



# 856 Conductivity Module 867 pH Module

Precision meets flexibility

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YOU  
CAN  
TRUST

# Swiss quality instruments for pH and conductivity

The 856 Conductivity Module and the 867 pH Module are high-end desktop measuring instruments for pH and conductivity. Controlled with either OMNIS Software or a 900 Touch Control, they ensure full compliance with the regulations for pharma and provide for the highest level of data integrity. Both devices offer extensive connectivity for flexible expansion and automation.

## PRODUCT HIGHLIGHTS

### MAXIMUM EFFICIENCY

Combine the 856 Conductivity Module with an 867 pH Module to simultaneously measure pH and conductivity in the same beaker, streamlining your workflows.

### UNCOMPROMISING SECURITY

Rely on maximum precision and complete traceability in compliance with GLP, GMP, and 21 CFR Part changers.

### A FUTURE-PROOF INVESTMENT

Expand both modules into fully automated systems at any time by adding OMNIS components, sample changers and Dosinos.

## SUPERIOR FLEXIBILITY & CONNECTIVITY

The 856 Conductivity Module and the 867 pH Module both feature four MSB and two USB inputs for seamless system expansion with plug & play functionality.

- Four Metrohm Serial Bus (MSB) connectors allow the simultaneous connection and controlling of up to four stirrers and four intelligent dosing devices (800 Dosino/805 Dosimat). This capability is crucial for adding auxiliary solutions or executing complex automated dosing tasks (e.g., standard addition, pH adjustment of buffers).
- Two USB ports (Type A sockets) are available for connecting peripheral devices such as printers, sample processors, barcode readers, or keyboards.

## FULL COMPLIANCE & TRACEABILITY

Integration with OMNIS Software or combination with a 900 Touch Control guarantees compliance with GLP, GMP, and 21 CFR Part 11.

- OMNIS Software and 900 Touch Control both provide for complete documentation, including user management and audit trail.
- Complete traceability is ensured through the automatic saving of all data, methods, and calibrations for maximum data integrity.



# 867 pH Module – Maximum data security guaranteed

## Prevention of errors and simplified compliance

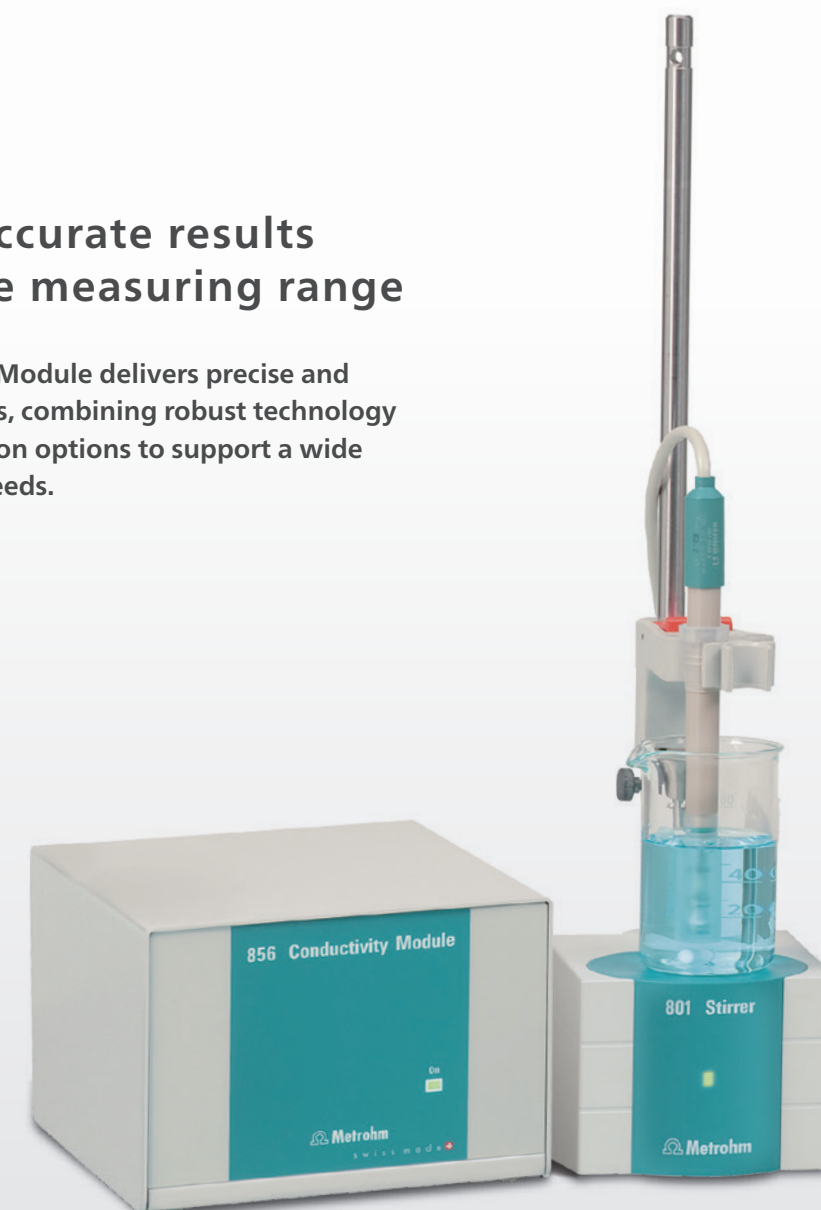
The 867 pH Module incorporates advanced technology for potentiometric and ion measurements. It supports both conventional sensors and intelligent electrodes.



# 856 Conductivity Module – Reliable conductivity measurement

## Stable and accurate results across a wide measuring range

The 856 Conductivity Module delivers precise and reliable measurements, combining robust technology with flexible application options to support a wide range of laboratory needs.



### INTELLIGENT ELECTRODES (iTRODES)

iTrodes store all essential sensor and calibration data directly on the electrode. When connected to the 867 pH Module, this data is read automatically, which prevents potential errors resulting from entering data manually or from using expired calibrations.

### PH BUFFER PRODUCTION

Together with OMNIS Software, the 867 pH Module enables precise and reproducible production of buffers.

### AUTOMATED ION DETERMINATION

With the 867 pH Module, ion determination using ion-selective electrodes can be performed by direct measurement or fully automatically by standard addition with an optional 800 Dosino or 805 Dosimat. A broad selection of ion selective electrodes is available, including sensors for fluoride, chloride, calcium, sodium, nitrate, and ammonia.

### WIDE MEASURING RANGE

The 856 Conductivity Module covers a wide measuring range of 1  $\mu$ S to 500 mS. The integrated temperature compensation provides for always accurate results.

### LOW-VOLUME MEASUREMENTS

The specially designed Micro conductivity measuring cell enables accurate measurements in very small sample volumes. This helps to save costs when measuring expensive samples, reduces waste, and is ideal for applications where only minimal amounts of sample are available.

### PROVEN TECHNOLOGY

The 856 Conductivity Module supports five-ring measuring cells. This technology minimizes polarization effects providing stable results across a broad measuring range.

### BACKWARD COMPATIBILITY

Older Metrohm conductivity measuring cells can be connected via adapters, which protects your current investment.

# Ordering information and options

| 856 Conductivity Module |                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.856.0010              | 856 Conductivity Module (without accessories)                                                                                                                                                                                                                                                                                                   |
| 2.856.0110              | 856 Conductivity Module with 900 Touch Control including: <ul style="list-style-type: none"><li>856 Conductivity Module with stand and electrode holder</li><li>2.900.0010 900 Touch Control</li><li>6.0915.100 Conductivity cell with Pt 1000 (c = 0.7 cm<sup>-1</sup>)</li><li>6.2324.010 Conductivity standard 100 µS/cm</li></ul>           |
| 2.856.0120              | As 2.856.0110 package, but with 6.0916.040 conductivity measuring cell (c = 0.1 cm <sup>-1</sup> )                                                                                                                                                                                                                                              |
| 867 pH Module           |                                                                                                                                                                                                                                                                                                                                                 |
| 2.867.0010              | 867 pH Module (without accessories)                                                                                                                                                                                                                                                                                                             |
| 2.867.0110              | 867 pH Module with Touch Control including: <ul style="list-style-type: none"><li>867 pH Module with stand and electrode holder</li><li>2.900.0010 900 Touch Control</li><li>2.854.0010 iConnect</li><li>6.0278.300 iUnitrode with Pt1000</li><li>6.2307.230 Buffer solutions pH 4, 7, 9 (3 x 10 x 30 mL)</li><li>6.2325.000 pHit Kit</li></ul> |
| 2.854.0010              | 854 iConnect for intelligent «iTrodes» electrodes                                                                                                                                                                                                                                                                                               |
| Control                 |                                                                                                                                                                                                                                                                                                                                                 |
| 6.06003.010             | OMNIS Stand-Alone license with 1 instrument license                                                                                                                                                                                                                                                                                             |
| 6.06003.110             | OMNIS Client/Server license with 1 instrument license                                                                                                                                                                                                                                                                                           |
| 6.06004.010             | Software License Compliance/Regulation Stand-Alone                                                                                                                                                                                                                                                                                              |
| 6.06004.011             | Software License Compliance/Regulation Client/Server                                                                                                                                                                                                                                                                                            |
| 2.900.0010              | 900 Touch Control                                                                                                                                                                                                                                                                                                                               |
| pH Electrodes           |                                                                                                                                                                                                                                                                                                                                                 |
| 6.0278.300              | iUnitrode with Pt1000                                                                                                                                                                                                                                                                                                                           |
| 6.0280.300              | iEcotrode Plus                                                                                                                                                                                                                                                                                                                                  |
| 6.0277.300              | iAquatrode Plus with Pt1000                                                                                                                                                                                                                                                                                                                     |
| 6.0258.600              | Unitrode with Pt1000 (electrode head U)                                                                                                                                                                                                                                                                                                         |
| 6.0257.600              | Aquatrode Plus with Pt1000 (electrode head U)                                                                                                                                                                                                                                                                                                   |
| 6.0228.000              | Solitrode with Pt1000 (fixed cable 1.2 m)                                                                                                                                                                                                                                                                                                       |
| 6.00226.600             | Spearhead electrode with Pt1000 (electrode head U)                                                                                                                                                                                                                                                                                              |
| 6.00221.600             | Ecotrode Gel with Pt1000 (electrode head U)                                                                                                                                                                                                                                                                                                     |
| Cables                  |                                                                                                                                                                                                                                                                                                                                                 |
| 6.2104.600              | Electrode cable for plug in head U/plug F, 2x2 mm B, 1 m                                                                                                                                                                                                                                                                                        |
| 6.2104.610              | Electrode cable for plug in head U/plug F, 2x2 mm B, 2 m                                                                                                                                                                                                                                                                                        |

| Conductivity measuring cells                                                                                                                                                                                                                                                                                                        |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 6.00921.040                                                                                                                                                                                                                                                                                                                         | Conductivity measuring cell c = 0.1 cm <sup>-1</sup> with Pt1000 (fixed cable, 0.65 m)        |
| 6.0916.040                                                                                                                                                                                                                                                                                                                          | Conductivity measuring cell c = 0.1 cm <sup>-1</sup> with Pt1000 (fixed cable 1.2 m)          |
| 6.00923.080                                                                                                                                                                                                                                                                                                                         | Conductivity measuring cell c = 0.5 cm <sup>-1</sup> with Pt1000 (fixed cable, 0.65 m)        |
| 6.00925.100                                                                                                                                                                                                                                                                                                                         | 5-ring conductivity measuring cell c = 0.7 cm <sup>-1</sup> with Pt1000 (fixed cable, 0.65 m) |
| 6.0915.100                                                                                                                                                                                                                                                                                                                          | 5-ring conductivity measuring cell c= 0.7 cm <sup>-1</sup> with Pt1000 (fixed cable 1.2 m)    |
| 6.0920.100                                                                                                                                                                                                                                                                                                                          | 5-ring conductivity measuring cell c= 0.7 cm <sup>-1</sup> with Pt1000 (fixed cable 2 m)      |
| 6.0915.130                                                                                                                                                                                                                                                                                                                          | 5-ring conductivity measuring cell c= 1.0 cm <sup>-1</sup> with Pt1000 (fixed cable 1.2 m)    |
| 6.0920.130                                                                                                                                                                                                                                                                                                                          | 5-ring conductivity measuring cell c= 1.0 cm <sup>-1</sup> with Pt1000 (fixed cable 2 m)      |
| 6.00929.140                                                                                                                                                                                                                                                                                                                         | Conductivity measuring cell c = 1.6 cm <sup>-1</sup> with Pt1000 (fixed cable, 0.65 m)        |
| 6.00931.100                                                                                                                                                                                                                                                                                                                         | Micro conductivity measuring cell c = 1 cm <sup>-1</sup> with Pt1000 (fixed cable, 2.0 m)     |
| 6.2103.160                                                                                                                                                                                                                                                                                                                          | Adapter 4 x B (4 mm) / plug N                                                                 |
| Automation options                                                                                                                                                                                                                                                                                                                  |                                                                                               |
| Both modules can easily be expanded into fully automated systems. Using an 814/815 Sample Processor, up to 100 samples can be processed automatically in one run. With an OMNIS Sample Robot, up to 175 samples can be processed fully automatically in a single run. Please contact your local Metrohm agency for further details. |                                                                                               |
| Optional accessories for 856 Conductivity Module and 867 pH Module                                                                                                                                                                                                                                                                  |                                                                                               |
| 2.801.0010                                                                                                                                                                                                                                                                                                                          | 801 Stirrer                                                                                   |
| 2.804.0010                                                                                                                                                                                                                                                                                                                          | 804 Ti Stand without stand rod                                                                |
| 2.802.0020                                                                                                                                                                                                                                                                                                                          | 802 Stirrer for sample changer                                                                |
| 6.2065.000                                                                                                                                                                                                                                                                                                                          | Stacking frame                                                                                |
| 2.800.0010                                                                                                                                                                                                                                                                                                                          | 800 Dosino                                                                                    |
| 6.3032.120                                                                                                                                                                                                                                                                                                                          | 807 Dosing Unit 2 mL                                                                          |
| 6.3032.150                                                                                                                                                                                                                                                                                                                          | 807 Dosing Unit 5 mL                                                                          |
| 6.3032.210                                                                                                                                                                                                                                                                                                                          | 807 Dosing Unit 10 mL                                                                         |
| 6.3032.220                                                                                                                                                                                                                                                                                                                          | 807 Dosing Unit 20 mL                                                                         |
| 6.3032.250                                                                                                                                                                                                                                                                                                                          | 807 Dosing Unit 50 mL                                                                         |
| Buffer, solutions and standards                                                                                                                                                                                                                                                                                                     |                                                                                               |
| 6.2307.230                                                                                                                                                                                                                                                                                                                          | Buffer solutions pH 4, 7 and 9                                                                |
| 6.2307.200                                                                                                                                                                                                                                                                                                                          | Buffer solution pH 4.00 (30 x 30 mL sachets)                                                  |
| 6.2307.210                                                                                                                                                                                                                                                                                                                          | Buffer solution pH 7.00 (30 x 30 mL sachets)                                                  |
| 6.2307.220                                                                                                                                                                                                                                                                                                                          | Buffer solution pH 9.00 (30 x 30 mL sachets)                                                  |
| 6.2307.100                                                                                                                                                                                                                                                                                                                          | Buffer solution pH 4 (500 mL bottle)                                                          |
| 6.2307.110                                                                                                                                                                                                                                                                                                                          | Buffer solution pH 7 (500 mL bottle)                                                          |
| 6.2307.120                                                                                                                                                                                                                                                                                                                          | Buffer solution pH 9 (500 mL bottle)                                                          |
| 6.2308.020                                                                                                                                                                                                                                                                                                                          | Electrolyte 3 mol/L KCl (250 mL)                                                              |
| 6.2323.000                                                                                                                                                                                                                                                                                                                          | Storage solution for all combined pH glass electrode                                          |
| 6.2325.100                                                                                                                                                                                                                                                                                                                          | Cleaning solution 3 x 50 mL for pH glass electrodes                                           |
| 6.2325.000                                                                                                                                                                                                                                                                                                                          | pHit kit                                                                                      |
| 6.2324.110                                                                                                                                                                                                                                                                                                                          | Conductivity standard 100 µS/cm, 5 x 30 mL                                                    |
| 6.2301.060                                                                                                                                                                                                                                                                                                                          | KCl ion standard 12.87 mS/cm (25 °C) 250 mL                                                   |
| 6.2324.010                                                                                                                                                                                                                                                                                                                          | Conductivity standard 100 µS/cm 250 mL                                                        |

