

# LP 2000

## Sophisticated bench turbidity meters made for simplicity of use

**LP 2000** is the lab operators dream instrument! It measures turbidity from 0 to 50 FTU\* with 0.01 sensitivity and then reads all the way from 50 to 1000 FTU with a 1 FTU resolution. **Calibration is automatic**, quick and simple. Two calibration standards with fixed values of 0 and 10 FTU are automatically recognized by the microprocessor. The new **LP 2000-11** can also be calibrated at 500 FTU.

The standards are AMCO-AEPA-1 instead of formazine since they are more stable, nontoxic and can be re-used for up to a year without contamination. **LP 2000** uses the **infrared beam** and the **90° sensor** method to measure turbidity since it is less sensitive to color as opposed to the filter system. A large LCD display shows read-outs in clear digits. The last calibration data can be retrieved at the touch of a button.

The meter is very **easy to use**. All operations can be carried out with a few keys and troubleshooting functions can be performed with user-friendly error codes on the LCD display. In addition, the meter's versatility and durability ensure low maintenance.

**LP 2000** provides **unsurpassed accuracy** with  $\pm 0.5$  FTU through an extensive range.

**LP 2000** is the only bench turbidity meter equipped with an infrared LED as source of light. The infrared LED has a long life, unlike standard lamps, and more importantly, it maintains **constant emission** for the entire life of the instrument. The wavelength peaks at 890 nm, which ensures maximum intensity of diffused light even in samples with low turbidity values, and also reduces the interference from colors.

Sensitive to the user's need to work with properly calibrated meters, Hanna has equipped **LP 2000** with a unique **GLP** feature. This feature automatically **stores** and **retrieves** the **last calibration** date. At the touch of a button, the last calibration data is displayed allowing the user to ensure accurate calibration with every test. The new and upgraded **LP 2000-11** can **memorize** up to **500 measurements**. This means tests can be performed one after another and the results memorized for retrieval at a later time. It also incorporates a real time clock. **LP 2000-11** can be hooked up to a **PC's serial port**. Download the results with the aid of the Windows® compatible **HI 92000** software to get the most from your instrument.

### SPECIFICATIONS

	LP 2000
RANGE	0.00 to 50.00 FTU / 50 to 1000 FTU*
RESOLUTION	0.01 / 1 FTU
ACCURACY	$\pm 0.5$ FTU or $\pm 5\%$ of reading (whichever greater)
TYPICAL EMC DEVIATION	$\pm 0.2$ FTU
LIGHT SOURCE/LIFE	High Emission Infrared LED / Life of the instrument
LIGHT DETECTOR	Silicon Photocell
COMPUTER INTERFACE	RS232, with optional <b>HI 92000</b> software (LP 2000-11 only)
POWER SUPPLY	12VDC adapter ( <b>included</b> )
ENVIRONMENT	0 to 50°C (32 to 122°F); RH 95%
DIMENSIONS	230 x 170 x 70 mm (9.1 x 6.7 x 2.7")
WEIGHT	600 g (1.3 lb)

### HOW TO ORDER

- LP 2000** bench turbidity meter is supplied with measurement cuvet and cap, 12VDC adapter, **HI 93703-0** and **HI 93703-10** calibration solutions and instruction manual
- LP 2000-11** bench turbidity meter is supplied with RS 232, measurement cuvet and cap, 12VDC adapter, **HI 93703-0**, **HI 93703-10** and **HI 93703-05** calibration solutions and instruction manual

### ACCESSORIES

- |  |   |
|--|---|
| <b>HI 710005</b> 110VAC to 12VDC adapter               | <b>HI 93703-10</b> AMCO-EPA-1 cal. sol. @ 10 FTU (30 mL)  |
| <b>HI 710006</b> 220VAC to 12VDC adapter               | <b>HI 93703-05</b> AMCO-EPA-1 cal. sol. @ 500 FTU (30 mL) |
| <b>HI 731321</b> Measurement cuvetts (4 pcs)           | for LP 2000-11 only                                       |
| <b>HI 93703-0</b> AMCO-EPA-1 cal. sol. @ 0 FTU (30 mL) | <b>HI 93703-50</b> Cleaning solution for cuvetts (230 mL) |
|  | <b>HI 731318</b> Tissue for wiping cuvetts (4 pcs)        |

\* 1 FTU (Formazine Turbidity Unit) = 1 NTU (Nephelometric Turbidity Unit)

For a comprehensive list of accessories see section R.

