



R A P I D A U T O M A T E D B A C T E R I A L I M P E D A N C E T E C H N I Q U E

The way forward for automation in the microbiology laboratory. Direct and indirect impedance measurements and modular design, provide a totally flexible screening system with Windows™ - based software adding usability and value.

RABIT - rapid automation in your laboratory providing assurance of quality and improving efficiency

Don Whitley Scientific Ltd has taken the measurement of impedance - widely accepted as the most versatile yet least expensive of all rapid bacterial detection methods - and produced an instrument which combines genuine ease of use with leading edge electronic technology. Two specific techniques offer the user considerable scope.

In the direct technique metabolizing micro-organisms increase the electrical conductance of the culture medium in the system.

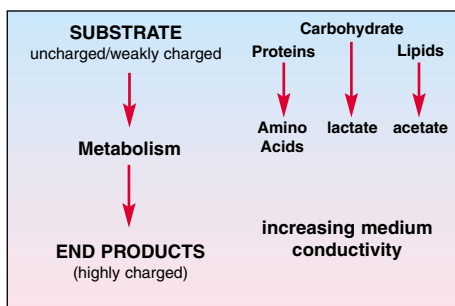
RABIT for WINDOWS™ measures these changes and provides results faster than by the use of traditional methods.

The indirect technique provides a flexible impedance method which monitors the amount of carbon dioxide produced by growing organisms. This technique - first exemplified by Owens at the University of Reading - is particularly suitable for detecting organisms which do not produce highly charged metabolites.

RABIT for WINDOWS™ 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 fitted with a special data logging facility 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.

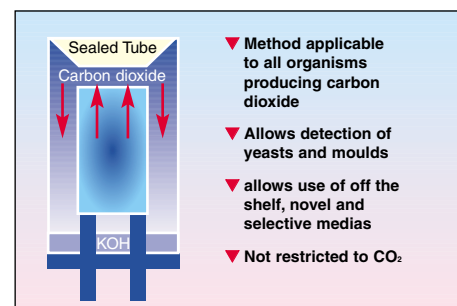
Direct Impedance Technique



Applications

- ▼ Quality Assurance
 - ▼ raw materials
 - ▼ finished product
 - ▼ water testing
 - ▼ environmental monitoring
- ▼ Preservative Efficacy/Challenge Testing
- ▼ Product Performance
- ▼ Antibacterial Studies
- ▼ Research & Development
- ▼ Total Microbial Load
- ▼ Group Screening
 - ▼ Coliforms
 - ▼ *E.coli*
 - ▼ *Salmonella spp*
 - ▼ Anaerobes
 - ▼ Gram negatives
 - ▼ *Pseudomonas spp*
 - ▼ *Staphylococcus sp*
 - ▼ Sporeformers
 - ▼ Yeasts & Moulds

Indirect Impedance Technique





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.

Training is provided by regular courses run at our Shipley Headquarters - this training can be customized to meet your specific applications.

Optional extras include racks to house incubator modules and bar code readers to speed up sample entry.

Four simple steps



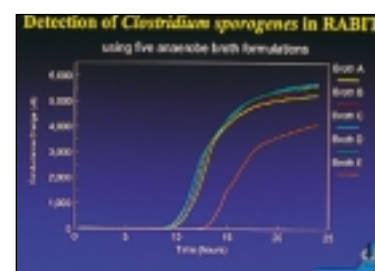
1. Sample preparation,



2. One step sample inoculation.



3. Place in RABIT.



4. Results.

- ◆ 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



Membrane Control Panel



Simple, easy to use controls.

RABIT Rack



The RABIT rack permits efficient utilisation of laboratory space

PRODUCT INFORMATION

R02000	<i>RABIT for WINDOWS™ System (No Incubator Modules)</i>
R01020	<i>32 Channel Incubator Module</i>
R00995	<i>RABIT Impedance Cells (pack of 8)</i>
R01052	<i>Rack for 4 Incubator Modules</i>
G50001	<i>Whitley Impedance Broth 500g</i>
G10014	<i>E.Coli/Coliform Broth 100g</i>
G50003	<i>Whitley Enterobacteriaceae Broth 500g</i>
G50004	<i>Whitley Gram Negative Broth 500g</i>
G50006	<i>Whitley Anaerobe Broth 500g</i>
G50007	<i>Whitley MacConkey Broth 500g</i>
G50010	<i>Wort Broth 500g</i>
G50011	<i>Maximum Recovery Diluent 500g</i>
G50013	<i>Buffered Peptone Water 500g</i>
G50015	<i>Whitley Gram Negative Broth 2 (Pseudomonas) 100g</i>

TECHNICAL DATA

Power Supply	230V~ ± 10%*
	50/60Hz
Weight of Single Module System	75.5kg**
Incubator Module Weight	35.0kg
Incubator Dimensions	400 x 600 x 400mm
Operating Temperature Range	25°C to 45°C***
Test Cell Volume	2 - 10ml

* Other voltages available on request.

** A single module system consists of a RABIT computer, Laser printer, Incubator module, Colour monitor, keyboard and mouse.

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

In the interests of a policy of continuous product and design improvement, the company reserves the right to alter specifications, materials used, or method of manufacture without prior notice.

Please contact our Technical Sales Department for information on this or any other DWS products

D O N W H I T L E Y S C I E N T I F I C L I M I T E D

14 Otley Road, Shipley, West Yorkshire, BD17 7SE England. Telephone: +44 (0)1274 595728 Fax: +44 (0)1274 531197 email: info@dwscientific.co.uk

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