

**Mahita** Model 917  
MULTI-PARAMETER ANALYZER

multiparameter  
analyzer  
NAHITA

## portable multiparameter analyzer

Portable multiparameter analyzer model 917 allows performing, easily and with only one equipment, the measurement of the most commonly analyzed parameters in aqueous solutions; thus being very useful in several fields as environmental control, waste treatment, industrial production, laboratory assays, etc.

An optimal calibration and its high resolution allows a quick and accurate control of the typical variations of water parameters, without the necessity of changing the probe and the confidence that provides an excellent resistance a protection against water and dust.

The equipment is supplied complete and ready to work, including pH probe (combined electrode), conductivity cell (platinum electrode), dissolved oxygen electrode (polarographic type) and temperature probe.

The different specifications of the 4 basic measurement units of the equipment (ion concentration, conductivity, dissolved oxygen and temperature) are detailed below.



## portable multiparameter analyzer, measurement units:



### 1| Ion measurement unit

- 1| Measurement of the following parameters : potential, pH (or pX) and ion concentration. Once reading is obtained, user can select between different concentration units.
- 2| Measurement of several selective ions ( $H^+$ ,  $Ag^+$ ,  $Na^+$ ,  $K^+$ ,  $NH_4^+$ ,  $Cl^-$ ,  $F^-$ ,  $NO_3^-$ ,  $BF_4^-$ ,  $CN^-$ ,  $Cu_2^+$ ,  $Pb_2^+$ ,  $Ca_2^+$ , etc...) by using the corresponding ion selective electrode and reference electrode. Possibility of setting other different ion modes apart from those provided with the equipment.
- 3| Calibration of the meter by automatic recognition of up to 10 different standard solutions.
- 4| Calibration in 1, 2 or up to 5 different points.
- 5| With different concentration measurement modes: [Direct Reading](#), [STD Addition](#), [Sample Addition](#) y [GRAN Method](#).
- 6| By using precise measurement electrode the equipment assures this high precision. The potential resolution can reach up to 0.01 mV.

portable multiparameter analyzer



## 2| Conductivity measurement unit

- 1| Measurement of conductivity, resistivity, total dissolved solids (TDS) and salinity.
- 2| Provided with automatic temperature compensation (ATC), automatic calibration, automatic measurement range and automatic frequency switching in the whole measurement range of conductivity parameters.
- 3| Function of cell constant and TDS factor calibration.

portable multiparameter analyzer,  
measurement units:



### 3| Dissolved oxygen (DO) measurement unit

- 1| Measurement of saturation, dissolved oxygen (DO) and electrode current.
- 2| Function of automatic temperature compensation (ATC)
- 3| Calibration in zero oxygen, full scale, atmospheric pressure and salinity.

## portable multiparameter analyzer

### portable multiparameter analyzer: equipment parts



#### 4.1

Easy-to-read large LCD display with manual illumination.



4 LCD display with optional illumination.

USB connection 4.2

#### 5.1

Conductivity cell (platinum electrode),

#### 5.2

pH probe (combined electrode)



5 Connection

Dissolved oxygen electrode (polarographic type)

Temperature probe. 5.3

## **multiparameter analyzer,**

### **General technical features of the meter:**

- [1] Easy-to-read large LCD display with manual illumination.
- [2] Simultaneous measurement of ion concentration, conductivity, dissolved oxygen and temperature or configuration by user of the simultaneous measurement parameters.
- [3] Support GLP:
  - Meter requests user code and records the procedure for each user.
  - Meter can record and print calibration data.
  - Memory of up to 200 data for each one of parameters of pH, conductivity, TDS, salinity and DO concentration; as well as 100 data of pX and concentration for up to 6 different ions.
- [4] Data can be displayed, printed or deleted; with USB output and software included.
- [5] Parameters or the current measurement mode as well as previous calibration data can be displayed and printed.
- [6] The meter is provided with 3 different measurement modes that adapts to user necessities: Continuous Mode (continuous measurement), Timed Reading (measurement in a certain time interval) and Balance Mode (measurement up to reaching a pre-configured balance conditions).
- [7] With electrical current cut off protection that saves stored data, calibration data and parameter selection.
- [8] Low consumption design with minimum energy dissipation, automatic shut-off, manual control of display illumination and intelligent management of measurement unit that allows to prolong battery life.
- [9] Back-lit display to be used in dark rooms or environments.
- [10] IP65 protection grade: waterproof, dustproof and suitable to be used in field analysis.

## **multiparameter analyzer: probe connection**

**[1]** Connections:

- [1.1] Conductivity cell (platinum electrode)
- [1.2] pH probe (combined electrode)
- [1.3] Dissolved oxygen electrode (polarographic type) and temperature probe

**[2]** Plug the probe in the corresponding connection.

**[3]** Put the plastic cover over metallic connector.

**[4]** For a right fixing, screw the end of the plastic cover.

**[1]** Connection for different probes



**[2]** Plug the probe in the corresponding connection



**[3]** Put the plastic cover over metallic connector



**[4]** For a right fixing, screw the end of the plastic cover





multiparameter  
analyzer:Technical  
features

Code	50917000
Model	917
Potential	
Range ( Resolution)	-1999.99/+1999.99 mV (0.1/0.01 mV)
Accuracy	±0.03 % (Full Scale)
pH/pX(ión)	
Range ( Resolution)	-2.000 - 19.999 pH/pX (0.01/0.001 pH)
Accuracy	±0.002 pX ± 1 bit
Conductivity	
Range	0.000 µS/cm - 199.9 mS/cm
Accuracy	±0.5 % (FS) ± 1 bit
Resistivity	
Range	5.00 Ω•cm - 20 MΩ•cm
TDS	
Range	0.000 mg/l - 19.99 g/L
Accuracy	±0.5 % (FS) ± 1 bit
Salinity	
Range	0.0 - 8.00 %
Accuracy	±0.1 % ± 1 bit
DO concentration	
Range ( Resolution)	0.00 - 19.99 mg/L (0.01 mg/L)
Accuracy	±0.10 mg/L
DO saturation	
Range ( Resolution)	0.0 - 199.9 % (0.1 %)
Accuracy	±1.0 %
Temperature	
Range ( Resolution)	-5.0 / +135.0 °C (0.1 °C)
Accuracy	±0.3 °C ± 1 bit
Concentration	
Range	Depending on potential and electrode
Accuracy	±0.5% ± 1 bit
Dimensions (LxWxH)	210×86×50 mm
Weight (approx.).	0.5 kg
Power	9 V DC, 800mA, int.(+)/ext.(-) (4 AA batteries included)
Environmental conditions	5.0 - 35.0 °C, ≤ 85% HR

**AUXILAB S.L.**

  
Material de laboratorio  
Laboratory supplies

Polígono Morea Norte  
Calle D Nº 6 Beriain [Navarra]  
C.P. 31191  
Tel: +34 948 310 513  
[www.auxilab.es](http://www.auxilab.es)