



FIRST ANALYSER FOR BACTERIAL CULTURE AND THE SUSCEPTIBILITY TESTING FROM HUMAN BIOLOGICAL FLUIDS AND URINE

**HB&L**  
UROQUATTRO

The extreme flexibility of HB&L is the answer to the most varied needs of modern microbiology laboratory



**HB&L UROQUATTRO** is the first analyzer able to perform bacterial culture, RAA test and susceptibility testing starting from samples such as **urine, sterile or non sterile** fluids and other **biological samples**.



Using the patented technology based on **light scattering** it is able to detect the presence of replicating microorganism and their drug resistance in a few hours with **high sensitivity and specificity**.

HB&L monitors the growth phases of bacteria from the inoculum step into specific culture broths providing **real time growth curves and quantitative bacterial count results in CFU/ml**.

All the samples are incubated on board at **37°C** and **only replicating microorganism are detected** while interference from non replicating substances such as erythrocytes, leucocytes, dead cells and salts present in the sample are eliminated during the initial zero reading.

Broth turbidity level is detected by **McFarland Monitor** and, as the sample reaches the **0.5 McFarland**, a visual and audible alert advises that the bacterial culture is ready to be tested for a customized antibiotic panel without awaiting the end of the analysis and avoiding further dilution steps.

The **HB&L UROQUATTRO** supports a **bi-directional interface** for sample data communication and result transmission.

The **software flexibility of the HB&L UROQUATTRO** allows **different tests to be performed simultaneously**; each reading unit position is independent from the others and can be set according to sample type, incubation time, test profile, analytical protocol and cut-off.

**Two HB&L UROQUATTRO models** are available, one version with 120 sample positions and a 60 position "light" version for reduced workload.



HB&L UROQUATTRO Code SI 190.300  
HB&L UROQUATTRO Light Code SI 190.300L



CUSTOMIZABLE PROTOCOLS WITH DIFFERENT INCUBATION TIMES AND CUT-OFFS

INCUBATION TIME (min)	FAST PROTOCOL (URINE ONLY) THRESHOLD (CFU/ml)	STANDARD PROTOCOL (URINE or HBL) THRESHOLD (CFU/ml)
70	1.000.000	20.000.000
80	500.000	12.000.000
110	100.000	2.000.000
120	<b>DEFAULT 50.000</b>	1.000.000
140	15.000	300.000
145	10.000	200.000
160	-	100.000
180	-	<b>DEFAULT for URINE 30.000</b>
190	-	15.000
235	-	1000
275	-	100
290	-	50
290-360	-	<b>DEFAULT for HBL &lt;50</b>

TESTS AND APPLICATIONS

- Urine culture **3 hours**, cutoff 30.000 CFU/ml
- Residual Antimicrobial Activity (RAA) test **Simultaneously** to the culture test
- Human Biological Liquid Bacterial Culture\* **6 hours**, cutoff <50 CFU/ml
- Bacteria Culture on special sample\* **6 hours**, cutoff <50 CFU/ml
- MDRO culture screening **6,5 hours**
- Aerobics, Anaerobics and Yeast/Fungi detection for microbiological suitability tests\* **48 hours**
- Susceptibility testing with customised antibiotic panel for: **3 or 5 hours**
  - Urine
  - Human Biological Liquids
  - Positive Blood Culture
  - Isolated Colonies



## FEATURES

- Light Scattering Technology
- Quantitative results expressed in CFU/ml
- Susceptibility testing with customised antibiotic panel
- Real time detection of microorganism growth curves
- Integrated turbidimeter with McFarland Monitor
- Single sample management with customised analysis profile: incubation time, analytical protocol, cut-off
- Continuous loading
- Automatic result reading and reporting
- External Barcode-reader
- LIS bidirectional interface
- 37°C incubation
- Dedicated area for lyophilized bacteria reconstitution (RAA Kit)
- User-friendly software
- Customized reports
- Database for epidemiological studies
- Connection to ALFRED 60/AST for increased capacity



Rack for manual sample inoculation Code SI190815

## KITS FOR THE RAPID SCREENING OF MULTI DRUG RESISTANT ORGANISMS

Alifax developed a new line of products for the rapid screening of the MDROs as *methicillin-resistant Staphylococcus aureus* (**HB&L MRSA KIT for dry swab SI 1001.900**, **HB&L MRSA KIT for liquid swab SI 1001.900-L**), *Extended-Spectrum  $\beta$ -Lactamase* (ESBL)/AmpC-producing Enterobacteriaceae (**HB&L ESBL/AmpC SCREENING KIT SI 1001.930**) and *Carbapenem-resistant Enterobacteriaceae* (**HB&L CARBAPENEMASE KIT SI 1001.950**).

Through the Light scattering technology it is possible to detect MDRO presence in only 6 hours 30 min thus actively supporting surveillance programs.



HB&L MRSA KIT for dry swab Code SI 1001.900  
HB&L MRSA KIT for liquid swab Code SI 1001.900-L  
HB&L ESBL/AmpC SCREENING KIT Code SI 1001.930  
HB&L CARBAPENEMASE KIT Code SI 1001.950

## AEROBICS, ANAEROBICS AND FUNGI DETECTION FOR MICROBIOLOGICAL SUITABILITY TESTS

Along with the **HB&L CULTURE KIT (SI 405.901)** Alifax proposes the new culture **HB&L SABOURAUD KIT (SI 405.910)** and **HB&L ANAEROBE KIT (SI 405.905)** for yeast/fungi and anaerobe bacteria detection, a full range of CE marked kits conceived **to assess the microbiological suitability of substances, preparations or formulations produced using aseptic procedures** as transport and storage media for cornea.

Thanks to the light scattering technology and the growth curve analysis, is possible to **considerably reduce the time required to report a negative result** thus assess a microbiologically free sample with high sensitivity and specificity.



HB&L CULTURE KIT Code SI 405.901  
HB&L SABOURAUD KIT Code SI 405.910  
HB&L ANAEROBE KIT Code SI 405.905

## TECHNOLOGY INTEGRATION

The bacterial suspension obtained at the end of each analysis is sufficiently enriched to perform further confirmatory biochemical, phenotypic tests and **microorganism identification through molecular biology or proteomic based technologies (Maldi-Tof)** using the bacterial pellet as starting sample. The complete integration of Alifax technology with those already present in the lab supports physicians providing **clinically useful results** in short time with high reliability.



### Technical Features

Supply voltage: 115-230 Vac $\pm$ 10% with switching power supply unit

Power consumption: SI 190.300 model 750 VA Max, 525 W, SI 193.300L model 485 VA Max, 320 W

Frequency: 50 or 60  $\pm$  2 Hz

Room operating temperature: +10 $\pm$ 30 °C

Size: 530x600x610

Weight: HB&L UROQUATTRO 65 Kg, 55 Kg HB&L UROQUATTRO Light

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