DL-Bt64

Automated Blood Culture Detection System

Technical Specifications

Testing Principles
Colorimetry & CO_2 sensor

Sample Type
Blood and various sterile body fluid

Capacity
64 bottles

Detection Method
1. Adopt continuous swinging vibration mode to increase bacterial growth, which enhances the detection rate of microorganisms, even fastidious ones.
2. Each vial cell has its own independent detector, which continuously monitors the real-time status of bottles.
3. The instrument detects the bottle every 10 minutes to optimize detection time and increase its precision.

Bottle Loading
Loading and unloading at any time

Monitor
Internal LCD 8^{inch} touch screen

Working environment
Environmental temperature: 5℃-40℃
Relative humidity: 10%-90%

Atmospheric pressure
76kPa-106kPa;

Power supply
AC220V±22V, 50Hz±1 Hz

Dimension & Weight
575*560*950mm; 80kg

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Automated Blood Culture Detection System

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Blood Culture Bottle Features

1. Excellent performance for the detection of a wide variety of microorganisms including bacteria and fungi.
2. Rapid recovery of pathogens from blood, even for fastidious bacteria.
3. Made of Multilayer polymeric fibers, light weigh and unbreakable, avoid biohazard.
4. Delayed-vial-entry capabilities up to 48 hours at room temperature.

Bacteria name & type	Colony-Forming Units(CFU)	Result report time(h)
S. pyogenes, S. pneumoniae	≤100	10～17
A. haemolyticus, A. baumannii	≤100	11～24
E. coli, P. aeruginosa	≤100	7～24
Haemophilus, gonococcus	≤100	15～40
Fungus	≤100	15～48

Culture bottle type:

1. FAN adult anaerobic/aerobic blood culture bottle
2. Child blood culture bottle

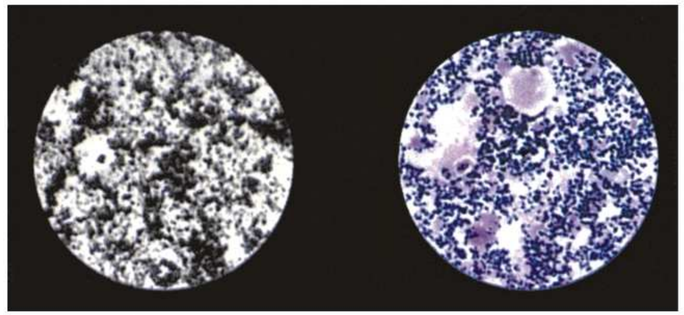
Advantages of Resin Media:

1. Proven, effective neutralization of a wide variety of antimicrobial improves recovery and shortens time for detection.
2. Resin microsphere guarantees antibiotics absorbing, prevents antibiotics interference. It also lyses WBC and release bacteria inside to improve detection rate.
3. Colorless resin design completely avoids interference of gram stain against activated carbon.

The blue on the left is negative;
The orange on the right is positive.

Polymeric fiber shell
Unbreakable and protect operator

GMP factory
Class 10,000 clean room



Carbon Resin

Automated Blood Culture Detection System Features

Testing Principle

Growth of microbe produces CO_2 , CO_2 reacts with H_2O and produces H^+. Then H^+ turns the color of bottle from blue into orange. The detector can measure it, together with mathematical analysis give final report.

Sample type

Blood and various sterile body fluid

Culture mode

① Adopt continuous swinging vibration culture mode to increase measuring speed and detection rate of fastidious bacteria.

② Every vial cell has its own independent detector. By continuous real-time monitoring, system measures the vial status every 10 minutes to increase testing speed and precision.

Function

① Able to accept samples in random position and at any time in each rack.

② Automated measurement, calibration and data storage.

③ Real time identification and warning by audio, visual and software alarm.

Biological safety

① Multilayer-polymeric-fibers culture bottle is light weight and unbreakable, prevent biological pollution;

② Vacuum blood sampling directly connect to bottle, thereby improving safety and cause less contamination.

Easy to use

① Microsoft Windows system

② Internal PC in blood culture system with color LCD touch screen

③ External bar-code scanner, mouse and keyboard

Instrument capacity

① 64-bottle system is capable of up to 180 specimens per month.