

## Standard One Module System

Windows™ 7, 64 bit PC with pre-loaded RABIT 3 software, Ethernet switch and a 32 channel incubator module. All necessary training will be provided by a DWS microbiologist. Each CPU will control between 1 - 16 incubator modules.

R03050

Includes 96 x Impedance Cells, 2 x cell racks, 2 x tube baskets, 1000 x borosilicate tubes and 100 x pressure seal caps complete with silicone inserts for indirect method usage.

## RABIT 3

Includes RABIT 3 computer, keyboard and mouse, colour monitor, Ethernet switch, one incubator module, 500g Whitley Impedance Broth and a comprehensive range of accessories including sufficient cleaning aids for the first year of use.

R03000

Includes 96 x Impedance Cells, 2 x cell racks, 2 x tube baskets, 1000 x borosilicate tubes and 100 x pressure seal caps complete with silicone inserts for indirect method usage.

Dimensions

400 x 600 x 400 mm (W x D x H) (incubator module)

Weight

35.2kg (incubator module)

Temperature

25°C to 45°C \* (operating range)

Power supply

230V~ ± 10% - 50/60Hz \*\*

Test Cell Volume

2-10ml

## Accessories

R01140

RABIT Test Cells

R01073

Rack for 36 RABIT Test Cells

## Consumables

R00995

RABIT Impedance Cells (pack of 8)

G50001

Whitley Impedance Broth (500g)

G50003

Whitley Enterobacteriaceae Broth (500g)

G50004

Whitley Gram Negative Broth (500g)

G50006

Whitley Anaerobe Broth (500g)

G50007

Whitley MacConkey Broth (500g)

G50010

Wort Broth (500g)

G50011

Maximum Recovery Diluent (500g)

G50013

Buffered Peptone Water (500g)

R00405

Borosilicate Inner Tubes (Pack of 1000)

R00407

Rubber Bungs (Pack of 10)

R00995

RABIT Impedance Cells (Pack of 8)

R00283

Cell Cleaning Brush (Pack of 10)

R00335

Electrode Complete with 'O' Rings (Pack of 8)

R00338

Spare Electrode 'O' Rings (Pack of 100)

R00336

Pressure Seal Cap with Silicone Insert (Pack of 8)

R00337

Silicone Insert for Cell Cap (Pack of 8)

A01429

Scotchbrite Hand Pad for Cleaning Electrode Pins

\* Use of the equipment outside the normal operating temperature range is possible. Consult DWS Technical Department.

\*\* Other voltages available on request.

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## Rapid Microbiological Methods Rapid Automated Bacterial Impedance Technique



The automatic, robust way to gain fast results in the microbiology laboratory.

Direct and indirect impedance measurements and modular design provide a totally flexible screening system with Windows™ based software.

RABIT measures impedance - the most versatile and least expensive of all rapid bacterial detection methods. It combines ease of use with leading edge electronic technology. Two specific techniques offer the user considerable scope.

In the direct technique, metabolising micro-organisms increase the electrical conductance of the culture medium in the system. RABIT measures these changes and provides results faster than by the use of traditional methods.

The indirect technique provides a flexible impedance method which monitors the amount of carbon dioxide produced by growing organisms. This technique is particularly suitable for detecting organisms which do not produce highly charged metabolites, for example yeasts and moulds.

RABIT/1032-09 / April 2019

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## The benefits of RABIT



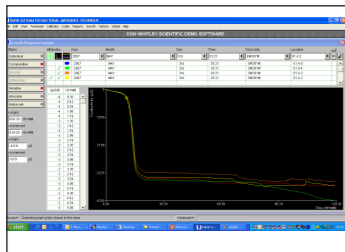
1. Sample preparation



2. One step sample inoculation



3. Place in RABIT



4. Results

RABIT 3 is a compact and versatile system for rapid microbial testing. The modular design enables a laboratory to enter the field of rapid testing with an initial system which comprises a PC, Ethernet switch and a single 32 channel incubator module.

The system can be expanded to provide a total of 512 channels by adding more incubator modules\*. No further expenditure on computer hardware or software is necessary.

The system is designed to allow tests to be carried out over a range of incubation temperatures to provide maximum flexibility for microbiological testing.

The Windows™-based software provides an easy to operate environment for sample entry and analysis of results. The impressive data handling capabilities are further enhanced by a facility to export generated data for use in various spreadsheet/database software programmes.

RABIT combines high technical specifications with low consumable costs – preserving the major financial advantage of rapid microbial detection. The test cells are durable, re-usable and easy to clean and maintain.

Laboratories in the food, pharmaceutical, petrochemical, public health and dairy industries, in addition to many universities, are using RABIT with excellent results. All Don Whitley Scientific customers have access to our team of engineering, electronics, software and microbiology staff. Any special needs are considered by microbiologists working in our own GLP-compliant laboratories.

Should any development work be necessary to match a RABIT system to your requirements this can be carried out quickly to ensure that you benefit from our considerable experience of impedance microbiology.

\* Please note that RABIT 3 incubator modules are not compatible with older RABIT systems.

## RABIT features

### Methods used in RABIT - Direct



#### Direct Impedance Technique

- Electrodes in direct contact with the growth medium and sample
- Metabolising micro-organisms increases the electrical conductance of the culture medium in the system

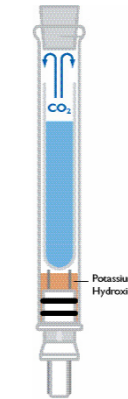
#### Direct Impedance Technique

### Methods used in RABIT - Direct



#### Indirect Impedance Technique

- The sample is contained in a glass tube, separated from the electrodes
- This method detects carbon dioxide produced by growing bacteria & fungi. This is converted to a conductivity reading
- The indirect method is suitable for detecting organisms such as yeast and moulds, which do not produce highly charged metabolites



#### Indirect Impedance Technique

### Who are our potential customers?



- Quality assurance on
  - Raw materials (high counts)
  - Finished products (low counts)
  - Water testing
- Challenge testing / preserve efficacy (Bioburden)
- Product performance
- Antibacterial studies
- Screening of groups:
  - TVC (Total viable counts)
  - Coliforms
  - Enterobacteriaceae
  - Salmonella sp
  - Anaerobes
  - Gram negatives
  - Spore formers
  - Yeast and moulds

#### Applications

- Flexible modular design
- Fast detection times
- Increased test throughput
- Simple to use
- Re-usable test cell
- Low cost per test
- Direct and indirect techniques
- Variable sample volume
- Access to culture during tests
- Optional extras include racks to house incubator modules and bar code readers to speed up sample entry.