



Rigel Medical Product Brochure

Medical Test Equipment



rigelmedical.com
TESTED, TRUSTED... WORLDWIDE.



Biomedical Safety Testing and Measuring

With over 35 years of experience, Rigel Medical has become the fastest growing and market leading provider of biomedical test equipment.

Our comprehensive suite of electrical safety analysers, performance analysers and vital signs simulators enable biomedical and clinical engineers to confirm their compliance to industry standards, manufacturers' specifications and most importantly, keeping patients, visitors, and staff safe in a healthcare environment.

Alongside our commitment to quality, we also offer peace of mind to our customers who know that help and advice is always available.

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288+

Accurate and fast electrical safety tester

The 288+ is the first truly handheld medical electrical safety tester to combine the features of an automatic/manual tester with data logging/asset management capability. Operation is through a menu driven GUI. A 5,000 record memory and Bluetooth connectivity make this an effective mobile unit.

Features include:

- Light, handheld, battery operation*
- Conforms to IEC 62353 / 60601 / VDE 0751 / NFPA-99 / AS-NZS 3551
- Memory for up to 5,000 devices
- Bluetooth communication
- Full, semi-automatic and manual testing
- Straightforward data transfer with the Rigel 288+ Downloader app**



*Battery operation of 'stay alive', data transfer and earth continuity testing.

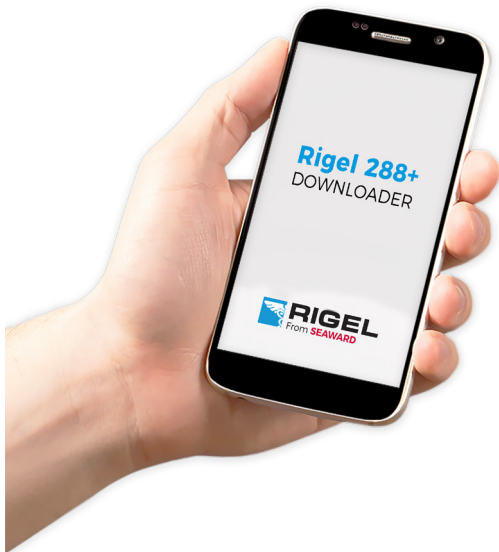
Rigel 288+ Downloader app

Transfer medical device test data straight from your pocket

The Rigel 288+ Downloader is an app built to make paperless and wireless data transfer possible for biomedical and clinical engineers performing electrical safety tests, using just a smartphone or tablet.

Features include:

- Allows you to download all your test results in one PDF document
- Free downloadable app for Android devices with no hidden add-ons
- Easy to use
- Available worldwide



**Available on Android devices only. Downloadable from the Google Play store.



62353+

Accurate and fast electrical safety tester

The 62353+ is a cost-effective automatic safety analyser dedicated to the IEC 62353 standard for electrical safety testing of medical devices. Offers automatic test sequences, data storage, and PC download capabilities.

Features include:

- Light, handheld, battery operation*
- Conforms to IEC 62353 / NFPA-99
- Fully customisable test sequences
- Easy data entry and storage
- PC download
- Full, semi-automatic and manual testing

SafeTest 60

A robust medical safety analyser

The SafeTest 60 is a robust, reliable and dedicated medical safety analyser for general electrical safety testing. Ideal for testing high volumes of medical and laboratory equipment that does not require patient lead testing, such as beds, hoists, infusion pumps, CPAP's and centrifuges etc.

Features include:

- Small and compact
- Fully compliant (tests to a range of international standards including IEC 60601, 62353, 61010 and NFPA-99)
- Extremely flexible - manual control of fault conditions
- Versatile multi voltage - operates on any mains supply between 90-264V / 48-64Hz



| | 288+ | 62353+ | SafeTest 60 |
|-----------------------------|--|--|--|
| Test Standards/Codes | IEC 60601 IEC 62353 NFPA 99 | IEC 62353 NFPA 99 | IEC 60601 IEC 62353 NFPA 99 |
| Voltage input | 230V ¹ | 230V ¹ | 90 - 230V |
| Patient leads | • (Individual or combined) | • (combined per IEC 62353 and NFPA 99) | |
| MAP ² | • | • | |
| Memory | • | • | |
| Communications | • (Wireless, Serial 232) | • (Serial 232) | |
| Android App | • | | |
| Secondary Earth Alert | • | • | • |
| SFC Conditions | Open earth, open neutral, mains reversed | Open earth, open neutral, mains reversed | Open earth, open neutral, mains reversed |
| Customisable test sequences | • | • | |

¹120V units available

²Mains on applied parts

Find out more at:
www.rigelmedical.com/safetyanalysers



Uni-Therm

High current electro-surgical analyser

The Uni-Therm offers the latest technology in high frequency power measurement. It's small, easy-to-use and has a large colour display and innovative navigation, making this a fast, efficient test tool for testing the performance of ESU generators.

Features include:

- HF leakage test
- Power distribution from 5 to 5115 Ω
- Current measurement up to 6A RMS continuous
- Return plate security test (REM/CQM)
- On-board data storage

Multi-Flo

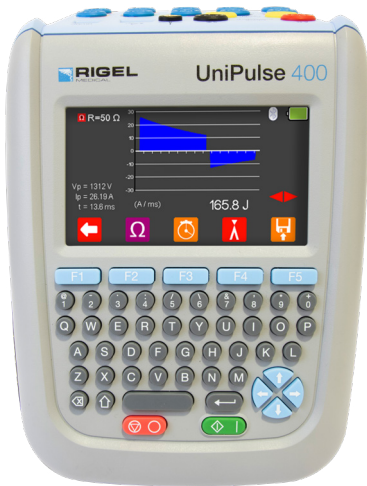
Market leading infusion pump analyser

The market defining 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 configurations.

Features include:

- IEC 60601-2-24 compliant
- Instant flow and pressure
- Compatible with all infusion devices
- On-screen flow graphs
- On-board data storage





UniPulse 400

An easy-to-use defibrillator analyser with pacer

The UniPulse 400 is designed to comprehensively test all defibrillators accurately and efficiently. The large vibrant colour screen will display both test results and waveforms in amazing detail. The dedicated fast keys and simple to use operating system enables biomedical/clinical engineers to select the relevant test function in seconds.

Features include:

- Light handheld, battery operation
- Pacer functionality
- Compatible with monophasic, biphasic and pulsed waveforms
- Reliable and non-inductive test load of 50Ω
- Patient simulator with ECG hi output

VenTest Series

High-performance gas flow analysers for ventilator measurement and calibration

The VenTest measures flow, pressure, temperature, humidity and O₂ concentrations bi-directionally. The adult, paediatric and high frequency ventilation measuring modes make the VenTest the ideal calibration tool for all ventilators, anaesthesia machines and spirometers.

Features include:

- All-in-one analyser
- Measures and calculates all common respiratory parameters
- Compatible with gas standards and gas types
- Built-in data storage with optional software for total traceability
- USB, RS-232 and external trigger interface
- Portable with battery operation



Find out more on our performance analysers at:

www.rigelmedical.com/performance



PatSim 200

A cost-effective, easy-to-use patient simulator

Designed to make every patient simulation quicker by utilising a home and recall function. Save your 5 most used simulations, and with universal ECG studs and mini DIN connectors, this is the most cost- and time-effective unit on the market.

Features include:

- An instant low-cost replacement
- Simple, fast navigation
- Lightweight, compact unit with rechargeable Li-Ion battery
- Recall most used simulations
- Fetal/maternal monitoring

UNI-Sim

The most complete vital signs simulator

The Rigel Uni-Sim verifies the performance of all vital signs on any type of vital signs monitor, ensuring monitors are provided accurate data for the correct treatment, diagnoses and monitoring of patients.

Features include:

- Small and compact
- Fast and accurate testing - multiparameter tests makes testing quicker and more controlled every time
- Monitors are checked with physiologically correct and synchronised simulations, the closest thing to a real human being





BP-Sim

Handheld NIBP simulator

The first handheld NIBP simulator to incorporate custom settings, including paediatric and adult NIBP pressure simulations, pulse volume adjustments, heart rate and manufacturer-specific envelopes.

Features include:

- Light, handheld battery operation
- Adult and paediatric NIBP simulations
- Manufacturer-specific O-curves
- Overpressure and leak test
- Memory for up to 5,000 devices
- Internal pneumatic pump

SP-Sim

Handheld SpO2 simulator

The first handheld SpO2 simulator featuring pulse volume adjustments, heart rate and manufacturer specific R-curves.

Features include:

- Light, handheld, battery operation
- Tests probe and monitor both at the same time
- User configurable simulations
- Manufacturer R-curves
- Memory for up to 5,000 devices



| | Uni-Sim | BP-Sim | SP-Sim | PatSim 200 |
|----------------------|----------|----------|----------|-------------------|
| Communications | Wireless | Wireless | Wireless | |
| ECG waveforms | • | | | • |
| Temperature | • | • | • | • |
| Respiration | • | • | • | • |
| NIBP | • | • | | |
| IBP | • | | | • |
| SpO2 | • | | • | |
| Memory | • | • | • | |
| Rechargeable battery | • | • | • | • |
| Fetal monitoring | | | | • |
| Test sequences | • | • | • | Note ¹ |

Note¹ 5 programmable presets

Find out more on our Vital Signs Simulators at:
www.rigelmedical.com/simulators

Med-eBase

Med-eBase software is designed to save you time and money. It can be used in a number of database environments. All your data will be easily accessible, and with the ability to schedule work orders, analyse test data and create certificates, your data will be secure and easy to manage.

Features include:

- Database management and scheduling
- Comparison alerts
- Customised test certificates
- Perfect for small independent service organisations.



www.rigelmedical.com/med-ebase

Accessories

There are a range of accessories to maximise your Rigel products, and to make sure you are covered for any eventuality. To see the wide range of accessories that we offer, please visit:



www.rigelmedical.com/accessories

Service, calibration and repair

Rigel Medical can also take care of your test and measurement equipment by providing calibration services (including on-site calibration), service, spares and repairs. Extend the life and quality of your instruments by contacting us for a no-obligation quote, wherever you are in the world.

www.rigelmedical.com/service-centre

To find out more visit: www.rigelmedical.com
Get in touch, we'd love to hear from you!



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