SPECTROPHOTOMETER MODEL AL800

Compact spectrophotometer for water and wastewater testing - 330 - 900 nm

APPLICATION FIELDS

- Waste Water
- Drinking Water
- Industrial Process Water
- Scientific & Research
- Governmental and Private Laboratories



ADVANTAGES / FEATURES

Multifunctional sample chamber

Round cuvettes measuring 16 mm and 24 mm in diameter and rectangular cells with pathlengths from 10 to 50 mm may be used without an adapter. Only the 10 mm cell will be fixed by a little holder that must inserted into the sample chamber.

Wide range of parameters + 35 user-specific methods

Wide range of pre-programmed methods using tube tests, tablet reagents, liquid reagents and powder reagents.

In addition to the pre-programmed methods, the user can also program 35 own methods (10 user concentration methods and 25 user polynomials).

Power supply

The required input voltage is 12 V. The AL800 is connected to an external power pack as standard. Battery operation is also possible by using an external energy station (optional equipment).

Interface RS232 Data transfer

The RS232 interface on the back allows direct connection and data transfer to a PC or printer with serial interface. Up to 1000 records can with date, time, running test and code number as well as the measuring range and the method number.

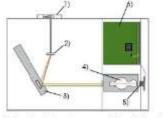
Large illuminated display - Touch-sensitive keypad

The AL800 is equipped with a touch-sensitive film keypad with logical layout. Easy access to menus and functions.

Multiple languages: English, French, Italian, German, Spanish and Portuguese.

N.I.S.T. (National Institute of Standards and Technology) Traceability

The device can be calibrated by the user with a secondary standard filter set which can be traced back to N.I.S.T. are. The user can set the device in "user adjustment mode" for each method with standards traceable to N.I.S.T. Adjust.



1) Tungsten halogen lamp

Monochromator
 Movable mirror

Sample chamber
 Siscon photodiode
 Microprocessor unit

The AL800 is a single-beam spectral photometer.

The light source is a tungsten halogen lamp with flash function. The lamp is switched on only momentarily during the measurement process, so there is no need for a warm-up period. The AL800 is ready to perform a self-test as soon as it is switched on. The light passes through an entry slot to the monochromator, where it is split into spectral ranges. The monochromator is a holographically produced, transparent grating. The movable mirror ensures that light of the desired wavelength is focused automatically so that it passes through the exit slot, into the sample chamber and therefore through the water sample. The light that is not absorbed by the sample travels to the silicon photodiode detector. This signal is then evaluated by a microprocessor and shown as a result in the display.



TECHNICAL SPECIFICATIONS

330 to 900 nm Wavelength range:

-0.3 to 2.5 Abs Photometric range:

Spectral bandwidth: 10 nm

Wavelength accuracy: ±2 nm

Wavelength

COD

reproducibility:

±1 nm

Light source: Pre-adjusted tungsten halogen lamp

Monochromator: Holographic grating

Detector: Silicon photodiode

Multifunctional sample Round cuvettes 24 and 16 mm Ø,

chamber: Rectangular cells 10-50 mm

List of the pre-programmed parameters:

Lead Alkalinity-M Manganese Alkalinity-P

Molybdate / Molybdenum Aluminium

Ammonia Nickel **Nitrate** Arsenic Boron **Nitrite Bromine** Ozone pH-value Cadmium

Calcium Hardness **Phenols**

Phosphate, ortho and total Chloride

Phosphonate Chlorine Chlorine Dioxide Potassium Silica Chromium

Spectral Absorption-Coefficient Color Hazen (Pt-Co-Units; APHA) Sulphate

Sulphide Copper Cyanide Sulphite

Surfactants (anionic, cationic, non ionic) Cyanuric acid Suspended Solids **DEHA** Fluoride TOC Formaldehyde **Total Hardness** Hydrazine Total Nitrogen

Hydrogen Peroxide

Iodine Iron (Fe2+, Fe3+), soluble

Turbidity / suspended solids (attenuated radiation method)

Urea Zinc

Display Backlit:

Language options:

Storage capacity:

Serial interface:

Weight approx.

Power supply:

Approval:

LCD graphic display

1000 test data sets

Dimensions (L x W x H): 10.6 x 10.8 x 5.9 in (270 x 275 x 150 mm)

7 lbs (3.2 kg)

Output: 12 V 30 W

Portuguese

RS232

CE

English, French, Italian, German, Spanish,

Input: 100 - 240 V ~ unit 1.0 A 50 - 60 Hz