

# VioLab

## PC 50

pH - mV - ORP - Cond - TDS - Temperature

## PC 60

pH - mV - ORP - Cond - TDS - Salinity - Temperature  
GLP - Data Logger - RS 232 Printer



### MADE IN ITALY

The first electrochemical instrumentation line completely conceived, designed and produced in Italy is here.

# PC 50 *VioLab*

pH - mV - ORP - Cond - TDS - Temperature

Professional bench meters with **innovative backlit high definition colored LCD display**, with possibility of brightness adjustment.

Management of **DHS digital sensors**.

Possibility to **select the parameters** to show on the display.

The **step by step guide in setup and calibration** allows a simple and immediate use of the device.

**Automatic pH calibration** with USA and NIST buffers, up to 3 points and 2 points defined by the user.

**Automatic ORP** calibration on 1 point.

**Automatic conductivity calibration** up to 5 points (84; 147; 1413  $\mu$ S e 12,88; 111,8 mS) and 1 point custom.

Automatic resolution, reference temperature from 15 to 30 °C, and selectable cell constant (C= 0,1; 1; 10).

**Indication of the calibrated points**, with icons.

Measurement **stability indication** and possibility to select 3 stability levels.

All operations are constantly monitored and shown to the operator by the **colored LED** above the display and **self-diagnosis messages**.

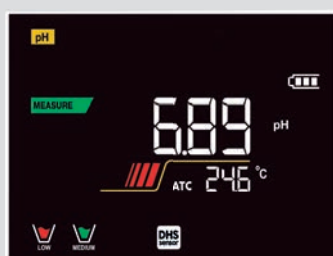
## DHS *D*igital *H*igh *S*ensor

Instruments compatible with DHS digital sensors, for **maximum performance and safety**



Connections PC 50 VioLab

The **LED indicator** allows you to keep always under control the state of the measurement



### NEW DISPLAY

The new high-resolution display shows all the useful information, including the buffer used for calibration and the stability icon. Through guided procedures it makes the user experience intuitive and safe, as well as extremely performing.

## How to order:

| PC 50 VIOLAB                                                                                                                              | code     |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Complete with <b>digital pH electrode XS 201 T DHS</b> and <b>conductivity cell 2301T (C=1)</b> , both with integrated temperature sensor | 50103892 |
| Complete with <b>pH electrode XS 201 T</b> and <b>conductivity cell 2301T (C=1)</b> , both with integrated temperature sensor             | 50103902 |
| With <b>conductivity cell 2301T (C=1)</b> , accessories, cable S7-BNC and temperature sensor NT 55<br>Without pH electrode                | 50103912 |

Inside the box:

Electrode holder stand, pH and conductivity buffer solutions, power supply and instructions for use.

# PC 60 *VioLab*

pH - mV - ORP - Cond - TDS - Salinity - Temperature - GLP - Data Logger

... only on PC 60 VioLab

-  **GLP function:** Date and time, recall of calibration data and function "Calibration due".
-  **Data logger up to 1000 savings,** manual and automatic, PC connect via micro-USB.
-  **Data-Link + software** available from [www.xsinstruments.com](http://www.xsinstruments.com).
-  **RS 232 external printer connection**



Connections PC 60 VioLab



Only **6 buttons** to easily manage all the functions of the instrument.

| #  | Date       | Time     | Value | M.U. | Temp | M.U. | MTC/ATC | DHS | Information                                                     |
|----|------------|----------|-------|------|------|------|---------|-----|-----------------------------------------------------------------|
| 1  | 16/01/2020 | 14:53:40 | 7.00  | pH   | 25.0 | °C   | MTC     |     | Last Cal. pH = 00100100 Offset = 0.007 Acid 100.0% Basic 100.0% |
| 2  | 16/01/2020 | 14:53:40 | 7.00  | pH   | 25.0 | °C   | MTC     |     | Buttress: (1) 00100                                             |
| 3  | 16/01/2020 | 14:53:42 | 7.00  | pH   | 25.0 | °C   | MTC     |     | Last Cal. ORP = 00100100 - 25.0 °C Offset = 0.007               |
| 4  | 16/01/2020 | 14:53:43 | 7.00  | pH   | 25.0 | °C   | MTC     |     | Buttress: (0)                                                   |
| 5  | 16/01/2020 | 14:53:44 | 9.54  | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 6  | 16/01/2020 | 14:53:45 | 10.51 | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 7  | 16/01/2020 | 14:53:46 | 10.51 | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 8  | 16/01/2020 | 14:53:47 | 10.51 | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 9  | 16/01/2020 | 14:53:48 | 10.51 | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 10 | 16/01/2020 | 14:53:50 | 6.40  | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 11 | 16/01/2020 | 14:53:51 | 6.40  | pH   | 25.0 | °C   | MTC     |     |                                                                 |
| 12 | 16/01/2020 | 14:53:51 | 6.40  | pH   | 25.0 | °C   | MTC     |     |                                                                 |

## DATA LINK +

The software allows remote control of the instrument in measure mode, shows all information relating to the instrument and calibrations, data export at the end of the analysis, (also in Excel and PDF format), and the display of measurements in the table and in graphic.

## How to order:

### PC 60 VIOLAB

### code

Complete with **digital pH electrode XS 201 T DHS** and **conductivity cell 2301T (C=1)**, both with integrated temperature sensor

50103942

Complete with **pH electrode XS 201 T** and **conductivity cell 2301T (C=1)**, both with integrated temperature sensor

50103952

With **conductivity cell 2301T (C=1)**, accessories, cable S7-BNC and temperature sensor NT 55 Without pH electrode

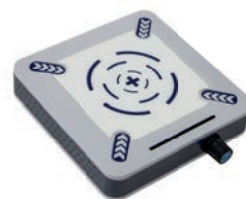
50103972

### Inside the box:

Electrode holder stand, pH and conductivity buffer solutions, USB cable, power supply and instructions for use.

## Data sheet

|                                    | PC 50 VioLab                                                           | PC 60 VioLab         |
|------------------------------------|------------------------------------------------------------------------|----------------------|
| <b>pH</b> Measuring range          | 0 ... 14,00                                                            | -2...16,00           |
| Resolution / Accuracy              | 0,1, 0,01 / $\pm 0,02$                                                 |                      |
| Calibration points                 | 1...3 Auto + 2 custom                                                  |                      |
| Buffer recognized                  | USA, NIST, 2 custom                                                    |                      |
| DHS sensors recognition            | Yes                                                                    |                      |
| <b>mV</b> Measuring range          | -1000 ... +1000                                                        | -1000 ... +1900      |
| Resolution                         | 1                                                                      | 0,1 / 1              |
| <b>ORP</b> Calibration point       | 1 point = 475 mV                                                       |                      |
| <b>COND</b> Measuring range        | 0,00 ... 200 mS                                                        |                      |
| Resolution                         | 0,01 - 0,1 - 1 $\mu$ S / mS (automatic)                                |                      |
| Accuracy                           | $\pm 2\%$ f.s.                                                         |                      |
| Calibration points                 | 1...5                                                                  |                      |
| Buffer recognized                  | 84 $\mu$ S - 147 $\mu$ S - 1413 $\mu$ S - 12,88 mS - 111,8 mS + 1 User |                      |
| Reference temperature              | 15 ... 30 °C                                                           |                      |
| Temperature coefficient            | 0,00 ... 10,00 % / °C                                                  |                      |
| <b>TDS</b> Measuring range         | 0,1 mg/l ... 200 g/l                                                   |                      |
| TDS Factor                         | 0.40 ... 1.00                                                          |                      |
| <b>Salinity</b> Measuring range    | -                                                                      | 0,1 ppm ... 100 ppt  |
| <b>Temperature</b> Measuring range | 0,0...100,0 °C                                                         | -10,0...110,0 °C     |
| Resolution / Accuracy              | 0,1 / $\pm 0,5$ °C                                                     |                      |
| Temperature compensation           | 0,0...80,0 °C                                                          | 0,0...100,0 °C       |
| <b>System:</b> GLP                 | -                                                                      | Yes                  |
| Calibration due                    | -                                                                      | Yes                  |
| Calibration point indication       | Yes                                                                    |                      |
| Calibration report                 | Yes                                                                    | Yes, printable       |
| Stability filter                   | Low - Nor - High                                                       |                      |
| Internal memory                    | -                                                                      | 1000 Data            |
| Display                            | high definition backlight colored LCD                                  |                      |
| Brightness adjustment              | Manual                                                                 |                      |
| IP protection                      | IP 54                                                                  |                      |
| Output                             | -                                                                      | Micro USB and RS 232 |
| Power supply                       | 5 V power adapter                                                      |                      |
| Electrical tension                 | 100 ... 240 V                                                          |                      |
| Working conditions                 | 0 ... +45 °C                                                           |                      |
| Dimensions / Weight                | 160 x 140 x 45 mm / 380 g                                              |                      |



ST 10 magnetic stirrer

cod: 50000132



RS 232 printer

cod: 50001502



201 T DHS

Digital pH electrode with DHS technology.  
Temperature sensor integrated.  
Plastic body for general use.  
Maintenance free.  
pH: 0...14 - T: 0...60 °C  
cod: 32200103



2301 T

Conductivity cell,  
Temperature sensor integrated  
Cable 1 m  
Measuring range: 10 $\mu$ S...200 mS  
cod: 50004002



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