 7 and pH 4, conductivity solution 1413  $\mu$ S and 12,88 mS, power supply and accessories
- EC-45 multi 1** Kit included pH electrode XS STANDARD S7, cell 2301T with ATC. Cable S7/BNC, pH buffer solution pH 7 and pH 4, conductivity solution 1413  $\mu$ S and 12,88 mS, power supply and accessories

All kits are also available with magnetic stirrer. For further details please see our new pricelist for electrochemistry products or check on our website [www.phoenix-instrument.de](http://www.phoenix-instrument.de).



### Technical Data

pH meas. Range  
Resolution  
Calibration points  
Buffer recognized  
mV meas. Range/Resolution  
Cond. Measuring range  
Resolution cond  
Relative accuracy  
TDS Measuring range  
TDS factor  
Relative Accuracy  
Temperature range  
Accuracy/Resolution Temp.  
Temperature compensation  
Temperature calibration  
Calibration points Cond.  
Calibration standards recognized  
Indication of cell condition  
GLP  
CALDUE  
Memory  
Interputs  
Protection class  
Power supply  
Dimensions

### EC-40 multi

0-14  
0.1 / 0.01 /  $\pm 0,01$   
1..3  
USA, NIST, 2 user defined  
 $\pm 2000 / 0,1/1$   
0,00 – 200 mS  
Automatic scale  
 $\pm 0,5$  % value reading  
0,1 mg/L...100 gr/L  
0.40...1.00  
 $\pm 0,5$  % value reading  
0 – 100 °C  
0,1/ $\pm 0,2$  °C  
Manual or automatic  
Yes  
1...4  
84, 1413  $\mu$ S / 12.88, 111.8 mS  
Yes  
No  
No  
No  
2xBNC, 2xATC  
IP 54  
AC/DC adapter 9 V / 300 mA  
200 x 220 x 100 mm, 950 gr

### EC-45 multi

-2-20  
0.1 / 0.01 / 0.001  
1..4  
USA, NIST, 5 user defined  
 $\pm 2000 / 0,1/1$   
0,00...1000 mS  
Automatic scale  
 $\pm 0,5$  % value reading  
0,1 mg/L...500 gr/L  
0.40...1.00  
 $\pm 0,5$  % value reading  
-20 – 200 °C  
0,1/ $\pm 0,2$  °C  
Manual or automatic  
Yes  
1....4  
1 point user defined  
Yes  
Yes, with date and time  
Yes  
1000 Data  
2x BNC, 2x ATC, 2 x USB  
IP 54  
AC/DC adapter 9V / 300 mA  
200 x 220 x 100 mm, 950 gr

In addition to Electrochemistry Phoenix Instrument also offers Rotary Evaporator, Balances, Centrifuges, Liquid Handling, Stirrer, Mixer, Shakers, Incubators and Ovens

