



Believe in Innovation

HB&L
UROQUATTRO

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

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

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



Using the patented technology based on **light scattering** is able to detect the presence of bacteria and their drug resistance in 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 at **37°C** and **only live bacteria 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.

With the new function **Mc Farland Monitor**, HB&L reports the 0.5 Mc Farland turbidity level reached during the culture test. Thus the sample is ready to be tested for a customized antibiotics panel without awaiting the end of the analysis and avoiding further dilution steps.

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

The **software flexibility of the HB&L 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 models are available, one version with 120 sample positions and a 60 position "light" version for reduced workload.

New application for the **direct susceptibility testing from positive blood culture samples** was recently introduced.



CE MARKED



Windows™ operating System

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

TESTS AND APPLICATIONS

- Urine culture
- RAA test
- Human Biological Liquid Bacteria Culture
- Bacteria Culture on special sample
- Mc Farland Monitor
- Susceptibility testing

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	DEFAULT 50.000	1.000.000
140	15.000	300.000
145	10.000	200.000
160	-	100.000
180	-	DEFAULT for URINE 30.000
190	-	15.000
235	-	1000
275	-	100
290	-	50
290-360	-	DEFAULT for HBL <50

Windows is a Microsoft trademark

FEATURES

- **Light Scattering Technology**
- **Quantitative results expressed** in CFU/ml
- **Susceptibility testing with customized antibiotic panel**
- **Real time** detection of bacteria growing curves
- **Integrated turbidimeter with Mc Farland Monitor**
- **Single sample management** with customized analysis profile settings: sample type, incubation time, analytical protocol, cut-off, use of boric acid
- **Continuous loading**
- Automatic results reading and reporting
- Integrated thermal printer
- **External Barcode-reader**
- **LIS bidirectional interface**
- **37°C** incubation
- Dedicated area for lyophilized bacteria reconstitution
- User-friendly software
- Customized reports
- Database for epidemiological studies
- Connection to **Alfred 60** available for increased throughput and productivity.



Perforated Rack for manual sample inoculation Code SI190815

NEW APPLICATIONS

New applications of the HB&L™ CULTURE KIT are under validation as Central Venous Catheter tips and organs and tissues transplantation culture.

TRANSPLANSTERIL Code SI 0602.900 New Vial For Solid Samples

A new device has been designed to allow the direct incubation of transplantation tissues, organ specimens and clumpy respiratory fluids in the HB&L vial broth for the aerobic bacteria culture.



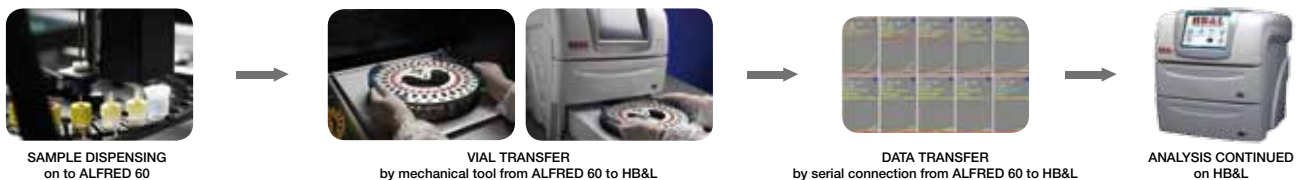
ALFRED 60 - HB&L CONNECTION

After samples are inoculated into the vial by the Alfred 60, they can be transferred to the HB&L with the growth curves data to continue the analysis cycle.

By integrating the 2 systems it is possible to analyze up to 180 samples in 5 hours.



Dispensing procedure	Dispensing time
60 Urine cultures	50 minutes
30 Urine cultures + 30 RAA tests	40 minutes
180 Urine cultures	150 minutes
90 Urine cultures + 90 RAA tests	120 minutes



HB&L - Technical Features
 Power supply: 230VAC ± 10% or 115 VAC ± 10 %
 Power consumption: 500 VA max

Frequency: 50 or 60 ± 2 Hz
 Room operating temperature: +10÷30 °C

Size: 540x650x640
 Weight: 65 Kg