



2026 Product Catalog





**Fluke
Health
Solutions**

“Our tools make healthcare better. Our team makes that possible. At Fluke Health Solutions, we lead with heart, innovate with purpose, and deliver with the conviction that those protecting others deserve nothing less than the best.”

Zack Permutt, MD
President

Keeping Life’s Critical Devices Ready to Go at a Moment’s Notice

Fluke Biomedical and RaySafe—Fluke Health Solutions leads the biomedical and radiation detection markets with innovative products and services that help keep patients, and staff safe. These businesses provide the tools to address increasing regulatory guidelines, higher quality standards, and rapid technology growth.

Fluke Biomedical leads the world in manufacturing biomedical test equipment like defibrillator analyzers and gas flow analyzers. RaySafe is the worldwide leader in X-ray test equipment, real-time staff dosimetry, and radiation survey meters.

65+

years pioneering radiation
safety innovations

5M+

patient radiation scans
analyzed annually

1M+

people protected per
year from unsafe doses
of radiation

flukebiomedical.com
raysafe.com

Table of Contents

Fluke Biomedical

New products

4



Biomedical Test and Measurement

 Patient Simulators	6
 Electrical Safety Analyzers	11
 Gas Flow Analyzers	17
 Defibrillator Analyzers	21
 Infusion Device Analyzers	24
 Electrosurgery Analyzer	27
 Neonatal Test Equipment	28
 Digital Pressure Meter	31

Software

 OneQA Workflow Automation	32
---	----

Portable Oscilloscope

 Medical Oscilloscope	33
--	----

Radiation Safety

 Radiation Survey Meters	35
---	----

RaySafe



 X-ray Test Equipment	39
 Real-time Dosimetry	43

Service, Calibration and Ordering Information



 Protect+ Service Program.....	44
 Calibration and Services.....	45
 Ordering Information	46

New Products



ESA700 Series Electrical Safety Analyzers

Our Easiest-To-Use Electrical Safety Analyzers, Ever



The ESA700 Series prioritizes workflow accuracy and efficiency. It sports a 5" color LCD touchscreen and a user-friendly interface for intuitive device navigation. The unit provides visual on-screen instructions during procedures and illuminating LED lights to guide users where and when to make connections. Embrace the ESA700 Series Electrical Safety Analyzers for your organization today.



New Products



IDA-6 Infusion Device Analyzer

Introducing a New Era of Innovation



The IDA-6 Infusion Device Analyzer, is the future of biomedical testing and analysis. This cutting-edge device, integrated with powerful OneQA™ workflow automation software, revolutionizes the performance testing of infusion devices by delivering unprecedented accuracy, efficiency, and automation. Experience the future with the OneQA-enabled IDA-6, introducing a new era of innovation.



Patient Simulators



ProSim Vital Signs Simulator Family

Comparison Guide



ProSim 8 / ProSim 8P	ProSim 4	ProSim 2 and 3
Arrhythmia waveform selections 50+	Arrhythmia waveform selections 43	Arrhythmia waveform selections 43
Cardiac output ✓	Cardiac output ✓	Cardiac output ✓
NIBP simulation ✓	NIBP simulation ✓	NIBP simulation ✗
ECG simulation ✓	ECG simulation ✓	ECG simulation ✓
IBP simulation (channels) 2	IBP simulation (channels) 1	IBP simulation (channels) 4 (2 for ProSim 2)
Leak test ✓	Leak test ✓	Leak test ✗
Compatible with OneQA Software ✓	Compatible with OneQA Software ✗	Compatible with OneQA Software ✗
Optical SpO ₂ ✓	Optical SpO ₂ ✗	Optical SpO ₂ ✗
Fetal ECG/IUP simulation ✓	Fetal ECG/IUP simulation ✗	Fetal ECG/IUP simulation ✗
Temperature ✓	Temperature ✗	Temperature ✗
Pressure relief test ✓	Pressure relief test ✓	Pressure relief test ✗
Respiration simulation ✓	Respiration simulation ✓	Respiration simulation ✗
Manometer (pressure meter) ✓ ProSim 8 ±(0.5% + 0.5 mmHg) ProSim 8P 0 to 300 mmHg ±0.75 mmHg 300 to 400 mmHg ±(0.5% + 0.5 mmHg)	Manometer (pressure meter) ✓ ±(1% +1 mmHg)	Manometer (pressure meter) ✗

Patient Simulators



ProSim 8 / ProSim 8P

Vital Signs and ECG Patient Simulator



Leading Edge Performance in Vital Signs Simulation

The industry-leading ProSim 8 / ProSim 8P patient simulator enables biomedical technicians to complete preventive maintenance testing with one device in less than five minutes. The ProSim 8 / ProSim 8P patient simulator is ideal for biomedical technicians testing patient monitors for certain known physiological output signals.

Key features

- 8-in-1 multifunction patient simulator is a combination ECG simulator, fetal simulator, arrhythmia simulator, respiration simulator, temperature simulator, IBP simulator, cardiac output simulator, cardiac catheterization simulator, NIBP simulator
- SpO₂ simulator to test Rainbow multi-wavelength waveforms (with optional ProSim SpO₂ Test Module)
- Stay-connected ECG posts for easy/secure ECG snap and lead connections
- Static pressure linearity testing
- Improved manometer accuracy with the ProSim 8P
- Repeatable NIBP simulation for dynamic pressure repeatability testing
- Physiologically synchronized pulses across all parameters
- Barcode scanning and direct data capture and printing functionality
- Onboard, patient pre-sets and auto sequences for fast/easy testing
- Multi-language user interface offers choice of language selection
- The device includes an external, long-life battery that allows for more flexible charging options
- Optional OneQA™ Workflow Automation Software offers customizable procedures/checklists and automated data capture/storage



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Optional accessories

- 2392199 CI-3 Cardiac Output Box
- 3408564 Mini-DIN to DIN IBP Adapter
- 3890640 NIBP Test Chamber 500 ML

Cable kits

- 3984910 ProSim 8 Accessory Kit
- 3984922 HP/Philips Intellivue

Cable Set

- 3984968 GE Marquette Eagle/Dash/Solar Cable Set
- 3984946 ProSim 8 SpaceLabs Ultraview Cable set
- 3984979 Welch Allyn/Propaq Cable Set
- 3984993 Drager Infinity Cable Set
- 3985009 ProSim 8 Nihon Kohden Cable Set

Patient Simulators



ProSim 4

Vital Signs Simulator



One-Touch Testing

The ProSim 4 Vital Signs Simulator offers quick and simple one-tap testing for patient monitor performance checks and troubleshooting. Designed to get you in and out of most locations in 60 seconds, this quick-check device offers 12-lead ECG simulation, respiration, IBP and NIBP testing in the palm of your hand. Featuring specialized stay-connected ECG posts to help ensure secure lead connections and no-hassle testing, the ProSim 4 is the perfect patient simulator for first-call patient monitor quality assurance and safety professionals.

Key features

ProSim 4

- ProSim 4 is a multi-function tester offering 12-lead ECG, respiration, IBP and NIBP simulation
- Touchscreen interface
- One-tap testing for most performance tests and checks
- Easy quick-check patient monitor testing



Discover the highest level of service and assurance for your Fluke Biomedical test equipment

Protect+ Program

Optional accessories

3984878 ProSim 4 Accessory Kit, includes: Unterminated IBP cable, HP-3 IBP cable, MQ-3 IBP cable, TK-1 IBP cable, Adult cuff Mandrel spacer block (3), Adult cuff Mandrel end block (2), Neonatal Mandrel, USB cable, Spare Battery pack, ECG Snap/ banana adapter

2392328 Neonatal Cuff Mandrel

2392370 Adult Cuff Mandrel End Blocks (2 needed)

2392381 Adult Cuff Mandrel Spacer Blocks (3 needed)

4026551 ECG Snap Adapter
4 mm and 3.2 mm ECG Banana Adapter
Converter Modules (international only)

Patient Simulators



SPOT Light

SpO₂ Functional Tester



15-Second Tester

The ProSim SPOT Light SpO₂ Tester is the first comprehensive SpO₂ tester to come in a handheld and easy-to-use device. It's lightweight and flexible with three custom presets specially designed to make it the fastest and easiest to use device on the market for pulse oximeter functional testing.

Key features

- SPOT Light preset programs test any combination of saturation, heart rate, perfusion, transmission, artifact noise, and r-curve in 15 seconds or less
- Small, portable and lightweight
- Rechargeable battery lasts 10 hours minimum
- Signal strength indicator
- SpO₂ saturation: 80 %, 85 %, 90 %, 95 %, 97 %, 98 %, 99 % and 100 %
- Heart rate: 30, 40, 60, 80, 90, 100, 120, 150, and 240 BPM
- Perfusion: 0.2 %, 2 % and 10 %
- Transmission: dark/thick, normal and light/thin
- Artifacts: respiration and ambient light
- R-curves: Nonin, Masimo, Nellcor, Nihon Kohden, Mindray, GE, Philips, BCI



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Optional accessories

4026823 BPPS4 ProSim 4 Battery Pack

4766589 PS4 ProSim 4 Power Supply

Patient Simulators



ProSim 2 and ProSim 3

Vital Signs Simulator



Portability Meets Performance

Don't need a comprehensive patient monitor tester? The ProSim 3 and ProSim 2 Vital Signs Simulators are clear choices for biomedical engineers and field service technicians that need a quality, portable device. Choose one of these modern vital signs simulators for preventive maintenance, troubleshooting and repair.

Key features

The ProSim 3 and 2 feature the perfect amount of features for testing in the field. We like to call it the just-right feature set, and it includes: ECG, Pacemaker, Arrhythmia and performance testing, Respiration, Invasive blood pressure, Temperature, Cardiac output (ProSim 3 only), Fetal/maternal (ProSim 3 only).

- Portable, for evaluating the performance of patient monitors in the field
- 20 % lighter and 25 % smaller than preceding technology
- Just Right feature set includes: ECG, Pacemaker, Arrhythmia and performance testing, Respiration, Invasive blood pressure, Temperature, Cardiac output (ProSim 3 only), fetal/maternal (ProSim 3 only)
- 43 high-quality waveforms
- With four IBP channels, ProSim 3 tests even the highest acuity scenarios
- Stay-connected ECG posts for secure lead connections
- Improved user interface and online Advantage Training demos
- Upgraded DIN connectors help ensure consistency with the ProSim family; minimize cable compatibility issues
- Field upgradeable, and easily paired with other devices for comprehensive testing
- ProSim 3 and 2 are 510(k) cleared products



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- ProSim 2/3 Instruction Sheet (Multilingual)
- 4253822 ProSim 2/3 Users Manual CD
- 614487 Two 9-volt alkaline batteries (minimum eight hours continuous use)
- 2392173 IBP Cable, unterminated
- 2392199 3010-0289FG, CI-3 Cable Assembly (Cardiac Output Box; ProSim 3 only)
- 1671807 USB cable
- 2248623 ProSim 2/3 Carrying Case

Optional accessories

- 2523334 YSI 400 Series (UT-4)
- 2199019 YSI 700 Series (UT-2)
- 4022300 Cardiac output switch for GE

Electrical Safety Analyzers



ESA Family

Comparison Guide



ESA715	ESA712	ESA710	ESA620	ESA609
On-board memory ✓	On-board memory ✓	On-board memory ✓	On-board memory ✗	On-board memory ✗
Automation inside ✓	Automation inside ✗	Automation inside ✓	Automation inside ✗	Automation inside ✗
Preferred analyzer for which standard IEC60601-1 2nd and 3rd edition, ANSI/AAMI (NFPA-99), IEC62353, AS/NZS 3551	Preferred analyzer for which standard IEC60601-1 2nd and 3rd edition, ANSI/AAMI (NFPA-99), IEC62353, AS/NZS 3551	Preferred analyzer for which standard ANSI/AAMI (NFPA-99)	Preferred analyzer for which standard IEC60601-1 2nd and 3rd edition, ANSI/AAMI (NFPA-99), IEC62353, AS/NZS 3551	Preferred analyzer for which standard IEC60601-1, ANSI/AAMI (NFPA-99), IEC62353
ECG simulation ✓	ECG simulation ✓	ECG simulation ✓	ECG simulation ✓	ECG simulation ✗
Compatible with OneQA Software ✓	Compatible with OneQA Software ✓	Compatible with OneQA Software ✓	Compatible with OneQA Software ✓	Compatible with OneQA Software ✗
OneQA Software on-board ✓	OneQA Software on-board ✗	OneQA Software on-board ✓	OneQA Software on-board ✗	OneQA Software on-board ✗
Handheld ✓	Handheld ✓	Handheld ✓	Handheld ✗	Handheld ✓
Respiration simulation ✓	Respiration simulation ✓	Respiration simulation ✓	Respiration simulation ✗	Respiration simulation ✗

Electrical Safety Analyzers


ESA715
Electrical Safety Analyzer


Our Easiest-To-Use Electrical Safety Analyzer, Ever

Revolutionizing the field of electrical safety testing, the ESA715 Electrical Safety Analyzer offers an innovative approach to automated testing. Compact yet powerful, this groundbreaking device is an indispensable tool for healthcare technology management professionals. With its ability to perform basic troubleshooting to comprehensive analysis, the ESA715 ensures uncompromised functionality in the field and in facilities.

Adaptable to a range of global electrical safety standards, this all-in-one device seamlessly integrates a safety analyzer and patient simulator, redefining efficiency in medical equipment testing.

Key features

- 5" Touchscreen with intuitive user interface
- Small, portable, ergonomic design with an integrated handle
- OneQA™-enabled workflow automation eliminates need for laptop
- Wireless capability allows you to run test procedures in the field and automatically sync results
- Ten applied parts posts with innovative LED lighting guidance (ECG & Banana)
- Insulation resistance from 50V, 100V, 250V and 500V
- ECG waveform tests and dual-lead measurements combine the functionality of a simulator and safety analyzer in a single test tool
- Ability to upload pictures, instructions, and text to procedures
- Easy data entry through barcode scanner, external keyboard or on-screen keyboard
- 20 A at 120 V equipment current capability
- Replaceable mains fuses keep your unit in the field and out of the repair shop
- Rigorously tested for rugged field applications with CE and CSA in addition to Fluke-quality ruggedness for longterm reliability
- Global support network delivering prompt service and peace of mind to Fluke Biomedical customers worldwide



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- 5517611 Getting started guide
- 5517610 OneQA quick start guide
- 5579600 USB C to USB A cable
- 2427138 Probe test banana jack 4MM tip black w/cap 175-290-001 EVZFTP74SW00 (USA/AUS/ISR/THAI/JAPAN)
- 2099044 Probe test banana jack 4MM tip red w/cap 175-290-003 EVZFTP74RT00 (USA/AUS/ISR/THAI/JAPAN)
- 4151242 USA/NEMA outlet to NBR14136 socket (BRAZIL)
- 3326842 Null post adapter
- 2248650 Carrying case
- LINE CORD Country-specific power cord

Optional accessories

- 6078258 Barcode scanner
- 6078184 USB Wi-Fi dongle

Electrical Safety Analyzers


ESA712
Electrical Safety Analyzer


Easiest-To-Use Manual Analyzer for Electrical Safety

The ESA712 Electrical Safety Analyzer is a gamechanger in manual electrical safety testing. This manually operated, portable device delivers unparalleled versatility and precision. Catering to the needs of healthcare technology management professionals, the ESA712 performs basic troubleshooting to comprehensive analysis on medical equipment, in the field and in facilities.

Meeting global electrical safety standards, this innovative device combines the functions of a safety analyzer and patient simulator into one, offering a complete, manual solution for your electrical safety testing needs.

Key features

- 5" Touchscreen with intuitive user interface
- Small, portable, ergonomic design with an integrated handle
- Ten applied parts posts with innovative LED lighting guidance (ECG & Banana)
- Insulation resistance from 50V, 100V, 250V and 500V
- ECG waveform tests and dual-lead measurements combine the functionality of a simulator and safety analyzer in a single test tool
- Ability to upload pictures, instructions, and text to procedures
- Easy data entry through barcode scanner, external keyboard or on-screen keyboard
- 20 A at 120 V equipment current capability
- Replaceable mains fuses keep your unit in the field and out of the repair shop
- Rigorously tested for rugged field applications with CE and CSA in addition to Fluke-quality ruggedness for longterm reliability
- Global support network delivering prompt service and peace of mind to Fluke Biomedical customers worldwide



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- 5517611 Getting started guide
- 5579600 USB C to USB A cable
- 2427138 Probe test banana jack 4MM tip black w/cap 175-290-001 EVZFTP74SW00 (USA/AUS/ISR/THAI/JAPAN)
- 2099044 Probe test banana jack 4MM tip red w/cap 175-290-003 EVZFTP74RT00 (USA/AUS/ISR/THAI/JAPAN)
- 4151242 USA/NEMA outlet to NBR14136 socket (BRAZIL)
- 3326842 Null post adapter
- 2248650 Carrying case
- LINE CORD Country-specific power cord

Optional accessories

- 6078258 Barcode scanner
- 6078184 USB Wi-Fi dongle

Electrical Safety Analyzers


ESA710
Electrical Safety Analyzer


Documentation Made Easy

Redefining automated testing in a compact format, the ESA710 Electrical Safety Analyzer is an essential tool for healthcare technology management professionals looking for portability without compromising functionality. This highfunctioning device enables users to perform basic troubleshooting to comprehensive analysis, ensuring electrical safety testing on medical equipment complies with key electrical safety standards, such as ANSI/AAMI ES1 and NFPA 99, whether in the field or within facilities.

Key features

- 5" Touchscreen with intuitive user interface
- Small, portable, ergonomic design with an integrated handle
- Wireless capability allows you to run test procedures in the field and automatically sync results
- Ten applied parts posts with innovative LED lighting guidance (ECG & Banana)
- Insulation resistance from 50V, 100V, 250V and 500V
- On-board automation with automated test sequences for compliance to key electrical safety standards (ANSI/AAMI ES1, NFPA 99)
- ECG waveform tests and dual-lead measurements combine the functionality of a simulator and safety analyzer in a single test tool
- Ability to upload pictures, instructions, and text to procedures
- Easy data entry through barcode scanner, external keyboard or onscreen keyboard
- 20 A at 120 V equipment current capability
- Replaceable mains fuses keep your unit in the field and out of the repair shop
- Rigorously tested for rugged field applications with CE and CSA in addition to Fluke-quality ruggedness for longterm reliability
- Global support network delivering prompt service and peace of mind to Fluke Biomedical customers worldwide



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- 5517611 Getting started guide
- 5517610 OneQA quick start guide
- 5579600 USB C to USB A cable
- 3111008 USA accessory kit: test lead set, TP1 test probe set, AC285 alligator clip set
- 2427138 Probe test banana jack 4MM tip black w/cap 175-290-001 EVZFTP74SW00
- 2099044 Probe test banana jack 4MM tip red w/cap 175-290-003 EVZFTP74RT00
- 3326842 Null post adapter
- 2248650 Carrying case
- 2238644 Power cord

Optional accessories

- 6078258 Barcode scanner
- 6078184 USB Wi-Fi dongle

Electrical Safety Analyzers


ESA620
Electrical Safety Analyzer


Easy Comprehensive Testing

The ESA620 Electrical Safety Analyzer sets a new standard for portable safety testing with smart technology and versatile features. It performs primary electrical safety and leakage tests for global compliance, offering three test loads, two protective earth test currents, and two insulation test voltages. A 20 A device receptacle expands testing options, while 2-wire and optional 4-wire earth measurements helps save time.

With ten safety-enhanced ECG posts, the ESA620 enables both electrical safety and basic patient monitor tests with a single connection. When paired with optional OneQA workflow automation software, it streamlines testing and data management from a central hub.

Key features

- Superior compliance with multiple standards: IEC60601-1 (partial), IEC62353, VDE 751, ANSI/AAMI ES1:1993, NFPA-99, AN/NZS 3551, IEC61010
- Expanded leakage ranges through 10,000 μ A
- Dual-lead resistance, leakage and voltage tests
- AC only, dc only and true-rms leakage readings
- 100 % and 110 % mains voltage for mains on applied parts (lead isolation) test
- DSP filter technology
- More applied parts selections
- ECG and performance waveforms
- Intuitive user interface
- Easy-to-use applied parts (ECG) connections
- Insulation posts on applied parts connections
- Five different insulation tests
- Varying insulation test voltage 500 V dc and 250 V dc
- Two or (optional) four-wire ground wire resistance
- Optional Ansur plug-in software
- USB connection
- CE, C-TICK and CSA for USA and Canada
- RoHS compliance



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

2814971 Multilingual Getting Started Guide
2195732 15 A to 20 A Adapter (USA only)
2814980 Carrying Case
1626219 Data Transfer Cable
Power Cord Country specific
ESA620 Accessory Kit Country specific

Optional accessories

2392639 Ground Adapter
4316223 50' Test Lead
4794643 75' Test Lead

Electrical Safety Analyzers


ESA609
Electrical Safety Analyzer


Test On-The-Go Effortlessly

The ESA609 Electrical Safety Analyzer is a rugged, portable, and easy-to-use device designed for general electrical safety testing. Built for on-the-go technicians, it features a protective rubberized case, functional strap, and lightweight design for maximum portability. Durable switches and push-button operation enable quick polarity changes and seamless test transitions. The ESA609 performs essential tests for medical devices without patient leads, including line voltage, ground resistance, equipment current, leakage current, and point-to-point tests.

Key features

- Standards compliance include: ANSI/AAMI ES1, NFPA-99, and parts of IEC62353 and IEC60601-1
- Test current consumption up to 20 A for a diverse set of medical devices
- All parameters needed for basic electrical safety testing: line (mains) voltage, ground wire (or protective earth) resistance, equipment current, ground wire (earth) leakage, chassis (enclosure) leakage, direct equipment leakage, and point to point leakage and resistance
- Global use: the ESA609 will operate at 120 V and 230 V
- Rugged: Rubberized case and Ingress Protection rating of IP30 help prevent damage when dropped
- User-friendly: Quick push-button operation for rapid testing
- Portable: Featherweight (1.5 lb) design, functional strap, and tilt stand make it easy for transportation and operation on-the-go (onsite or offsite)
- Rigorously tested for safety and reliability, with CE, CSA and Australia RCM in addition to Fluke-quality ruggedness for longterm reliability



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

4370092 Safety sheet

3111008 USA/AUS/ISR Accessory

Kit: test lead set, TP1 test probe set, AC285 alligator clip set (ESA T/L kit, USA)

2248650 Carrying case

2242165 Ground Adapter

Line cord country-specific power cord

3111024 EUR Accessory Kit: test lead set, TP74 test probe set, AC285 alligator clip set (ESA T/L kit, EUR)

Optional accessories

2195732 15 A to 20 A adapter

Gas Flow Analyzers



Gas Flow Analyzers

Comparison Guide



VT900A	VT650
Single flow full-range channel (± 300 lpm) ✓	Single flow full-range channel (± 300 lpm) ✓
Oxygen accuracy 1%	Oxygen accuracy 2%
7-in (17.8 cm) color touch screen ✓	7-in (17.8 cm) color touch screen ✓
Airway temperature / humidity / oxygen measurement ✓	Airway temperature / humidity / oxygen measurement ✓
Test profile customization ✓	Test profile customization ✓
Real-time measurements and graphical display ✓	Real-time measurements and graphical display ✓
Onboard memory and automatic test report creation ✓	Onboard memory and automatic test report creation ✓
Global user interface ✓	Global user interface ✓
Ultra-low flow channel (± 750 ml/min) ✓	Ultra-low flow channel (± 750 ml/min) ✗
Ultra-low pressure range (0 - 10 mbar) ✓	Ultra-low pressure range (0 - 10 mbar) ✗
External trigger input ✓	External trigger input ✗
Anesthesia gas concentration measurements with VAPOR	Anesthesia gas concentration measurements ✗
Compatible with OneQA™ Software ✓	Compatible with OneQA Software ✓

Gas Flow Analyzers


VT900A
Gas Flow Analyzer


Easy-to-Use, Reliable and Portable

Designed to accurately and reliably test all types of gas flow equipment especially those requiring high accuracy in ultra-low flow and ultra-low pressure measurements, this compact and lightweight analyzer is extremely portable, and also saves space on your benchtop.



Key features

- More uptime with increased oxygen sensor accuracy and life
- Avoid confusion and help ensure accuracy with one-channel full range air flow functionality
- Streamline your testing procedure, reduce errors and quicken your test time with the ability to create customized test profiles
- Easily transport and store the lightweight (3.64 lb/1.6 kg) all-in one device—no extra modules for different tests
- Quickly access menu options, interpret results and see measurements at a distance up to 6' (1.8 m) with the large, easy to read 7" (17.8 cm) color touch screen
- Operate on-the-go, all day with 8 hours of battery life
- The on-board memory allows you to record and save data
- Have confidence that your measurements comply to global regulatory standards and adhere to SI units of measurement with the Molbloc-L calibration system
- More control over your testing by selecting your own trigger point with the external trigger input
- Ultra-low flow and ultra-low pressure ports allow high accuracy for devices requiring crucial low volume and pressure testing such as anesthesia machines and flow meters



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Optional accessories

- 2387318 ACCU LUNG Test Lung
- 4281291 ACCU LUNG II Test Lung
- 4969657 Vesa Mounting System/ Test Arm



VAPOR Anesthesia Tester

- Detects all 5 anesthetic agents (SEV, ISO, HAL, ENF, DES)
- Reduce risk of error with automatic agent ID and color matching
- Portable – fits in one case with VT900A

Gas Flow Analyzers


VT650
Gas Flow Analyzer


All-in-One, Basic Needs Gas Flow Analyzer

Offers high accuracy and reliability for gas flow and respiratory medical equipment, including neonatal, mechanical and high-frequency ventilators. The single, full range ± 300 lpm air flow channel offers built-in oxygen, temperature and humidity measurements to streamline your testing procedure. Designed and tested to world renown Molbloc-L calibration specifications ensures traceability to global regulatory standards with measurements you can rely on.



Key features

- More uptime with increased oxygen sensor accuracy and life
- Avoid confusion and help ensure accuracy with one-channel full range air flow functionality
- Streamline your testing procedure reduce errors and quicken your test time with the ability to create customized test profiles
- Easily transport and store the lightweight (3.64 lb/1.6 kg) all-in one device—no extra modules for different tests
- Quickly access menu options, interpret results and see measurements at a distance up to 6' (1.8 m) with the large, easy to read 7" (17.8 cm) color touch screen
- Operate on-the-go, all day with 8 hours of battery life
- The on-board memory allows you to record and save data
- Have confidence that your measurements comply to global regulatory standards and adhere to SI units of measurement with the Molbloc-L calibration system



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Optional accessories

2387318 ACCU LUNG Test Lung
4281291 ACCU LUNG II Test Lung
4969657 Vesa Mounting System/
Test Arm

Gas Flow Analyzers



MaxO2+AE

Gas Flow Analyzer



Oxygen Analyzer for Medical Gas Flow

The MAXO2+AE is an oxygen analyzer that measures the oxygen concentration in a gas flow from a medical gas source or through a medical gas-flow device such as a ventilator or anesthesia system, or within an infant incubator. It is handheld and rugged to suit the needs of portable use. The MAXO2+AE comes equipped with a two-year warranty on both the analyzer and the sensor.

Key features

- One-touch calibration, with reminder
- Long battery life (approx. 5,000 hrs)
- Impact resistant and drip-proof
- External MAX-250E Oxygen Sensor

Defibrillator Analyzers



Defibrillator Analyzers

Comparison Guide



Impulse 7000DP

Selectable measurement algorithms, test loads for external pacemakers



Accuracy (energy measurement)
1%

Default patient test load
50 Ω

Mono-, bi- and pulsed bi-phasic energy measurement



Tests transvenous external pacemakers



Capable of testing ECG



10-lead

Compatible with OneQA Software



Tests transcutaneous external pacemakers



Test variable patient loads
with 7010 Load Box

Impulse 6000D

Selectable measurement algorithms, test loads for external pacemakers



Accuracy (energy measurement)
2%

Default patient test load
50 Ω

Mono-, bi- and pulsed bi-phasic energy measurement



Tests transvenous external pacemakers



Capable of testing ECG



10-lead

Compatible with OneQA Software



Tests transcutaneous external pacemakers



Test variable patient loads



Defibrillator Analyzers



Impulse 7000DP

Defibrillator Tester/External Pacemaker Analyzer



Efficient, Accurate, Versatile

The Impulse 7000DP is a combination Defibrillator/Transcutaneous Pacemaker Analyzer that is portable, rugged, and easy-to-carry. It measures any defibrillator energy waveform, properly tests all defibrillator and AED devices (including Shock Advisory), ensures proper loads used for pacer testing, and delivers superior performance with accuracy measurements $\pm 1\%$ of reading + .01 J.

Key features

- IEC 60601-2-4 compliance
- Lown, Edmark, trapezoidal, biphasic and pulsed-biphasic defibrillation technology compatibility
- AED compatibility
- 12-lead ECG simulation
- Ability to test external transcutaneous pacemakers (Impulse 7000DP only)
- Internal pacer brand selections
- Flexible heart-rate settings (1 BPM step)
- DSP-based measurements for firmware and waveform upgrade
- Waveform capture, store and replay
- First-in-class accuracy $\pm 1\%$ of reading + 0.1J
- Long lasting, rechargeable battery



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- 1626219 USB Computer Communication Cable
- 3028662 Getting-Started Guide
- Battery Eliminator country specific
- 2814980 Carrying Case
- 3156262 Defib Paddle Contact Plates

Optional accessories



Impulse 7010 Defibrillator Selectable Load Accessory

Provides multiple loads of 25 Ω , 50 Ω , 75 Ω , 100 Ω , 125 Ω , 150 Ω , 175 Ω , and 200 Ω to comply with IEC 60601-2-4 standard*

*Compatible only with Impulse 7000DP

Defibrillator Analyzers



Impulse 6000D

Defibrillator Analyzer



Portable, Rugged, Easy-to-Carry Device

If you don't require a pacemaker analyzer, the Impulse 6000D is your device. It is the quintessential defibrillator analyzer featuring the exact functionality of the 7000DP, but without pacemaker testing. It will deliver any energy or waveform (monophasic, biphasic, pulsed-biphasic) while properly testing all defibrillator and AED devices including Shock Advisory.

Key features

- Portable, rugged, easy to carry
- Intuitive user interface and backlight, easy-to-read display
- 10 independent ECG outputs that provide 12 lead combinations for standardized clinical signals
- Unique integrated posts for secure connections
- Optional Ansur test automation software to standardize testing procedures, capture waveforms and test results, and print and document test results
- Global support network delivering prompt service and peace of mind to Fluke Biomedical customers worldwide



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

1626219 USB Computer Communication Cable
3028681 User Manual CD
3028662 Getting-Started Guide
Battery Eliminator Country specific
2814980 Carrying Case
3156262 Defib Paddle Contact Plates

Optional accessories

3091370 Ansur Impulse 6000D/7000DP

Infusion Pump Analyzers



Infusion Device Analyzers

Comparison Guide



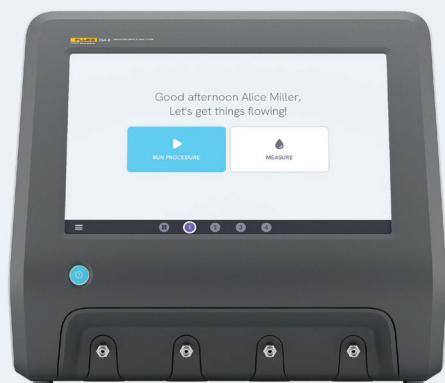
IDA-6	IDA-1S
On-board automation ✓	On-board automation ✗
Wi-Fi connectivity ✓	Wi-Fi connectivity ✗
Volume measurement 0 to 100,000 mL	Volume measurement 0.06 to 999ml
Modular channels ✓	Modular channels ✓
OneQA Integration ✓	OneQA Integration ✗
Flow rate range 0 to 3000 mL/hr (steady flow) 0 to 1500 mL/hr (peristaltic flow)	Flow rate range 0.5 to 1000 ml/hr
Weight 8.4 lbs	Weight 2.7 lbs
Onboard graphing of pressure and flow ✓	Onboard graphing of pressure and flow ✗
Priming required ✗	Priming required ✓
Battery operated ✗	Battery operated ✓
Number of Channels up to 4	Number of Channels 1
Dual flow measurement ✓	Dual flow measurement ✗
Closed loop flow IntelliPump™ Technology	Closed loop flow ✗

Infusion Pump Analyzers



IDA-6

Infusion Device Analyzer



Introducing a New Era of Innovation

Introducing the revolutionary IDA-6 Infusion Device Analyzer, featuring our proprietary workflow automation software OneQA. This groundbreaking analyzer is the solution to common pain points including the length of time spent testing and documenting results. Along with the ability to customize pre-built procedures on IDA-6, results are automatically saved on the device and synced to your PC. Completing your PMs is easy with our intuitive user interface.

Key features

- OneQA-enabled workflow automation simplifies testing, enhancing accuracy and efficiency
- Achieve low flow stable readings 100x faster than IDA-5
- No priming required between tests or repriming after initial setup
- IntelliPump™ Technology provides the ability to recirculate water during testing
- Test up to four infusion pumps simultaneously
- Removable channels simplify calibration process and avoid device downtime
- Meets or exceeds most OEM low flow accuracy
- Enhanced resolution by 60x vs. IDA-5
- Flow and volume more accurate vs. IDA-5
- Simply and quickly customize pre-built test procedures for any infusion device
- Wireless capability allows you to run test procedures in the field and automatically sync results
- Large 10" touchscreen with an intuitive user interface
- Ability to upload pictures, instructions and text to procedures
- Immediate results with as little as < 0.0003mL
- Verifies PCA, bolus, and occlusion functionality



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- 5589148 Power Supply, IDA-6
- 5589153 IDA-6 Adapter Kit (US, Europe, Australia and UK)
- 5589166 USB-C Data Transfer Cable
- 5589175 Silicone Tubing

Optional accessories

- 5583523 Barcode Scanner, C750, Corded/Bluetooth/2.4G Wireless
- 5579584 Wi-Fi USB Dongle



Infusion Pump Analyzers



IDA-1S

Infusion Device Analyzer



The Portable, High-Performance Infusion Device Analyzer Designed For Testing On-the-Go

The IDA-1S One-Channel Infusion Device Analyzer is a portable, battery-operated tool that delivers fast and accurate testing of infusion pumps with real-time results. It measures flow rate, delivered volume, and pressure during occlusions, using trusted technology relied on by biomedical professionals worldwide. Easy to set up and use with minimal training, the IDA-1S supports a variety of infusion pumps, while its auto-start feature simplifies syringe pump testing and other procedures with long startup times.

Key features

- Integrated carrying handle and lightweight (2.7 lb) for easy portability
- Battery powered with up to 10 hours of continuous operation for on-the-go operation
- LCD touch screen for ease of use
- Average and instantaneous flow measurement
- Occlusion pressure measurements to 45 psi
- Maximize accuracy with Autostart mode enabling unit to begin testing only when fluid is detected
- Compatible with a wide variety of infusion pumps
- Based on technology that is proven and trusted worldwide
- On-board memory allows instant test results storage
- Hydrograph graphical software to control unit, display results and print results via PC

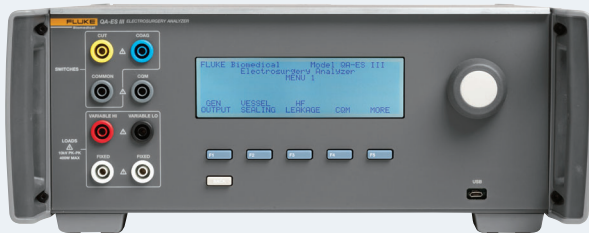


Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Included accessories

- 4497350 20 ml syringe
- 4480194 3-way plastic Luerlock
- 4478942 Drain tube (1 m)
- 4541948 Micro-90 bottle (225 ml)
- 1740487 USB data transfer cable
- 2461300 4-plug mains adapter kit for US, UK, EURO, AUS
- 4329971 Power supply cord without main adapters, univ, wall mount
- 4481150 NiMH replacement battery
- 2523995 Soft carrying case

Electrosurgery Analyzer


QA-ES III
Electrosurgery Analyzer


Complete Electrosurgical Testing and Preventive Maintenance for ESU Devices

Quickly and easily test all critical ESU functions using the Fluke Biomedical QA-ES III Electrosurgery Analyzer. The user-friendly interface guides you through test sequences, lets you collect measurements and wirelessly download records.

Key features

- Test all critical ESU functions with precise power, current, frequency, crest factor and load resistance ranges
- Collect measurements in single and continuous mode
- Automatic power distribution measurement, including power, current, peak-to-peak voltage, and crest factor
- All-in-one tool: all hardware and software necessary to complete preventive maintenance and troubleshooting is built in to the unit, eliminating the need to purchase or transport additional cables, leads, switch boxes and RECM box
- User-friendly interface: large buttons and LCD screen guide the user through test sequences
- Memory storage of up to 5,000 test records, eliminating the need to download data after the completion of each preventive maintenance or troubleshooting session
- Complies to all global standards, including ANSI/AAMI and IEC*



Discover the highest level of service and assurance for your Fluke Biomedical test equipment

Protect+ Program

Optional accessories

4635248 International dispersive lead (1/4 inch phono plug)

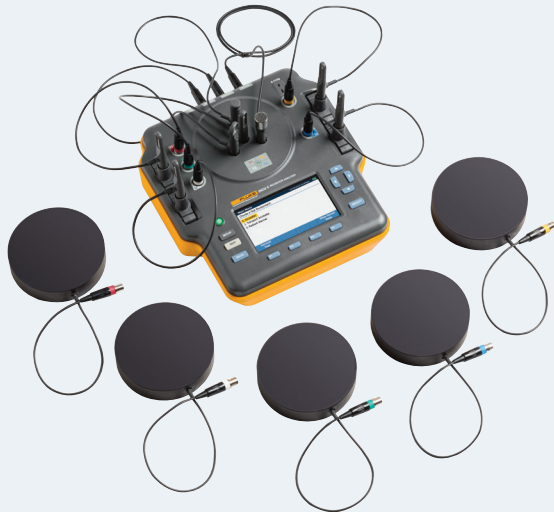
1909216 Test probe set—0.080 brass tip

4704312 Ansur Plug-in

4840263 QA-ES III Pelican Hard Case

*Bipolar leakage testing performed with 200 ohm fixed load

Neonatal Test Equipment


INCU II™
Incubator/Radiant Warmer Analyzer


The INCU II Neonatal Warmer Makes Testing Incubators and Radiant Neonatal Warmers Fast and Easy

Portable and easy-to-use, the INCU II Incubator Tester simplifies testing baby incubators, transport incubators, and infant radiant warmers. Compliant with IEC standards, the INCU II simultaneously measures temperature, airflow, sound, humidity, and more.



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Key features

- Displays pass/fail indicators and real-time test results on a large LCD screen
- Portable and compact design, weighs less than 3 lbs (1.4 kg), or 9 lbs (3.9 kg) including radiant warmer pucks
- Creates personalized test sequences for automatic test completion in compliance with standards
- General test enables flexibility in testing procedures and simplifies troubleshooting
- Simplifies test set-up with color-coded temperature probes that match color of input ports
- Wireless* functionality supports fast and convenient downloading of test results and data
- Able to choose from 10 different Measurement and test language interfaces
- Compliant with global IEC standards (IEC 60601-2-19, IEC 60601-2-20 and IEC 60601-2-21), the INCU II simultaneously measures temperature in six independent points, sound, humidity, and airflow

Standard accessories

- 4720996 Cable K-Type Thermocouple
- 4721000 S Sensor Sound Sensor
- 4721017 A F Sensor Air Flow Sensor
- 4721021 H Sensor Humidity Sensor
- 4721039 R Sensor Red Temperature Sensor
- 4721042 G Sensor Green Temperature Sensor
- 4721056 Y Sensor Yellow Temperature Sensor
- 4721063 W Sensor White Temperature Sensor
- 4721074 B Sensor Blue Temperature Sensor
- 4721109 Spacers Tripod Spacers
- 4721111 R Puck Red Temperature Puck
- 4721127 G Puck Green Temperature Puck
- 4721130 Y Puck Yellow Temperature Puck
- 4721148 W Puck White Temperature Puck
- 4721153 B Puck Blue Temperature Puck
- 4721166 USB Type A to Micro B, USB Cable
- 4721194 Adapter AC Adapter
- 4715713 Pad Placement Pad Microfiber
- 4715749 Carry Case Soft Carry Case
- 4724692 Puck Case Soft Carry Case Puck

Optional accessories

- 4721175 Skin Temperature Heater Assembly

* Wireless capabilities not available in all countries. Ask your distributor for more details.

Neonatal Test Equipment



DALE40

Phototherapy Radiometer



Designed for the Accurate Measurement of Light Radiation

The DALE40 measures light radiation in medical devices used to treat hyperbilirubinemia in newborns. It can accurately capture measurement across the blue color spectrum from 400-480 nanometers.

Key features

- Intuitive to use with LCD screen
- Accurate to $\pm 5\%$ of full spectral range of 429-472 nanometers
- Measurement range of 0-1999 $\mu\text{W}/\text{cm}^2$ with 1 $\mu\text{W}/\text{cm}^2$
- Probe lens matches the cosine receiving function of human skin
- Portable, weighing less than 9 ounces with a 9 V battery
- Verifies output power and provides continuous measurement of irradiation
- Saves costs by eliminating premature replacement of lamps



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Neonatal Test Equipment



PS320

Fetal Simulator



The PS320 is a Fetal Monitor Simulator that Accurately Tests and Troubleshoots

The PS320 is a portable, battery-operated device that simulates fetal and maternal ECG, uterine activity, and various clinical scenarios, including twins, to test fetal monitors and train labor-and-delivery staff. Small enough to fit in a pocket, it features an easy-to-use interface with an adjustable LCD display and can operate on a 9V battery or a battery eliminator. An optional mechanical heart generates fetal heart sounds for testing ultrasound cables and transducers.

Key features

- Mechanical heart for ultrasound simulation
- TOCO simulation, external or IUP
- Ultrasound simulation, including twins
- Maternal ECG simulation
- Fetal ECG, tracks ultrasound #1
- Internal (DECG) and external fetal ECG
- Uterine-activity selections
- Fetal beat-to-beat variability
- Periodic and non-periodic fetal ECG changes
- Arrhythmia selections
- Compact, lightweight, pocket-size plastic housing
- Battery operated with status indications
- Special kits available with all required accessories and cables to test fetal monitors for specified manufacturer



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Standard accessories

2631693 Printed-Version Users Manual

2647372 Battery Eliminator Universal
90 V to 240 V

9 V Battery

Optional accessory

MFH-1 Mechanical fetal heart probe

Part Number 2651757



Digital Pressure Meter



DPM2Plus

Universal Pressure Meter



Accurate and Low-priced for Medical Pressure Devices

The DPM2Plus Universal Pressure Meter is designed to measure the positive and negative pressures of medical devices in either liquid or gaseous form to assist in repair and quality control.

Key features

- Handheld, battery-operated
- 1 % accuracy
- Five selectable scale ranges
- Voltage output to drive a recorder for assessing the electronics of the pressure measurement circuit
- Capability to test ophthalmology equipment, lasers, dialysis machines, automatic tourniquets, drainage devices, IV pumps, pressure gauges, ventilators, diagnostic, surgical suction devices, and more
- Air or liquid measurement



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Standard accessories

2572323 Operators Manual

2242653 Catheter Adapter

9-volt battery

Software



OneQA™

Workflow Automation Software

Streamline Biomedical Testing From a Central Hub



OneQA WorkFlow Automation Software seamlessly pairs with Fluke Biomedical test tools. You can also integrate it into your asset management system to automate your QA/PM workflows from preparation through testing and archival reporting.

- **Save time:** seamlessly capture test results and populate your work orders through CMMS integrations eliminating the need for manual data entry.
- **Standardize your facility:** cloud-based OneQA WorkFlow Automation Software ensures changes made by an administrator are automatically updated so that everyone is following the most recent procedure.
- **Increase efficiency:** customize and share procedures, photos, instructions, and key insights from peers and route data across systems.
- **Enhance accuracy:** eliminate human error in manual entry ensuring consistency and reliability. Plus, OneQA WorkFlow Automation Software provides a backup of all your completed work orders.
- **Improve safety focus:** automate routine tasks so staff can focus more on patient and operator safety.
- **Increase compliance:** automatically record Fluke Biomedical calibration dates and the utilized electrical safety standard with your results into traceable reports.

End to End Workflow Automation



flukebiomedical.com/oneqa

Fluke Health Solutions

Portable Oscilloscope



190M Series III

Medical ScopeMeter® Portable Oscilloscope



Taking the Guesswork Out of Troubleshooting

This all-in-one tool offers two or four electrically-isolated inputs, a fast sampling rate, and a deep memory for detailed waveform capture.

Key features

- Two or four electrically-isolated inputs
- Fast sampling rate, up to 2.5 GS/s on two channels simultaneously with up to 400 ps resolution.
- Deep memory: 10,000 samples per channel waveform capture so you can zoom in on the details (scope mode).
- Dedicated 5000 count digital multimeter in two-channel model.
- Quad meter measurements via scope BNC inputs in four channel model.
- Connect-and-View™ triggering for intelligent, automatic triggering on fast, slow and even complex signals.
- Frequency spectrum using FFT-analysis.
- ScopeRecord roll mode gives 30,000 points per input channel and capture waveform sample data for up to 40 hours.
- TrendPlot, trend measurement readings for up to 22 days
- Advanced automatic measurements, power (Vpwm, VA, W, PF) and time (mAs, V/s, w/s).
- Two USB ports make it easy to transfer data to a PC and store unlimited waveforms, screen captures and instrument setups on USB memory devices.
- New high-performance Li-ion battery technology delivers the longest battery life on the market.

Standard accessories

- BP190 NIMH Battery Pack
- EBC290 External battery charger
- 3269726 RS-232 Interface Cable, 2m (7ft)
- VPS410-B Voltage probe set
- VPS410-G Voltage probe set
- VPS410-R Voltage probe set
- VPS410-V Voltage probe set
- C290 Hard shell case

Download the Advantage Training Mobile App

Ready to enhance your skills and boost productivity?



Fluke Biomedical and RaySafe developed the free **Advantage Training App** to offer you an array of courses focused on medical device quality assurance. Explore our test tools and discover newfound efficiencies to simplify your busy schedule.

Course hunting is a breeze with the help of category or keyword filters, helping you enhance your skills anywhere, anytime — at your own pace.

So, why delay? Download the Advantage Training app, available on both iOS and Android platforms, and embark on your learning journey today!

Follow these steps to access training on the go!

1

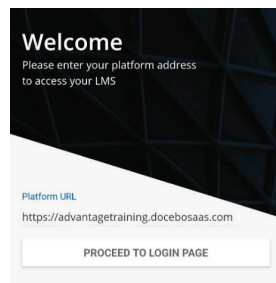
Scan the QR code or visit your app store and download GoLearn App on your mobile device.



2

Open the GoLearn App and enter in the Advantage Training Platform URL: <https://advantagetraining.docebosaas.com>

You will receive an email confirmation.

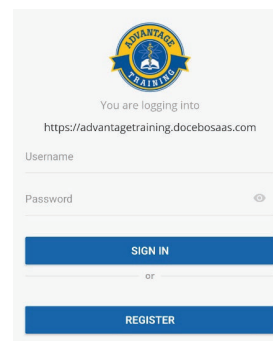


3

Login to Advantage Training.

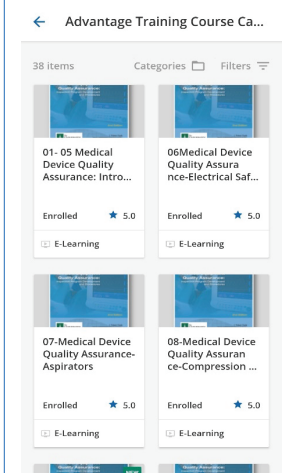
Existing users sign in with your login credentials.

New users create an account here.



4

Browse the course catalog and start learning on the go!



Register for Advantage Training today!

flukebiomedical.com/knowledge-center/training

Radiation Safety



Radiation Safety Comparison Guide



452	451P	451B
Contamination measurements ✓	Contamination measurements ✓	Contamination measurements ✗
Radiotherapy ✓	Radiotherapy ✓	Radiotherapy ✓
NDT (non-destructive tests) ✓	NDT (non-destructive tests) ✓	NDT (non-destructive tests) ✓
X-ray wall leakage ✓	X-ray wall leakage Functional	X-ray wall leakage Functional
X-ray tube leakage ✓	X-ray tube leakage Functional	X-ray tube leakage Functional
Environmental radiation ✓	Environmental radiation ✓	Environmental radiation ✓

Radiation Safety



RaySafe 452

Radiation Survey Meter



One Device. Endless Possibilities.

The RaySafe 452 redefines convenience, allowing you to focus on radiation protection rather than device set-up. With instant readiness upon turning on, it requires no corrections or manual settings. Its broad application range and compliance with IEC 60846-1 make it an essential tool in radiation measurement.

Key features

- Broad application range
- Compliant with IEC 60846-1
- IP 64 (dust proof and water resistant)
- Automatic data storage
- PC software connectivity
- USB charging
- Measures alpha, beta, gamma, X-ray
- Alarm threshold setting
- Built for indoor and outdoor applications

Typical applications

- X-ray tube leakage
- X-ray wall leakage
- Scattered room radiation
- Contamination measurements
- Environmental radiation
- Non-destructive testing



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Models

RaySafe 452	RaySafe 452 Air Kerma	RaySafe 452 Ambient
R / Gy / rad ✓	R / Gy / rad ✓	R / Gy / rad ✗
Sv / rem ✓	Sv / rem ✗	Sv / rem ✓
cps / cpm ✓	cps / cpm ✗	cps / cpm ✗

Radiation Safety


451B
Radiation Survey Meter


Ion Chamber Survey Meter with Beta Slide

The 451B Ion Chamber Survey Meter is designed for quick and efficient radiation detection. Thanks to its ionization chamber detector, it promptly responds to radiation from leakage, scatter beams, and pinholes. This makes it ideal for a wide range of users, including emergency response teams, medical labs, and nuclear power workers.

Key features

- High sensitivity measurement of rate and dose simultaneously with the capability to record peak rate
- Auto-ranging and auto-zeroing
- RS-232 communications interface with optional Windows-based Excel add-in for data logging
- Ergonomic, anti-fatigue handle with replaceable grip, wrist strap and tripod mount
- Programmable flashing LCD display and audible alarm
- Easily-accessible battery door (operated by two 9-volt alkaline batteries) on the outside of the bottom case
- Available with dose equivalent energy response (SI units)
- Shoulder strap and handle that can be easily decontaminated (Nuclear power plant specific unit)



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Optional accessories

451EXL 451 Assistant for Excel, includes RS-232 interface cable

190HPS Single Unit Carrying Case

450UCS Check Source, 238Uranium, 0.064 μ Ci, impregnated 2 x 2 in yellow card

62-103 Check Source, 137Cs, 10 μ Ci. Flat disc, 1 inch diameter

Due to recent international airline shipping policies/restrictions, radioactive Check Source will not be shipped with the main unit outside US.

Radiation Safety


451P
Radiation Survey Meter


Pressurized μ R Ion Chamber Survey Meter

The lightweight 451P ionization chamber survey meter is designed to help ensure radiation safety. Originally intended to measure leakage and scatter around diagnostic X-ray and radiation therapy suites, it's now used by X-ray manufacturers, government agencies, biomedical technicians, and airport baggage scanner maintenance technicians.

Key features

- High sensitivity μ R measurements of rate and dose simultaneously with the capability to record peak rate
- Ergonomic, anti-fatigue handle with replaceable grip, wrist strap and tripod mount
- Easily-accessible battery door (operated by two 9-volt alkaline batteries) on the outside of the bottom case
- RS-232 communications interface with optional Windows-based Excel add-in for data logging
- Available with dose equivalent energy response (SI units)
- Shoulder strap and handle that can be easily decontaminated (Nuclear power plant specific unit)



Discover the highest level of service and assurance for your Fluke Biomedical test equipment
Protect+ Program

Optional accessories

451EXL 451 Assistant for Excel, includes RS-232 interface cable

190HPS Single Unit Carrying Case

62-103 Check Source, 137Cs, 10 μ Ci.
Flat disc, 1 inch diameter

Due to recent international airline shipping policies/restrictions, radioactive Check Source will not be shipped with the main unit outside US.

X-ray Test Equipment



RaySafe X2

X-ray Test Equipment



Discover the highest level of service and assurance for your RaySafe test equipment
Protect+ Program

Less Effort. More Insight.

The RaySafe X2 offers a wide choice of sensors for different applications. While the X2 Prestige contains all sensors it is also possible to start with a dedicated system and expand over time. As the X2 sensors store calibration data as well as necessary firmware, the addition of a new sensor is simple – just plug it in and you are ready to go!

Full Range Measurements for Different Modalities

RaySafe X2 system packages include everything you need for quality assurance testing of your X-ray system; a base unit, a pre-defined selection of sensors and accessories.

X2 R/F Sensor

- No selections, no corrections
- Orientation independent
- Small footprint

X2 MAM Sensor

- Dose and HVL for all beam qualities – without corrections
- Orientation independent
- Stacked sensor technology prevents the influence of the heel effect

X2 CT Sensor

- Pencil chamber including electrometer
- Built-in temperature and pressure corrections
- Dose, time and waveforms

X2 Volt Sensor

- mA/mAs or kV from output voltage test points
- Save waveforms and data
- BNC connector for easy connectivity

X2 Survey Sensor

- Lightweight with fast response time
- High precision in the X-ray range
- Dose, rate, mean energy and waveforms

X2 Light Sensor

- Luminance and illuminance Class B sensor
- Durable housing
- Dual acquisition keys, on sensor or base unit

Standard Accessories*

- 4853992 X2 Power Supply Kit
- 4560097 X2 USB Cable 2M, Green
- 4560106 X2 USB Cable 5M Extender
- 4560085 X2 USB Cable 5M, BLUE
- 4559783 X2 Flexistand
- 4560013 X2 Standard Case

Optional Accessories

- 4560060 X2 Bluetooth
- 4560072 X2 GX Light Adapter
- 4718087 X2 Light Holder
- 4712697 X2 MAM Filter, 2MM AL
- 4559803 X2 Scanning Mam Holder
- 4560024 X2 Storm Case
- 4560036 X2 Storm Case SO
- 4787978 X2 Suction Cup Holder
- 4559688 X2 MAS Cable, 10M
- 4559790 X2 Vacuum Holder
- 5234544 X2 Volt Cable - 10:1 Probe
- 5234503 X2 Volt Cable - Banana Connectors

*Standard accessories vary depending on system

X-ray Test Equipment



RaySafe X2 Solo

X-ray Test Equipment



Discover the highest level of service and assurance for your RaySafe test equipment

Protect+ Program

All You Need for Your Targeted Modalities

The RaySafe X2 Solo will meet all your quality assurance or service measurement needs.

It's based on the same technology as RaySafe X2, highly esteemed for its user-friendliness and performance, but instead of multi-modality capability, each model meets specific needs.

RaySafe X2 Solo R/F covers all your radiography and fluoroscopy measurements needs:

- For conventional X-ray, interventional radiology, surgery, CR, DR, dental (Intraoral, Panoramic, CBCT) and CT (kVp, HVL and time only)
- Measures dose, dose rate, kVp, exposure time, pulses, pulse rate and dose/pulse
- Options include HVL & Total Filtration as well invasive mAs measurements
- One dynamic range covering low dose rates as needed in fluoroscopy as well as a kV range up to 150 kV for CT

RaySafe X2 Solo DENT – tailor-made for dental X-ray

- Attach the holder to the X-ray machine
- Make an exposure with gafchromic film (included) to reveal the position of the X-ray beam
- Use the adjustment lever to align the sensor with the X-ray beam
- The markings on the holder makes it possible to go back to a previous position if needed

Standard Accessories*

- 4853992 X2 Power Supply Kit
- 4560097 X2 USB Cable 2M, Green
- 4560106 X2 USB Cable 5M Extender
- 4560085 X2 USB Cable 5M, Blue
- 4959576 X2 SOLO R/F / DENT Standard ALU Case

Optional Accessories

- 4560060 X2 Bluetooth
- 4559783 X2 Flexistand
- 4959583 X2 Panoramic Holder
- 4560024 X2 Storm Case
- 4560036 X2 Storm Case SO
- 4787978 X2 Suction Cup Holder
- 4559688 X2 MAS Cable, 10M
- 4559790 X2 Vacuum Holder
- 4560114 Gafchromic Film - 10PCS

*Standard accessories vary depending on system

X-ray Test Equipment



RaySafe ThinX

X-ray Test Equipment



Discover the highest level of service and assurance for your RaySafe test equipment

Protect+ Program

An Easy Tool For Fast Results

An easy-to-use, compact multi-parameter instrument designed for fast and accurate radiation measurements. It simultaneously measures dose, dose rate, kVp, HVL, exposure time, and pulses, displaying all data on a large LCD for convenience.

Key features

- Fully automatic user interface with no buttons, setup, or range selection
- Auto ON/OFF activates device upon radiation detection
- Measures multiple parameters simultaneously: dose, dose rate, kVp, HVL, exposure time, and pulses
- Large LCD for clear and convenient data display
- Over 1 year of battery life with no maintenance required
- Compact and lightweight, ideal for radiographic applications
- Active Compensation technology automatically adjusts for beam filtration variations
- Eliminates need for manual corrections in measurements

Models

RaySafe ThinX Intra
RaySafe ThinX RAD
RaySafe ThinX RAD Dose
RaySafe ThinX RAD kVp
RaySafe ThinX Dose Unit R

X-ray Test Equipment



RaySafe DXR+

X-ray Test Equipment



An Easy Tool for X-ray/Light Field Alignment

A pocket-sized, direct X-ray ruler designed for quick and easy alignment of the light and radiation fields. It powers on automatically upon exposure and provides immediate, objective, and reproducible read-outs without the need for film development or phantom adjustments.

Key features

- Fully automatic operation with auto reset and auto power off
- Measures light and radiation field alignment accurately and instantly
- Operates down to 30 kVp for radiography and mammography applications
- Pocket-sized and easy to use with no setup required
- Metric scale visible on X-ray images for precise adjustments
- Designed to meet international regulations for field alignment within 2% SID or ± 5 mm at the chest wall for mammography
- Long battery life of 6 to 8 years
- Ideal for real-time quality checks on X-ray equipment

"The DXR is amazing – Before I had multiple steps with shots and film alignment. This is so much faster!"

- Mike Pool, Field Service Specialist

Real-time Dosimetry



RaySafe i3

Real-time Radiation Dosimeter

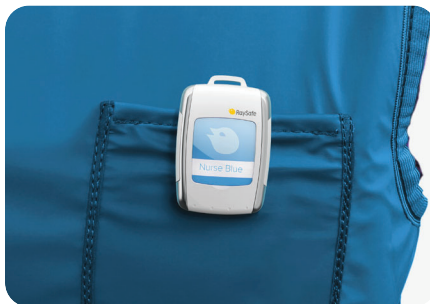


We feel better about our work and our safety. Now that we see what RaySafe real-time dosimetry does for us, we wouldn't want to work at a place that doesn't have it."

- Dawn Dowling, Technologist
Lawrence General Hospital

See and Reduce your Radiation Exposure

The RaySafe i3 is an active dosimetry system that provides immediate insights about radiation exposure, helping medical staff and physicians evaluate and take action to more effectively use radiation reduction measures.



Wear a Real-time Dosimeter to measure your exposure

The RaySafe Real-time Dosimeter measures and records radiation every second. Data is transferred wirelessly to the RaySafe Real-time Display or Hub.

The dosimeter requires minimal maintenance and can be personalized by removing its window and changing color insets.



Get visual feedback enabling quick actions

RaySafe Real-time View visualizes radiation exposure in real time using easy-to-read, color-coded bar graphs displayed on either the dedicated RaySafe Real-time Display or your main X-ray monitor. Green, yellow and red bars indicate the dose rate for up to eight individuals. Instant feedback empowers users to learn, adapt, and take immediate actions to minimize unnecessary radiation exposure.



Learn more by analyzing your dose data

RaySafe Dose Viewer is used for personal dose information viewing and administration of dosimeters. For advanced analysis, reporting and archiving of dose information, use RaySafe Dose Manager. It manages multiple dosimeters and can retrieve dose information from multiple i3 systems throughout the hospital network or via USB storage.

Service and Calibration



Protect+ Program

Precision. Performance. Peace of Mind.



Don't Compromise on Precision and Compliance.

No one knows your equipment better than we do. No one cares about its performance more than you do. With Protect+ you get total peace of mind with comprehensive coverage designed to eliminate unexpected costs.

Protect+ is engineered to provide you with the highest level of service and assurance for your test equipment. As a global leader in medical device testing, safety, and quality, Fluke Biomedical holds an ISO 17025 certification, underscoring their expertise, quality, and reliability as a partner in assurance, testing, inspection, and certification services.

	Warranty	Protect+
Term	1-Year* (from date of shipment)	Lifetime 1-Year, renewable annually
Repairs	 Manufacturer's defects only Limited to components pertaining to functionality. All other repairs are at customer's expense.	 Full coverage Defects, accidental damage, wear-and-tear
Calibration	 Calibration and repair services are available at customer's expense.	 Annually or according to the frequency specified in the user's manual of the product.
Adjustments	 Available at customer's expense.	
Annual Calibration Certificates	 Initial certificate included with purchase. Calibration certificate is available when ad-hoc service is done by a Fluke Biomedical Service Center.	 Included with calibration each year
Calibration Reminders	 You manage calibration on your own. Calibration is still a necessity for safety and compliance.	 We partner with you to keep your equipment in full working condition and compliant.
Fast-track Service Move to the front of the line		

Protect+ is only available in particular regions. Ask your local sales representative.

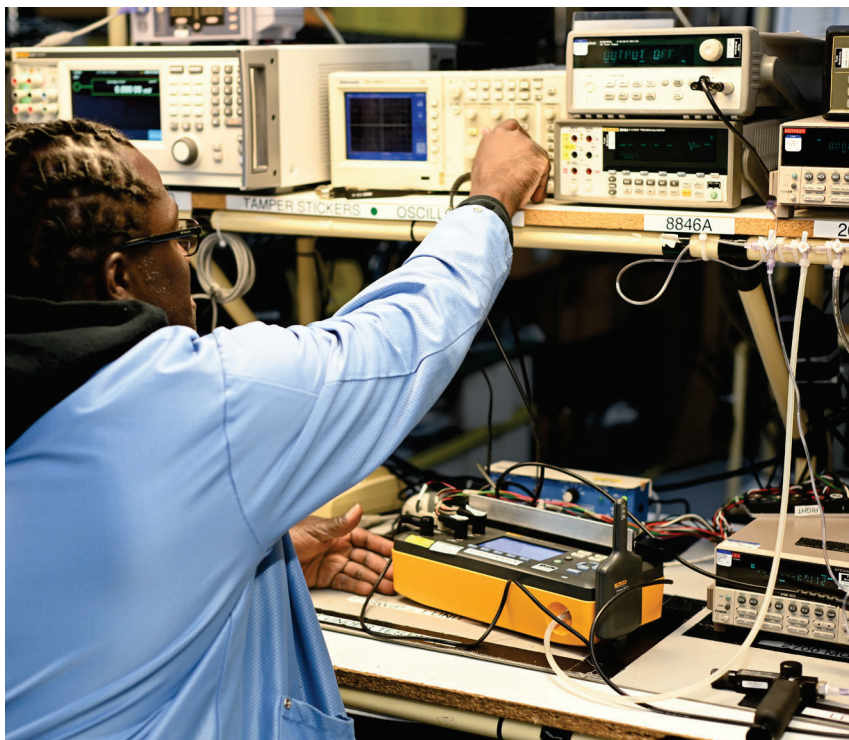
flukebiomedical.com/services/protect-plus

Service and Calibration



World-class Facilities. World-class Service.

Service and Calibration



At Fluke Biomedical and RaySafe, our state-of-the-art calibration labs and global service centers help ensure the reliability and compliance you need. Regular calibration minimizes uncertainty and maximizes uptime, allowing you to perform your job with confidence and excellence. Trust us to keep your equipment in top condition.

Why Calibrate?

Calibrating your equipment regularly is a critical part of helping ensure your instrument is still functioning correctly. You also must have many medical and radiation devices calibrated regularly to be compliant with Regulatory Bodies governing your area. Ensuring your equipment measures correctly is essential to your job performance, your facility, and the people that trust you to provide adequate medical care.

Here's why you should calibrate your equipment annually:

- Help ensure the reliability of your instrument by providing traceability and standardization of measurements
- Using a calibrated instrument reduces the uncertainty in your results cost-effective way to prevent costly repair and possible damage claims from your clients
- Help ensure compliance with Regulatory Bodies such as TJC and CMS
- Performing calibration regularly on your equipment is expected to maximize up-time

Contact information Service Center/Repair/Calibration

Fluke Biomedical USA
6920 Seaway Blvd
Everett, WA 98203
Tel: 1-440-248-9300; option 4 for calibration and repair
Toll free: 1-800-850-4608
Email: globalcal@flukebiomedical.com

Unfors RaySafe AB
Björklundabacken 10
436 57 Hovås
Sweden
Fax: +46 31 910 950
Phone: +46 31 719 97 00
Email: customerservice.se@raysafe.com



Ordering Information

Patient Simulators

PROSIM 2	4318341
PROSIM 3	4307790
PROSIM 4	3985156
PROSIM 4 - 04 AUSTRALIA	3985195
PROSIM 4 - 05 BRAZIL	3985206
PROSIM 4 - 03 JAPAN	3985188
PROSIM 4 - 01 SCHUKO	3985163
PROSIM 4 - 02 UK	3985174
PROSIM SPOT	3985658
PROSIM 8	3979409
PROSIM 8 - 01 - SCHUKO	3979411
PROSIM 8 - 02 - UK	3979427
PROSIM 8 - 03 - JAPAN	3979430
PROSIM 8 - 04 - AUSTRALIA	3979448
PROSIM 8 - 05 - BRAZIL	3979453
PROSIM 8 SPOT KIT	5238495
PROSIM 8 SPOT KIT AUS	5255933
PROSIM 8 SPOT KIT BRAZ	5255940
PROSIM 8 SPOT KIT JAPAN	5262232
PROSIM 8 SPOT KIT SCHUKO	5255916
PROSIM 8 SPOT KIT UK	5255925
PROSIM 8P SPOT KIT	6024669
PROSIM 8P SPOT KIT AUS	6022257
PROSIM 8P SPOT KIT BRAZ	6022274
PROSIM 8P SPOT KIT JAPAN	6022288
PROSIM 8P SPOT KIT SCHU	6022290
PROSIM 8P SPOT KIT UK	6022300
PROSIM 8P	6021706
PROSIM 8P-01 SCHUKO	4322364
PROSIM 8P-02 UK	6022079
PROSIM 8P-03 JAPAN	6021995
PROSIM 8P-04 AUS/CHINA	4322373
PROSIM 8P-05 BRAZIL	6021982
PS320	2583030
PS320 KIT GE CORO	2794057
PS320 KIT PHILIPS	2794069
PS410	2631276

Electrical Safety Analyzers

ESA609-US	4375516
ESA609-01-FR	4375533
ESA609-02-EUR	4375525
ESA609-03-ISR	4375578
ESA609-NA220V	4722214
ESA609-05-AUS	4375557
ESA609-06-UK	4375540
ESA609-07-SWISS	4375569
ESA609-08-THAI	4485661
ESA609-09-JAPAN	4485645
ESA609-US W/ ADAPT	4551169
ESA609-11-BRAZIL	4375584
ESA609-12-INDIA	4375591
ESA609-13-S AFRICA	5261534
ESA609-14-DEN	5276110
ESA620-01 FR	3051390
ESA620-02 EUR	3051408
ESA620-03 ISR	3051413
ESA620 US	2785725
ESA620-05 AUS	3051436
ESA620-06 UK	3051449
ESA620-07 SWI	3051451
ESA620-08 THAI, 230V	3345247
ESA620-09 120V BRAZ	3965097
ESA620-10 230V BRAZ	3965106
ESA620-11 INDIA	4287983
ESA620-13 SOUTH AFRICA	5261529
ESA620-14 DENMARK	5303107
ESA710-US	5577713
ESA710-02-NA220	6028740
ESA710-03-NEMA615	6046116
ESA712-US	6046003
ESA712-01-FR	6046042
ESA712-02-EUR	6045879
ESA712-03-ISR	6046035
ESA712-04-DEN	6046019
ESA712-05-AUS	6045867
ESA712-06-UK	6045898
ESA712-07-SWISS	6045908
ESA712-08-THAI	6046026
ESA712-09-JAPAN	6046192
ESA712-10-NA220	6046163
ESA712-11-BRAZIL	6046205
ESA712-12-INDIA	6046057
ESA712-14-NEMA615	6046171
ESA712-13-S AFRICA	6045996
ESA715-US	5577854
ESA715-01-FR	5577724
ESA715-02-EUR	5577736
ESA715-03-ISR	5577749

ESA715-04-DEN	5577846
ESA715-05-AUS	5577751
ESA715-06-UK	5577760
ESA715-07-SWISS	5577772
ESA715-08-THAI	5577785
ESA715-09-JAPAN	5577797
ESA715-10-NA220	5577805
ESA715-11-BRAZIL	5577810
ESA715-12-INDIA	5577822
ESA715-14-NEMA615	6046090
ESA715-13-S AFRICA	5577831

Gas Flow Analyzers

MAX02 PLUS AE	2511920
VT650	4920340
VT650 W/ ACCULUNG	5067887
VT650/ACCULUNGII	4962481
VT900A	5014711
VT900A W/ACCULUNG	5034254
VT900A/ACCULUNG II	5014730
VT900A/VAPOR	5014727
VT900A/VAPOR/ACCU	5067879
VT900A/VAPOR/ACCU II	5067868

Defibrillator Analyzers

IMPULSE 6000D	2811928
IMPULSE 6000D-01 SCHUKO	3077031
IMPULSE 6000D-02 UK	3077046
IMPULSE 6000D-03 JAPAN	3077054
IMPULSE 6000D-04 AUSTRALIA	3085270
IMPULSE 6000D-05 INDIA	3085281
IMPULSE 6000D-06 BRAZIL	3938219
IMPULSE 7000DP	2811919
IMPULSE 7000DP-01 SCHUKO	3077005
IMPULSE 7000DP-02 UK	3077010
IMPULSE 7000DP-03 JAPAN	3077022
IMPULSE 7000DP-04 AUSTRALIA	3085296
IMPULSE 7000DP-05 INDIA	3085308
IMPULSE 7000DP-06 BRAZIL	3938228
IMPULSE 7010 Load Box	3158544
IMPULSE 7000DP KIT	5238524
IMPULSE 7000DP KIT AUS	5255893
IMPULSE 7000DP KIT INDIA	5255902
IMPULSE 7000DP KIT JAPAN	5255887
IMPULSE 7000DP KIT SCHUKO	5255868
IMPULSE 7000DP KIT UK	5255879



Ordering Information

Infusion Device Analyzers

IDA-1S	4468525
IDA-6/1	5329703
IDA-6/2	5329715
IDA-6/4	5329726
IDA-6/M	5329817

Electrosurgery Analyzers

QA-ES III - 06 US	4632363
QA-ES III - 07 SCHUKO	4632374
QA-ES III - 08 UK	4632388
QA-ES III - 09 JAPAN	4632395
QA-ES III - 10 AUSTRALIA	4632407
QA-ES III - 11 BRAZIL	4632418
QA-ES III - 13 BRAZIL, 230	4634405
QA-ES III - 15 INDIA	4777977

Neonatal Test Equipment

INCUII NO BT KIT	5238513
INCUII BT KIT	5238508
INCUII-NO BT	4722635
INCUII-BT	4722620
DALE301	2249200

Digital Pressure Meter

DPM2PLUS	2249768
----------	---------

Portable Oscilloscopes

190M-2-III	5282536
190M-4-III	5282549

Radiation Survey Meters

451B-RYR	2550217
451B-RYR-SS	3568706
451B-DE-SI-RYR	3267659
451P-DE-SI-RYR	2550239
451P-RYR	2550256
451P-RYR-SS	3568761
452 AIR KERMA KIT	5082295
452 AMBIENT KIT	5082288
452 KIT	5082301

X-ray Test Equipment

DXR+	4558862
THINX INTRA	4559186
THINX RAD	4559199
THINX RAD DOSE	4559213
THINX RAD KVP	4559208
X2 SOLO DENT	5080827
X2 SOLO DENT PLUS	6113198
X2 SOLO DENT PLUS WITH MAS	6113200
X2 SOLO DENT WITH MAS	5080811
X2 SOLO R/F	5080809
X2 SOLO R/F WITH MAS	5080792
X2 SOLO R/F WITH MAS AND HVL	5080853
X2 SOLO R/F WITH MAS, HVL AND FLEXISTAND	5216000
X2 SOLO R/F + FLEXISTAND BUNDLE CHINA	5343635
X2 SOLO R/F MAS + FLEXISTAND BUNDLE CHINA	5343620
X2 BASE UNIT	5347264
X2 BASE UNIT MAS	5347273
X2 CT	5080588
X2 CT, MAS	5080574
X2 LIGHT	5080714
X2 LIGHT, MAS	5080706
X2 MAM	5080542
X2 MAM, MAS	5080539
X2 PRESTIGE R/F, M, C, L	5080640
X2 PRESTIGE R/F, M, C, L, MAS	5080633
X2 PRESTIGE R/F, M, C, S	5080750
X2 PRESTIGE R/F, M, C, S, MAS	5080745
X2 PRESTIGE R/F, M, L, S	5080777
X2 PRESTIGE R/F, M, L, S, MAS	5080761
X2 R/F	5080521
X2 R/F, MAM	5080602
X2 R/F, MAM, MAS	5080595
X2 R/F, MAS	5080517
X2 SURVEY	5080738
X2 SURVEY, MAS	5080723
X2 VOLT	5307103
X2 VOLT, MAS	5307115

Real-Time Staff Dosimetry

i3 DOSIMETER 866.0 MHZ	5293222
i3 DOSIMETER 868,3 MHZ	4923909
i3 DOSIMETER 918,3 MHZ	4923911
i3 DOSIMETER BUNDLE 866.0 MHZ	5304537
i3 OSD PACKAGE 866.0 MHZ	5293302
i3 OSD PACKAGE 868.3 MHZ	5131252
i3 OSD PACKAGE 918.3 MHZ	5131265
i3 OSD PACKAGE 927.9 MHZ	5131276
i3 PACKAGE 866.0 MHZ	5293279
i3 PACKAGE 866.0 MHZ WITH DOSE MANAGER	5293287
i3 PACKAGE 868,3 MHZ	5081006
i3 PACKAGE 868,3 MHZ WITH DOSE MANAGER	5081023
i3 PACKAGE 918,3 MHZ	5081014
i3 PACKAGE 918,3 MHZ WITH DOSE MANAGER	5081038
i3 PACKAGE 927.9 MHZ	5129157
i3 PACKAGE 927.9 MHZ WITH DOSE MANAGER	5129169
i3 PACKAGE CHINA 868.3 MHZ	5111921
i3 PACKAGE CHINA 868.3 MHZ WITH DOSE MANAGER	5111956
i3 DOSIMETER BUNDLE 868.3 MHZ	5274858
i3 DOSIMETER BUNDLE 918.3 MHZ	5274873
i3 DOSIMETER BUNDLE 927.9 MHZ	5274886

Protect+ Service Program

For total peace of mind with comprehensive coverage designed to eliminate unexpected costs, please contact our customer support team.

**FLUKE®****Biomedical**

Learn anytime, anywhere

For no-cost BMET training, go to
www.flukebiomedical.com/knowledge-center/advantage-training

Visit www.flukebiomedical.com to download product spec sheets, application notes and white papers, view webinars and how-to videos and more.



Fluke Health Solutions

We empower our everyday heroes to focus only on protecting lives.

Fluke Biomedical
6920 Seaway Boulevard
Everett, WA 98203

For more information, contact us at:
(800) 850-4608 or Fax (440) 349-2307
sales@flukebiomedical.com
flukebiomedical.com

Unfors RaySafe AB
Björklundabacken 10
436 57 Hovås
Sweden

For more information, contact us at:
+46 31 719 97 00 or Fax +46 31 910 950
customerservice.se@raysafe.com
raysafe.com



©2026 Fluke Health Solutions.
Specifications subject to change without notice.
2/2026 6011634d-en

Modification of this document is not permitted without written permission from Fluke Corporation.