

# pH 300 SERIES



*Today's regulatory environment is the compelling reason to demand more from laboratory instrumentation. To remain in compliance, instrumentation must follow protocols for traceability and documentation. The pH 300 series of multi-functional instruments meet requirements of Good Laboratory Practices for calibration protocols and data record keeping.*

## Ordering Information

**pH 300, pH 301** and **pH 302** are supplied complete with HI 1131B pH electrode with BNC connector and 1 m cable, HI 7669/2W temperature probe, pH 4, 7 and 10 cal. solutions (20 mL each) & 12VDC adapter

In addition, **pH 302** comes with 5 spare paper rolls

## pH 302

The **pH 302** fulfills the needs of general purpose and analytical laboratories for a single instrument to measure pH milliVolts (mV), Oxidation Reduction Potential (ORP), and specific ions. The oversized display is easy to read and presents step-by-step guidance for calibration. Instructions are also provided on the display to correct calibration errors and guarantees optimal performance. Advanced memory feature also recalls calibration data to comply with Good Laboratory Practices (GLP) protocols.

To support your requirements to customize activities and record samplings, the meter features an on-board dot matrix plain paper printer and unique programmable functions:

- Sampling cycle - set the sample number, time, and date
- Custom calibration - calibrate the meter using nonstandard buffer values
- GLP compliance - prints calibration data with date, time, pH offset, and slope
- Time study 1 - log and print pH, mV, and temperature values at selected intervals
- Time study 2 - log and print pH, mV, and temperature to a pre-set parameter
- Alarms - set upper and lower pH or mV limits
- International - choose different languages for printed data
- ISE - print the ion concentration for pH values
- Connectivity - sets up communication with your computer system

## Accessories

|                  |       |                                       |
|------------------|-------|---------------------------------------|
| <b>HI 76405</b>  | ..... | Electrode holder                      |
| <b>HI 7004L</b>  | ..... | pH 4.01 buffer solution, 500 mL       |
| <b>HI 7007L</b>  | ..... | pH 7.01 buffer solution, 500 mL       |
| <b>HI 7010L</b>  | ..... | pH 10.01 buffer solution, 500 mL      |
| <b>HI 77400P</b> | ..... | Cal. kit (pH 4 & 7, 20 mL, 5 pcs ea.) |
| <b>HI 70300L</b> | ..... | Storage solution, 460 mL              |
| <b>HI 92000</b>  | ..... | Windows® compatible software          |
| <b>HI 920010</b> | ..... | 9-pin cable for PC                    |
| <b>HI 8427</b>   | ..... | pH and ORP electrode simulator        |
| <b>HI 931001</b> | ..... | pH and ORP electrode simulator        |



### pH 301

When requirements include specific ion concentration measurements, the **pH 301** is an exceptional value. It optimizes precision and accuracy by employing 1, 2, or 3-point calibration. In the Ion Specific Electrode (ISE) mode, you can switch between the readings in millivolts or direct concentration. Collected data is logged at selected intervals and can be easily transferred to your computer.



### pH 300

If requirements are for pH, mV and temperature, the **pH 300** will provide superior performance and value. The oversized LCD provides easy-to-read sample information and instructions for calibration with safeguards to prevent premature calibration.

## Specifications

|                         | pH 302                               | pH 301                               | pH 300                               |
|-------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <b>pH Range</b>         | 0.00 to 14.00                        | -1.999 to 19.999                     | 0.00 to 14.00                        |
| <b>pH Accuracy</b>      | ±0.01                                | ±0.002                               | ±0.01                                |
| <b>pH Resolution</b>    | 0.01                                 | 0.01; 0.001                          | 0.01                                 |
| <b>mV Range</b>         | ±399.9 (ISE); ±1999 (ORP)            | ±1999.9                              | ±399.9 (ISE); ±1999 (ORP)            |
| <b>mV Accuracy</b>      | ±0.2 (ISE); ±1 (ORP)                 | ±0.1 (±799.9); ±0.2 (outside)        | ±0.2 (ISE); ±1 (ORP)                 |
| <b>mV Resolution</b>    | 0.1 (ISE); 1 (ORP)                   | 0.1                                  | 0.1 (ISE); 1 (ORP)                   |
| <b>°C Range</b>         | -9.9 to +120.0                       | -9.9 to +120.0                       | -9.9 to +120.0                       |
| <b>°C Accuracy</b>      | ±0.5                                 | ±0.5                                 | ±0.5                                 |
| <b>°C Resolution</b>    | 0.1                                  | 0.1                                  | 0.1                                  |
| <b>ppm Range</b>        | -                                    | 0.001 to 19999                       | -                                    |
| <b>ppm Accuracy</b>     | -                                    | ±0.5% F.S.                           | -                                    |
| <b>ppm Resolution</b>   | -                                    | 0.001; 0.01; 0.1; 1                  | -                                    |
| <b>Auto cal Buffers</b> | 4.01/7.01/10.01                      | 1.68/4.01/6.86/7.01/9.18/10.01       | 4.01/7.01/10.01                      |
| <b>pH calibration</b>   | Automatic 1 or 2 points              | Automatic 1, 2 or 3 points           | Automatic 1 or 2 points              |
| <b>Last cal recall</b>  | •                                    | •                                    | •                                    |
| <b>Auto T.C.</b>        | with HI 7669/2W probe                | with HI 7669/2W probe                | with HI 7669/2W probe                |
| <b>Manual T.C.</b>      | from -9.9 to +120.0°C                | from -9.9 to +120.0°C                | from -9.9 to +120.0°C                |
| <b>pH electrode</b>     | HI 1131B (included)                  | HI 1131B (included)                  | HI 1131B (included)                  |
| <b>°C probe</b>         | HI 7669/2W (included)                | HI 7669/2W (included)                | HI 7669/2W (included)                |
| <b>Printer</b>          | •                                    | -                                    | -                                    |
| <b>Input impedance</b>  | 10 <sup>12</sup> ohm                 | 10 <sup>12</sup> ohm                 | 10 <sup>12</sup> ohm                 |
| <b>RS232 output</b>     | •                                    | •                                    | •                                    |
| <b>Power</b>            | 12VDC adapter (included)             | 12VDC adapter (included)             | 12VDC adapter (included)             |
| <b>Environment</b>      | 0 to 50 (32 to 122°F)<br>max. 95% RH | 0 to 50 (32 to 122°F)<br>max. 95% RH | 0 to 50 (32 to 122°F)<br>max. 95% RH |
| <b>Dimensions</b>       | 280 x 200 x 75 mm (11 x 7.9 x 3")    | 280 x 200 x 75 mm (11 x 7.9 x 3")    | 280 x 200 x 75 mm (11 x 7.9 x 3")    |
| <b>Weight</b>           | 1.3 Kg (2.9 lb)                      | 1.3 Kg (2.9 lb)                      | 1.3 Kg (2.9 lb)                      |