# SevenCompact<sup>™</sup> S220

## Truly Universal and Reliable



The SevenCompact<sup>™</sup> series combines precise electrochemical measurement technologies with flexibility, innovative design and ease-of-use. It can be universally employed and continues the tradition of the Seven series from METTLER TOLEDO.

The SevenCompact™ pH/lon meter S220 is the perfect choice for a wide range of applications. It is much more than a pH meter: it can also measure ORP and ion concentration in various units. Starting a measurement or calibration has never been easier, requiring only a single keypress.

#### Seven good reasons for SevenCompact™

- Fast and accurate measurements
- User-friendly operation
- Menu guidance in 10 languages
- Clear, well arranged color display
- Many peripheral options
- GLP compliant
- Service offering, including IQ/OQ



# **Productive Work from the Start**

### Intuitive and Powerful

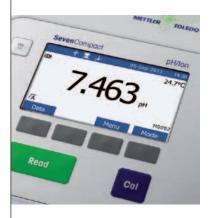
The instrument's functionality has been designed to maximize the productivity of your work. Stand alone, the instrument already offers many functionalities, but you can achieve higher efficiency and flexibility by connecting peripherals.

#### Security

The instrument's versatility is also reflected in its security package.
Users requiring little or no GLP support can easily use the instrument

without worrying about security settings. Still they benefit from the functionalities that minimize mistakes, such as calibration support and Intelligent Sensor Management (ISM®). On the other hand, those that need full GLP support will have peace of mind when employing the full spectrum of security functionalities.

### All Parameters or the Essentials – Decide by a Single Keypress



The instrument gives you the choice! In the normal screen layout, all available information is visible. By switching to the uFocus<sup>™</sup> view you will not be distracted by information of less importance.

## Perfect Ergonomics and High Productivity with $\mathbf{uPlace}^{\mathsf{TM}}$



uPlace<sup>™</sup>: the electrode arm can be operated with one hand; moving straight up and down. This allows for faster measurements and reduces the risk of the sample vessel tipping over and/or damage to the sensor!

### Total Flexibility with Data Processing



Upon endpointing SevenCompact<sup>™</sup> allows multiple archiving options: the data can be stored, printed or transferred to LabX direct. Any combination of these three options is possible giving you total flexibility.

### Specifications for SevenCompact $^{\mathsf{TM}}$ pH/Ion S220

|                    | Measuring range   | Resolution   | Accuracy                             |
|--------------------|---|--|--------------------------------------|
| pH                 | -2.000 20.000   | 0.001 / 0.01 / 0.1   | ± 0.002                              |
| mV                 | -2000.0 2000.0  | 0.1 / 1  | ± 0.2                                |
| Rel. mV            | -2000.0 2000.0  | 0.1 / 1  | ± 0.2                                |
| lon concentration  | 0.000 1000.0 %<br>0.000 10000.0 ppm<br>1.00E-9 9.99E+9 mg/L<br>1.00E-9 9.99E+9 mmmol/L<br>1.00E-9 9.99E+9 mol/L<br>-2.000 20.000 pX   | ± last significant digit   | ± 0.5%                               |
| Temperature MTC    | -30.0 130.0 °C  | 0.1 °C   | ± 0.1 °C                             |
| Temperature ATC    | -5.0 130.0 °C   | 0.1 °C   | ± 0.1 °C                             |
| Calibration        | Calibration points Buffer groups Buffer recognition Isopotential point Temperature capture Calibration reminder Electrode status icon | Max. 5 8 pre-defined and 1 user-defined Automatic pH 7.00 Automatic and manual User-configurable Shows quality of last calibration   |                                      |
| Measurement        | Choice of endpoint formats Choice of stability criteria Choice of pH decimal places Temperature capture Serial measurements           | Automatic, manual, timed Fast, standard, strict X.XXX, X.XX, X.X Automatic and manual Time interval user-configurable  |                                      |
| System and GLP     | Menu guidance Display color scheme Time and date PIN protection Measurement limits Instrument modes ID input ID input automation      | 10 languages Blue, red, green, grey 2 time formats, 4 date formats Login, deletion of data, system settings User-defined Routine mode / expert mode User ID, sample ID, sensor ID, sensor SN Barcode reader and keyboard (USB) |                                      |
| Data processing    | Data storage Print formats Data Export  | 1000 measurements Short, normal, GLP USB-stick, LabX direct PC software  |                                      |
| Connectors         | pH Sensor input Temperature sensor input Reference input Digital sensor input Communication interfaces Stirrer connector              | BNC (impendance > 3 x 10E+12Ω) Cinch/RCA (NTC30 kΩ or Pt1000) 2 mm Ref. mini-LTW RS232, USB-A, USA-B Mini-DIN  |                                      |
| General            | Power requirements Size/weight Display  | DC 9–12V/10W<br>204 x 174 x 74 mm, 890 g<br>TFT  |                                      |
| Ambient conditions | Display Temperature Relative humidity Installation category Pollution degree Altitude   | TFT 540 °C 580% (non-condensing) II 2 Up to 2000 m above sea level   |                                      |
| Ingress protection | Protection level  | IP54   |                                      |
| Materials          | Housing<br>Window<br>Keypad   | ABS/PC reinforced Polymethyl methacrylate Membrane keypad: Polye   | (PMMA)<br>thylene terephtalate (PET) |

### **Order Information**

### Description and order information for SevenCompact $^{\mathsf{TM}}$ pH/lon

| Order info     | Description and sensors   | Order no. |
|----------------|---|-----------|
| S220-Basic     | Includes instrument, electrode holder, protective cover, operating instructions, quick guide, | 30019028  |
| (instrument)   | declaration of conformity and test certificate  |           |
| S220-Kit (kit) | As S220-Basic, but also with InLab® Expert Pro-ISM, guide to pH measurements and              | 30019029  |
|                | 2 buffer sachets for pH 4.01, 7.00, 9.21 and 10.00.   |           |
| S220-Bio (kit) | As S220-Kit but with InLab® Routine Pro-ISM cable kit instead of InLab® Expert Pro-ISM        | 30019031  |
| S220-U (kit)   | As S220-Kit but with InLab® Versatile Pro instead of InLab® Expert Pro-ISM                    | 30019032  |

### General accessories for SevenCompact $^{\mathsf{TM}}$

| Description  | Order no. |
|--|-----------|
| uPlace™: Electrode holder (included in standard delivery)                                  | 30019823  |
| Protective cover (included in standard delivery)   | 30019824  |
| Mains adapter 12V (included in standard delivery)  | 11120270  |
| RS-P25 printer (with RS232 cable)  | 11124300  |
| Barcode reader body  | 21901297  |
| USB cable for barcode reader (not included with barcode reader body)                       | 21901309  |
| LabX direct PC software  | 51302876  |
| USB A-B cable 1.8m for LabX direct PC software (not included with LabX direct PC software) | 51191926  |
| Guide to pH measurement (included in kit versions)   | 51300058  |

### Sensors and cables for SevenCompact $^{\text{\tiny TM}}$ pH/lon S220

| Sensors with fixed cable  |          |
|---|----------|
| InLab® Expert Pro-ISM, rugged 3-in-1 pH sensor, PEEK shaft, ATC                                     | 30014096 |
| InLab® Versatile Pro, 3-in-1 pH Sensor, Polysulfone shaft, ATC, Refillable                          | 51343031 |
| ISM® sensors with MultiPin™ head  | ·        |
| InLab® Routine Pro ISM, 3-in-1 pH sensor, glass shaft, ATC, refillable                              | 51344055 |
| InLab® Micro Pro ISM, 3-in-1 pH sensor, glass shaft, 5 mm shaft diameter, ATC, refillable           | 51344163 |
| InLab® Power Pro ISM, 3-in-1 pH sensor, glass shaft, ATC, pressurized SteadyForce™ reference system | 51344112 |
| InLab® Pure Pro ISM, 3-in-1 pH sensor, glass shaft, immovable glass sleeve, ATC, refillable         | 51344172 |
| InLab® Science Pro ISM, 3-in-1 pH sensor, glass shaft, movable glass sleeve, ATC, refillable        | 51344072 |
| InLab® Solids Pro ISM, 3-in-1 pH sensor, glass shaft, open junction, sharp membrane, ATC            | 51344155 |
| ISM® cable 2 m, BNC/RCA-MultiPin™   | 51344291 |
| ISM® cable 5 m, BNC/RCA-MultiPin™   | 51344292 |

| pH Buffers   | Order no. |
|--|-----------|
| pH 4.01 buffer solution in side-sealed sachets, 30 x 20 mL | 51302069  |
| pH 7.00 buffer solution in side-sealed sachets, 30 x 20 mL | 51302047  |
| pH 9.21 buffer solution in side-sealed sachets, 30 x 20 mL | 51302070  |
| pH 10.01 buffer solution in side-sealed sachets, 30 x 20mL | 51302079  |
| Rainbow I (3 x 10 sachets of 20 mL, 4.01/7.00/9.21)        | 51302068  |
| Rainbow II (3 x 10 sachets of 20 mL, 4.01/7.00/10.01)      | 51302080  |
| pH 2.00 buffer solution, colorless, 250 mL                 | 51350002  |
| pH 4.01 buffer solution, red, 250 mL                       | 51350004  |
| pH 7.00 buffer solution, green, 250 mL                     | 51350006  |
| pH 9.21 buffer solution, blue, 250 mL                      | 51350008  |
| pH 10.01 buffer solution, colorless, 250 mL                | 51350010  |
| pH 11.00 buffer solution, colorless, 250 mL                | 51350012  |



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For more information