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Part of  **SEAWARD**

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- Electrical Safety Analysers
- Vital Signs Simulators
- Performance Analysers
- Asset Management Software
- Med-eKit Solutions
- Service & Maintenance Plans



Innovating Together

Innovating together produces  
better biomedical test solutions.

# Your ideas are at the heart of our product development.

Thanks to experts like you, producing the world's leading biomedical equipment is much easier.

Your hands-on experience with test equipment provides you with invaluable insight. And you know exactly what you need and what would make your work easier.

Only you can give us the vital feedback and original ideas that enable us to innovate constantly and give us our edge of excellence.

For generations we've been making biomedical test and measurement instruments for medical physics staff, biomedical service engineers and medical equipment manufacturers. We've always communicated closely with our users and historically this has meant that Rigel's been a major asset synonymous with compliance to strict industry requirements.

We offer you superb, ergonomically designed, compact equipment that's compatible, traceable and user-friendly, way beyond procedures and buttons.

The biggest reason we can keep these benefits up to speed is your input.

Share your ideas with us by contacting the Rigel Medical Ideas Centre:

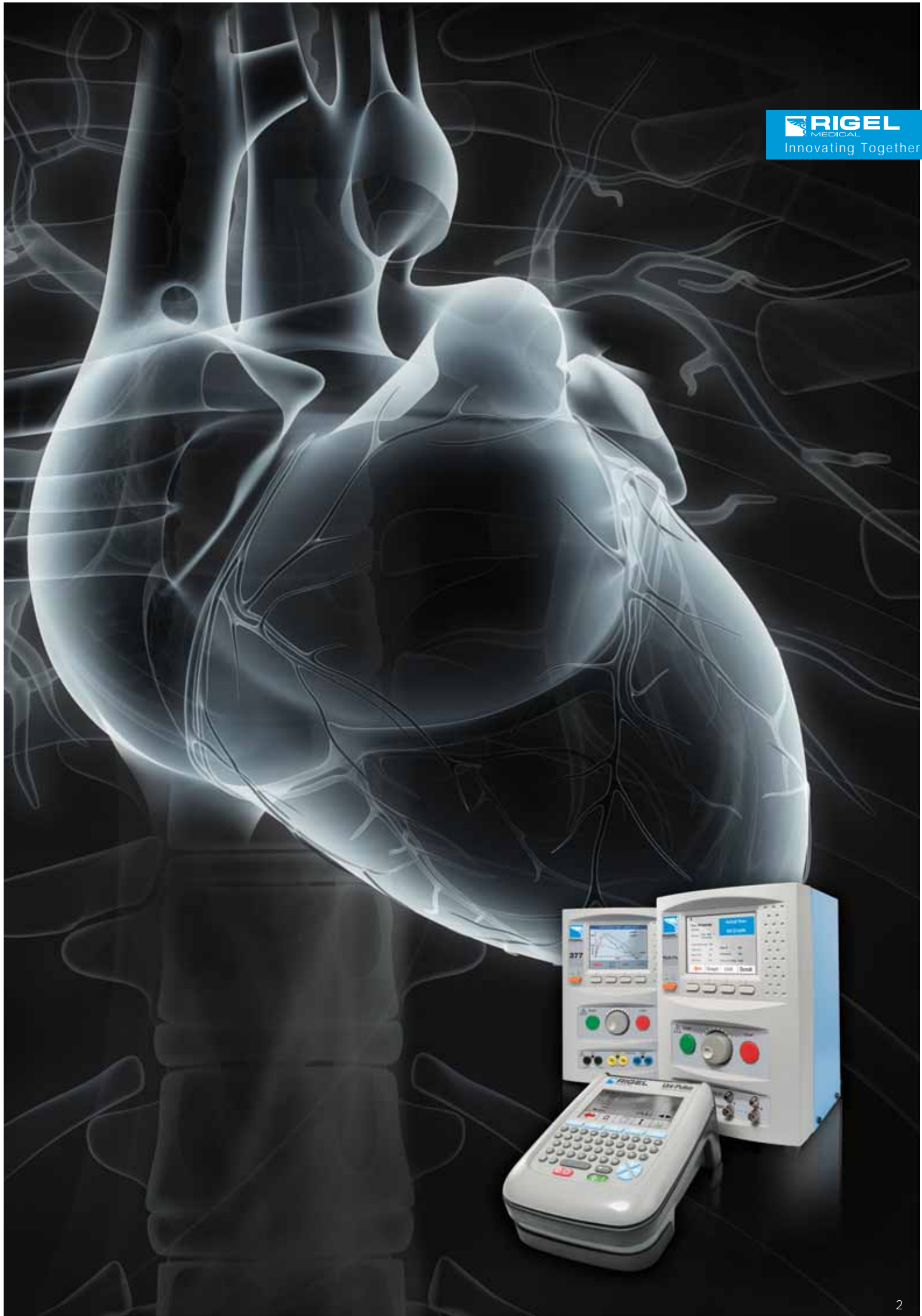
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# Electrical Safety Analysers



Rigel leads the world with decades of pioneering design and innovation. From full IEC 60601 compliant instruments with constant 25A test current to small and handy analysers that can be carried easily into the field.

Thanks to customer input, the Rigel 288 electrical safety analyser has become the first choice of many and a leading electrical safety analyser in its market sector. Rigel's pioneering design enabled a reduction in size by 80% compared to conventional testers, making the Rigel 288 the most compact and lightweight automatic electrical safety analyser on the market.

No other electrical safety analyser provides the unique combination of flexibility and usability directly into the patient environment thanks to its inbuilt automation, data storage and fast "scan and confirm" retesting of medical electronic devices.

Rigel's enhanced range gives you the choice of analysers across the widest range of applications, from type testing (IEC 60601) right through to preventative maintenance (IEC 62353).

▼ Features	266 Plus	277 Plus	288	62353
IEC 60601* leakage	■	■	■	
IEC 62353 leakage			■	■
IEC 61010 leakage		■	■	
Applied Parts	5	11	10	2
Max earthbond current	25A	25A	30A**	30A**
Point to point measurement		■	■	■
Insulation test	■	■	■	■
IEC lead test	■	■	■	■
Manual mode	■	■	■	■
Automatic mode		■	■	■
Custom test sequencing		■	■	■
Battery operation			■	■
Data storage		■	■	■
Data entry		QWERTY	ABCD	ABCD
Barcode scanning		■	■	
PC download		■	■	■
Secondary earth warning	■	■	■	■
Line voltage check	■	■	■	■
On-board printer		■		
Direct print facility	■	■	■	
Weight (kg)	<4	<9	<1.7	<1.7

\* Including all local derivatives (AAMI, NFPA, AS/NZ, VDE)  
 \*\* using high current low energy method



**288**  
**Electrical Safety Analyser**

The 288 is the first truly hand-held medical electrical safety tester to combine the features of an automatic/manual tester with a data logging/asset management facility. Control is through a menu driven GUI. A large data memory and bluetooth facility make this an effective mobile unit.

**Features include:**

- Light, hand-held, battery operation
- Conform IEC 62353 / 60601/ VDE 0751 / NFPA-99 / AS-NZS 3551
- Memory for up to 10,000 devices
- Bluetooth communication
- Full, semi automatic & manual tests



**277 Plus**  
**Electrical Safety Analyser**

The Rigel 277 Plus is a fully comprehensive electrical medical safety analyser used within the widest possible range of applications. The ability to manage results and print records means that the user can manage the test and re-test procedure more productively.

**Features include:**

- Conform IEC 60601 / 61010 / AAMI / NFPA-99 / AS-NZS 3200
- Onboard printer & QWERTY keyboard
- 100mA to 25A earthbond current
- Full, semi automatic & manual tests
- Memory for up to 2,500 devices



**266 Plus**  
**Electrical Safety Analyser**

The Rigel 266 Plus is a highly compact, easy-to-use safety analyser designed to test in accordance with IEC/EN 60601-1, MDA DB9801 and AS/NZ 3200. This compact unit provides a highly effective and portable test solution.

**Features include:**

- Small and compact
- Conform IEC 60601, MDA DB 9801
- 1-25A earthbond test current
- Up to 5 applied parts
- Direct print facility



**62353**  
**Electrical Safety Analyser**

The Rigel 62353 is a cost effective automatic safety analyser dedicated to the IEC 62353 standard for routine and testing after repair of medical devices. Offering automatic test sequences, data entry and storage as well as PC download capabilities.

**Features include:**

- Light, hand-held, battery operation
- Conform IEC 62353
- Fully customisable test sequences
- Data entry and storage
- PC download
- Full, semi automatic & manual tests



See page 17-18 for product specifications and features key





# Vital Signs Simulators



Budgets today sometimes prevent the purchase of equipment that, in the long run, would give a number of practical or competitive advantages. ECG patient simulators are a good example. Users reported that they were saddled with ECG patient simulators and unable to justify the purchase of separate NIBP and SpO2 simulators. Your feedback told us that the size and weight of these three simulators might be something of a struggle to carry and operate.

We identified the tests that you needed to carry out and combined those functions into a single device. At the same time, we utilised new simulation technologies to reduce the size of the components.

The result is the UNI-Sim, the world's first combined vital signs simulator. It's highly flexible, with ppm protocols and test sequences that can be customised. It allows users to configure their own calibration settings (O-curves) for NIBP simulations, producing highly accurate and real simulations of NIBP.

The UNI-Sim is a complete and highly versatile vital signs simulator that offers incredible value for money.

▼ Features	BP-Sim	SP-Sim	333	UNI-Sim
<b>NIBP Simulation</b>	■			■
Leak test	■			■
Over pressure test	■			■
Manometer	■			■
<b>SpO2 Simulation</b>		■		■
Artefacts		■		■
Chronometer function		■		■
<b>ECG Waveforms</b>			■	■
Arrhythmias			■	■
IBP simulation			■	■
Temperature simulation			■	■
Respiration simulation			■	■
Manual mode	■	■	■	■
Automatic mode	■	■		■
Custom test sequencing	■	■		■
Battery operation	■	■	■	■
Data storage	■	■		■
Data entry	ABCD	ABCD		ABCD
Barcode scanning	■	■		■
PC download	■	■		■
Direct print facility	■	■		■
Weight (kg)	<1.5	<1	<1	<1.5



**UNI-Sim**  
**Vital Signs Simulator**

The world's first combined, fully functional NIBP, SpO2 and Patient Simulator in a single hand-held unit. Extremely accurate and featuring full synchronised functionality. A breakthrough in the way safety testing is implemented, the UNI-Sim saves time and money, as well as simplifying the testing process.

**Features include:**

- Light, hand-held, battery operation
- Combined NIBP, SpO2 and Patient Simulator in one unit
- User configurable simulations
- Full synchronised functionality
- Memory for up to 10,000 devices

**BP-Sim**  
**NIBP Simulator**

The first hand-held NIBP simulator to incorporate custom settings, including paediatric and adult NIBP pressure simulations, pulse volume adjustments, heart rate and manufacturer-specific envelopes. Large capacity internal memory for data capture, storage and downloading of test results via Bluetooth.

**Features include:**

- Light, hand-held, battery operation
- Adult & Paediatric NIBP Simulations
- Manufacturer specific O-curves
- Overpressure and leak test
- Memory for up to 10,000 devices

**SP-Sim**  
**SpO2 Simulator**

The first hand-held SpO2 simulator featuring pulse volume adjustments, heart rate and manufacturer-specific R-curves. The large capacity internal memory enables test results to be captured, stored and downloaded via Bluetooth.

**Features include:**

- Light, hand-held, battery operation
- Tests probe and monitor both at the same time
- User configurable simulations
- Manufacturer R-curves
- Memory for up to 10,000 devices

**333**  
**Patient Simulator**

The 333 is one of the smallest, most powerful and fully comprehensive patient simulators available. Providing a true 12 lead ECG signal with 43 arrhythmias, dual invasive blood pressure, respiration, temperature and industry standard waveforms.

**Features include:**

- Light, hand-held, battery operation
- Accurate 12-lead simulation of 43 arrhythmias
- Invasive blood pressure
- Temperature & respiration
- Performance wave forms



See page 17-18 for product specifications and features key





# Performance Analysers



With the help of our customers and with portability, traceability and efficiency at the heart of our design philosophy, we have developed a dedicated world-leading range of performance analysers. These products feature built-in automation and onboard data storage as standard, meaning test equipment can be brought into the patient environment, speeding up the test process and reducing the downtime of medical

equipment. Rigel's enhanced range of performance analysers includes an electro-surgical analyser; a new defibrillator analyser and a new infusion pump analyser. All our unique designs incorporate wireless communication, colour screens and onboard data storage which will increase efficiency and make your life easier.



**Uni-Pulse**  
Defibrillator Analyser

The innovative Rigel Uni-Pulse Defibrillator Analyser is the most compact and versatile instrument on the market, able to accurately verify all mono- and bi-phasic defibrillators and AED's. Features include: onscreen waveform capture, built-in 12-lead ECG simulator, onboard memory and optional variable load box ensuring the Rigel Uni-Pulse meets all the requirements of IEC 60601-2-4.

**Features include:**

- IEC 60601-2-4 Compliant
- Mono and bi-phasic
- Waveform capture, store & replay
- Built-in 12 lead ECG simulator
- Auto AED testing



**Multi-Flo**  
Infusion Pump Analyser

The market defining Rigel Multi-Flo Infusion Pump Analyser is a portable instrument to accurately and swiftly verify the performance of all infusion devices. Offering instantaneous flow and available in 1, 2 and 4 individual channel configuration. The Multi-Flo boasts a large colour screen, providing precise information on flow rate, occlusion and back pressure and trumpet curves.

**Features include:**

- IEC 60601-2-24 compliant
- Instant flow and pressure
- Compatible with all infusion devices
- On-screen trumpet curve
- Onboard data storage



**377**  
ElectroSurgical Analyser

The Rigel 377 offers the latest technology in high frequency power measurement. It's small, easy-to-use, has a large colour display and innovative navigation making this a fast, efficient test tool for testing the performance of all diathermy machines. A large internal memory and PC communication provides traceability of the test data.

**Features include:**

- IEC 60601-2-2 compliant
- Power distribution from 10-5100Ω
- HF leakage test
- Return plate security test (Rem)
- Onboard data storage



See page 17-18 for product specifications and features key



# Asset Management Software



You saw database management and work order schedules as a major benefit, as they lead to fast, efficient test device configuration. You asked for time and money-saving software to provide monthly schedule tests you could upload to your testers for easy re-test.

You also wanted preventative maintenance which analysed and compared results and which also sent you an alarm when devices could be deteriorating or needed to be replaced.

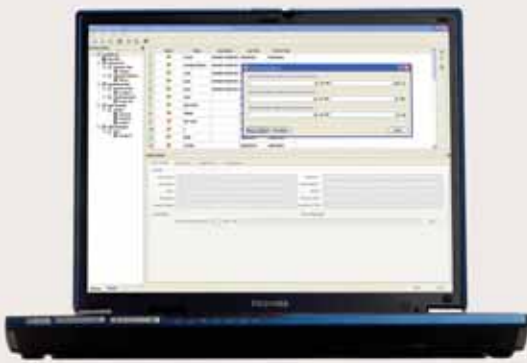
And you asked for test certificate software customisable for details and logos in PDF format.

So we created Med-eBase software which can be used in a number of database environments, including: SQL, MySQL and SQLite. This way your data's secure and easily accessible. It can also be easily interrogated by third party software which makes compatibility with other software packages easy and straightforward.



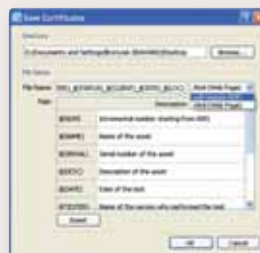
#### Database Management & Scheduling

You saw proper database management and the scheduling of work orders as being of huge importance. Med-Base was designed with this in mind. The result meant a significant increase in the efficiency and speed of our test devices. Retesting is also much easier.



#### Comparison Alerts

Med-eBase lets you analyse test data based on pre-set conditions. Comparison alerts can be set when you're downloading. This gives you a quick overview of the downloaded assets and an indication of which assets need attention because of leakage or a change in expected values.



#### Customised Test Certificates

You wanted to create and customise professional test certificates relating to the centralised data. With Med-eBase, you've got it.





# Med-eKit Solutions



Getting multiple pieces of heavy equipment to test sites was one of the struggles you complained about most. So our design department came up with various wheeled solutions. It seems obvious enough but what they've done is make them flexible, allowing customised configurations: you tell us what you want and we'll build it for you.

Just contact us by email or phone and we'll match your requirements with one of the following solutions. Alternatively, visit our online Med-eKit configurator at [www.rigelmedical.com/med-ekit](http://www.rigelmedical.com/med-ekit)

Med-eKit  
**BEST**  
INNOVATION  
Voted by Rigel customers



**Med-eKit Pro**

If you're after a complete biomedical workshop on wheels, take a look at our configurable Rigel Med-eKit Pro. Housed in a durable and handy trolley case, it accommodates up to 10 different testers and simulators, so you can carry your analyser, vital signs simulator, defib analyser, ventilator tester and more, safely and conveniently.

**Features include:**

- Integral wheels and extendable handle for easy use
- Configurable with up to 10 tester functions
- Durable and robust enclosure
- Water-proof design
- Secure locking

**Med-eKit Elite**

The Med-eKit Elite is a handy and more specialised carrying solution. It has a hard-wearing pelican case which can be customised to hold up to two individual testers (the Rigel 288 and UNI-SIM, for instance). It can also include a label and results printer, barcode scanner and PC software.

**Features include:**

- Configurable with up to 4 tester functions
- Lightweight design
- Durable and robust enclosure
- Water-proof design
- Secure locking

**Med-eKit Lite**

This new case is a standard accessory for the Rigel 288, UNI-Sim and Uni-Pulse biomedical testing instruments. It can be configured to hold a number of different items of test equipment and accessories like a label results printer and a barcode scanner.

**Features include:**

- Carry securely on back/ easy access from front
- Configurable compartments for testers and accessories
- Extremely lightweight design
- Suitable for up to 5 tester functions
- Durable and water repellent design

**Med-eKit Plus**

The Med-eKit Plus is a solution package offering a complete test set that includes electrical safety, vital signs simulator, ventilator test and more. It can also feature a laptop of your specification and our latest asset management software. You could make life a lot more efficient for yourself if you included a range of accessories like the compact barcode scanner and results/label printer.

**Features include:**

- Cost effective package deal
- Configurable including up to 5 tester functions
- Optional laptop included
- Extremely lightweight design
- Durable and water repellent design





# Service & Maintenance Plans



Rigel's Med-eCare Plan is at your service for the entire Rigel Medical range.

It covers all typical and unexpected costs associated with calibration and maintenance of your test equipment for the duration of the plan.

Cover lasts for either 3 or 5 years and includes free scheduling of annual calibration, which can be tailored to your specific requirements. We'll contact you when it's due and will pick up and deliver free to a destination of your choice.

Med-eCare Plan is flexible and offers you the choice of extending it on an annual basis. The package is in addition to the standard one year warranty.

Feel free to get in touch and tell us what you need. Our tailored solutions are there to give you peace of mind.

Our Med-eCare Plan can include:

- No hassle cover
- Fast turnaround
- Extended warranty
- Free calibration
- No repair cost
- Free pick-up & delivery
- Replacement product
- Automatic alerts





# Accessories



**601  
Calibration Checkbox**

The Rigel 601 is a calibration verification instrument designed to accurately replicate the leakage characteristics of medical equipment. It offers both AC and DC leakage currents and dedicated F-type circuitry. It provides calibrated values for earth and enclosure leakage, patient leakage and earthbond and insulation resistance references.



**Printers**

Rigel Medical offer a unique range of printers to increase traceability onsite. From dedicated barcode label and results printers to the popular Test 'n' Tag Elite printer which encompasses all. Available with durable and tamper-proof labels; you can choose from mains or battery and bluetooth operated printers. There is always a solution to meet your requirements.



**Barcode Scanners**

Speed up your testing procedures and reduce data entry errors with a dedicated range of barcode scanners. Simply "scan and test" with Rigel's range of barcode scanners. Compatible with all conventional barcode systems, the scanners are available in Bluetooth & battery operation or RS232 variants.



**SpO2 Adaptor Boxes**

To ensure the most accurate validation of both SpO2 monitor and SpO2 probe performance, Rigel offers a range of dedicated SpO2 adaptor boxes. Available for the Rigel UNI-Sim and SP-Sim products, this solution provides fast and accurate simulations utilising all optical and electronic parts of the SpO2 monitor and probe. Simply test the whole system or just the quality of individual probes.



#### Med-eKit Solutions

No matter where you go, you can always take your Rigel test equipment with you easily and securely with a range of dedicated mobile solutions from Rigel Medical's Med-eKit range. Combine single or multiple testers and analysers with the accessories you require and choose your preferred mobile solution. Whether it's a back-pack or trolley case you're after, Rigel will customise to your requirements. See pages 11-12 for further details on Med-eKit solutions.



#### Asset Management Software

Rigel's Med-eBase is a universal software package that not only allows you to download and manage test results, it also allows for easy scheduling of work-orders, configuration of test equipment, comparing of data, trend analyses and creation of customised test certificates to give you flexibility in the way you want to manage your assets. See pages 9-10 for further details on Med-eBase.



#### Temperature and Invasive Blood Pressure Interconnect Cables

Rigel Medical offers an extensive range of high quality interconnect cables compatible with YSI 400/700 temperature sensors and single and dual channel IBP sensors. Made from durable and resistant materials, our cables are suitable for use in medical environments and maintain their quality throughout. Simply contact us with your type of monitor and type of sensor requirements.



#### Service & Maintenance Plans

Why not consider one of our tailored service and calibration agreements designed to give you peace of mind, reduced turnaround times and preferential pricing? Rigel's Med-eCare is tailored around your requirements and can include: scheduled calibration, free upgrades, free pick-up and return service, loan equipment and priority service. See page 13-14 for further details on Med-eCare solutions.

For our full range of accessories visit  
[rigelmedical.com/accessories](http://rigelmedical.com/accessories)





# Specifications

The following pages provide basic specifications for our product range. For more in-depth product details and for feedback on our current range, please visit [rigelmedical.com](http://rigelmedical.com)



## Electrical Safety Analysers

### 288 Electrical Safety Analyser

Earth Continuity	Method 2 wire technique
Test Current	>+200mA -200mA DC into 2ohms
Measuring Range	0.001 – 19.9Ω
Insulation Test Voltage	250V DC & 500V DC @1mA
Range (low range)	0.01MΩ - 100MΩ
Leakage Current	4μA to 9999μA
Measuring Device	IEC 60601 / 62353
Number of Applied Parts	10
Measurement Type	Direct, Differential and Alternative
PC Connections	Bluetooth + RS232
Memory	Appr. 5,000 records
Mains Power	230V AC ±10%, 50Hz +/- 1Hz (USA model) 120V AC ±10%, 60Hz +/- 1Hz
Battery	6 x 1.5V Alkaline AA
Weight	1.6 kg including batteries
Dimensions	270mm x 110mm x 75mm
Operating Conditions	0°C - 40°C, 0-90% RH - NC
Storage Environment	-15°C to +60°C

### 277 Plus Electrical Safety Analyser

Earth Continuity	Method 4 wire technique
Test Current	0.1 A, 1A, 10A & 25A
Measuring Range	0.01 – 19.99Ω
Insulation Test Voltage	250V DC & 500V DC @1mA
Range (low range)	0.01MΩ - 100MΩ
Leakage Current	0.000mA to 9.999mA
Measuring Device	IEC 60601 & 61010
Number of Applied Parts	11
Measurement Type	Direct / Alternative method
PC Connections	RS232
Memory	Appr. 2,500 records
Mains Power	115 / 230V AC: 48Hz to 66Hz
Weight	9.5kg
Dimensions	450mm x 410mm x 155mm
Operating Conditions	0°C - 40°C, 0-90% RH - NC
Storage Environment	-10°C to +50°C

### 266 Plus Electrical Safety Analyser

Earth Continuity	Method 4 wire technique
Test Current	1A, 10A & 25A
Measuring Range	0.04 – 19.99Ω
Insulation Test Voltage	250V DC & 500V DC @1mA
Range (low range)	0.01MΩ - 100MΩ
Leakage Current	0.04mA to 9.999mA
Measuring Device	IEC 60601
Number of Applied Parts	5
Measurement Type	Direct method
PC Connections	RS232
Mains Power	230V AC ±10%, 50Hz +/- 1Hz (USA model) 120V AC ±10%, 60Hz +/- 1Hz
Weight	4kg
Dimensions	310mm x 210mm x 80mm
Operating Conditions	0°C - 40°C, 0-90% RH - NC
Storage Environment	-10°C to +50°C

### 62353 Electrical Safety Analyser

Earth Continuity	Method 2 wire technique
Test Current	>+200mA -200mA DC into 2Ω
Measuring Range	0.001 – 19.9Ω
Insulation Test Voltage	250V DC & 500V DC @1mA
Range (low range)	0.01MΩ - 100MΩ
Leakage Current	4μA to 9999μA
Measuring Device	IEC 60601 / 62353
Number of Applied Parts	2
Measurement Type	Direct, Differential and Alternative
PC Connections	RS232
Memory	Appr. 5,000 records
Mains Power	230V AC ±10%, 50Hz +/- 1Hz (USA model) 120V AC ±10%, 60Hz +/- 1Hz
Battery	6 x 1.5V Alkaline AA
Weight	1.6kg including batteries
Dimensions	270mm x 110mm x 75mm
Operating Conditions	0°C - 40°C, 0-90% RH - NC
Storage Environment	-15°C to +60°C



## Vital Signs Simulators

### UNI-Sim Vital Signs Simulator

NIBP Simulation Waveform	Oscillometric
Integrated Pump	0 to 350mmHg user configurable
Leak Test	User configurable between 0-350mmHg
Digital Manometer	0 - 410mmHg
SpO2 Simulation	Opto-electronic method
SpO2 Range	50 to 100%
ECG	Full 12 lead simulation including high level output
Waveforms	NSR, Atrial, Atrial Conduction, Ventricular and Pacer wave forms
Rate	20 – 300BPM
Performance Waveforms	Sine, Square, Triangle and Pulse
Temperature Simulation	25, 33, 37 and 41°C (YSI400/700)
Respiration	Apnoea, 5, 10, 15, 30, 60, 120, 180BPM
Invasive Blood Pressure	2 channels, 0 - 300mmHg
PC Connections	Bluetooth
Memory	Appr. 5,000 records
Dimensions	270mm x 110mm x 75mm
Weight	<1.5kg
Operating Temperature	10-30°C, 0-90% RH - NC
Storage Temperature	0°C to 50°C
Mains Power	115 / 230V AC: 48Hz to 66Hz
Operation	Battery cell, insitu charge



## Performance Analysers

### BP-Sim NIBP Simulator

NIBP Simulation Waveform	Oscillometric
Integrated Pump	0 to 350mmHg user configurable
Leak Test	User configurable between 0-350mmHg
Digital Manometer	0 - 410mmHg
Rate	20 – 300BPM
PC Connections	Bluetooth
Memory	Appr. 5,000 records
Dimensions	270mm x 110mm x 75mm
Weight	<1.5kg
Operating Temperature	10-30°C, 0-90% RH - NC
Storage Temperature	0°C to 50°C
Mains Power	115 / 230V AC; 48Hz to 66Hz
Operation	Battery cell, insitu charge

### SP-Sim SpO2 Simulator

SpO2 Simulation	Opto-electronic method
SpO2 Range	50 to 100%
Rate	20 – 300BPM
PC Connections	Bluetooth
Memory	Appr. 5,000 records
Dimensions	270mm x 110mm x 55mm
Weight	<1.0kg
Operating Temperature	10-30°C, 0-90% RH - NC
Storage Temperature	0°C to 50°C
Mains Power	115 / 230V AC; 48Hz to 66Hz
Operation	Battery cell, insitu charge

### 333 Patient Simulator

ECCG	Full 12 lead simulation including high level output
Waveforms	NSR, Atrial, Atrial Conduction, Ventricular and Pacer Wave forms
Rate	20 – 350BPM
Performance Waveforms	Sine, Square, Triangle and Pulse
Temperature Simulation	25 and 37°C (YSI400/700)
Respiration	Apnoea, 15, 30, 60, 120BPM
Invasive Blood Pressure	2 channels, 0 - 300mmHg
Dimensions	140mm x 90mm x 40mm
Weight	0.3kg
Operating Temperature	15-35°C, 0-90% RH - NC
Storage Temperature	0°C to 50°C
Operation	Battery cell, 9V

### Uni-Pulse Defibrillator Analyser

Energy Range	0-600 Joules
Internal Load	50Ω non inductive
External Loads*	25 - 200Ω
Voltage	0 - 6000V
Current	0 - 120A
Cardiac Synchronisation	-250 to +250ms
ECG	Full 12 lead simulation including high level output
Waveforms	NSR, Atrial, Atrial Conduction, Ventricular and Pacer wave forms
Rate	20 – 300BPM
Performance Waveforms	Sine, Square, Triangle and Pulse
External Connections	External paddle and load box
PC Connections	Bluetooth + USB
Memory	Appr. 5,000 records
Dimensions	225mm x 145mm x 95mm
Weight	<2kg
Operating Temperature	15°C to 40°C
Storage Temperature	0°C to 50°C
Mains Power	115 / 230V AC; 48Hz to 66Hz
Operation	Battery pack, insitu charged

### Multi-Flo Infusion Pump Analyser

Channels	1, 2 or 4
Flow Rates	0.100 - 1.000mL / hour
Update Rate	1Hz
Back Pressure	-200 to 600mmHg
Occlusion Pressure	0 - 1500mmHg
PCA Bolus	0.10 - 100mL
Basal Flow Rate	1 - 30mL
External Connections	Flow in and out
PC Connections	Bluetooth + USB
Memory	Up to 24 hours real time recording
Dimensions	330m x 204mm x 150mm
Weight	5 - 8kg (1-4 ch)
Operating Temperature	15°C to 35°C
Storage Temperature	0°C to 50°C
Mains Power	115 / 230V AC; 48Hz to 66Hz

### 377 Electrosurgical Analyser

Power Rating	0 – 500W (RMS)
Duty	Up to 100% (at 15 seconds)
Voltage (peak)	0 – 10KV (Peak) – Closed load only
Voltage (RMS)	0 - 500V
Current	0 – 2200mA
Crest Factor	1.4 – 20 (Vpeak / V RMS)
Variable Loads	10 – 5100Ω, steps @ 10Ω (510 steps)
REM Test	0 - 500Ω, steps @ 0.5Ω steps
External Connections	Footswitch controls, Oscilloscope output, USB and PS2 (keyboard)
PC Connections	Bluetooth + USB
Memory	Appr. 5,000 records
Dimensions	330mm x 204mm x 300mm
Weight	9kg
Operating Temperature	15°C to 35°C
Storage Temperature	0°C to 50°C
Mains Power	115 / 230V AC; 48Hz to 66Hz

#### Product Features Key



Bluetooth compatible



Battery powered



Mains powered



Med-eBase compatible



Barcode scanner



Med-ekit compatible