

medTester 5000C

Automated Biomedical Equipment Test System

Technical Data



The medTester 5000C is an automated system designed for electrical safety testing and performance verification. It is compatible with most Fluke Biomedical testing devices and a majority of the popular Computerized Maintenance Management Systems (CMMS) in the US. The medTester 5000C provides a completely integrated solution for standardized and streamlined testing and record keeping.

The medTester 5000C can accept inventory and equipment testing procedures from the CMMS and control Fluke Biomedical testing devices in the field. The tool automatically runs all the tests and stores detailed results. Technicians can either print data or transfer it to CMMS for simple, automatic record keeping and exceptional documentation. The medTester 5000C automated system can provide up to a 50-percent saving in time and money over manual testing.

Modules are available for each Fluke Biomedical testing device that the medTester 5000C controls, for expanded capability, according to specific needs.

The medTester 5000C also serves as a stand-alone device to run integrated automated or manual electrical safety tests. The tool comes with ten preprogrammed and five user-programmable electrical-safety-testing sequences for one-button testing of virtually every piece of equipment in the hospital.

Key features

- Easy verification of biomedical equipment to manufacturer's specifications
- Ten preprogrammed and five user-programmable electrical-safety-testing sequences
- Convenient transfer of equipment inventory and testing procedures from CMMS
- Module options to automate testing of most Fluke Biomedical testing devices
- Automatic storage of detailed test results for printing or transfer to CMMS
- Compliant with ANSI/AAMI (1993) and NFPA-99 (2005) standards
- 20 A device testing with GFCI protection
- Wedge hardware option for extended serial port use, optional PC-style keyboard and barcode scan gun

Specifications

Modes of operation		
Fully equipped, with four operational modes	Manual, autosequence, medCheck, and remote control	
Input power supply	Line-voltage/frequency input	115 V ac \pm 10%/60 Hz
	Test-receptacle type	USA, 20 A
System/line voltage		
Range (full scale)	200 V	
Accuracy	\pm 5% of range \pm 1 LSD	
Resolution	0.1 V	
Equipment current		
Range (full scale)	0 A to 20 A	
Accuracy	\pm 5% of range	
Resolution	0.01 A	
Ground resistance		
Range (full scale)	0 Ω to 2 Ω	
Accuracy	\pm 1% of range	
Resolution	0.001 Ω (1 m Ω)	
Current source	100 mA dc	
Measurement type	True four-terminal technique	
Test leads	Kelvin (2) insulated clip	
Leakage-current/voltage gradient		
Ranges (full scale)	200 μ A and 2000 μ A or mV	
Accuracy	\pm 1% of reading dc + 3 LSD from 48 Hz to 1 kHz \pm 2.5% of reading + 3 LSD from 1 KHz to 100 KHz \pm 5% + 3 LSD from 100 KHz to 1Hz	
Resolution	0.1 μ A or 0.1 mV	
Measurement type	True-rms (autoranging) (AC + DC or dc-only response)	
Test-load selection	ANSI/AAMI ES1 1993	
Test-load impedance	1000 Ω \pm 1% at dc	
Isolation test		
Test selection (full scale)	Patient leads to ground	
Lead combinations	All leads; or individual leads – RL, RA, LA, LL, and V1/V6 (V1 through V6 tested as a single lead)	
Available current	Limited by internal 120 k Ω resistor	
Resolution	0.1 μ A	
Ranges (full scale)	200 μ A and 2000 μ A	
ECG binding posts		
10 posts, American Hospital Association color-coded RL, RA, LA, LL, V1-V6. Compatible with both 3.2 mm and 4 mm pins and disposable snap electrodes		

Performance waveforms		
ECG performance test waves (lead I, Vp-p)	Square wave	2 Hz, 1 mV
	DC pulse	4 s, 1 mV
	Sine wave	0.5 Hz, 10 Hz, 40 Hz, 60 Hz, and 100 Hz, 1 mV
	Square wave	1 kHz, 1 mV
	Triangle	2 Hz, 1 mV
	CMRR	60 Hz sine wave with 1 kΩ imbalance in LA
	Normal sinus	30 BPM, 60 BPM, 120 BPM, and 240 BPM
Arrhythmias		
Atrial fibrillation; second-degree A-V Block, Type 1; premature atrial contractions; missed beat at 80 BPM and 120 BPM; PVC 1 left; PVC 2 right; multifocal PVCs; PVC 1, R on T; A pair of PVCs; run of 5 PVCs; run of 11 PVCs, MF; right bundle branch block; ventricular tachycardia; ventricular fibrillation; asystole		
Environmental requirements		
Operating temperature	15 °C to 55 °C (59 °F to 95 °F)	
Storage temperature	0 °C to 50 °C (32 °F to 122 °F)	
General information		
Clock/date functions	Time and date formats	24 hour (hh:mm:ss) and mm/dd/yy
Display characteristics	Type	80-character, alphanumeric liquid crystal display (LCD)
	Size	2 lines x 40 characters
	Backlight	LED with adjustable brightness control
Dimensions (LxWxH)	25.4 cm x 35 cm x 10.2 cm (10 in x 13.8 in x 4 in)	
Weight	5 kg (11 lb)	



Ordering information

Models

5000C medTester 5000C (20 A, 115 V ac)
5000C/B medTester 5000C/B, CMMS Connectivity Bundle

medTester 5000C

Standard accessories

9508-0272 Operators Manual
9530-0045FG Soft Vinyl Accessory Pouch
9501-0032FG Two Kelvin Cables
9503-0004FG Two Ground-Pin Adapters

medTester 5000C/B

Standard accessories

5000C medTester 5000C
5000C-02 RS-232/Printer Module
5000C-03 100-Record Storage Module
5000C-04 Expanded Record Storage Module
5000C-06 Data-Transfer Module
5000C-07 medCheck Module
5000C-10 CMMS Interface Module

Optional accessories

5000C-02 Performance Enhancement Module 2: RS-232 Printer
5000C-03 Performance Enhancement Module 3: 100 Records

5000C-04 Performance Enhancement Module 4: Expanded Memory
5000C-05 Performance Enhancement Module 5: Waves/Extended Test
5000C-06 Performance Enhancement Module 6: Data Transfer
5000C-07 Performance Enhancement Module 7: medCheck
5000C-08 Performance Enhancement Module 8: Defibrillator
5000C-09 Performance Enhancement Module 9: IV Pump
5000C-10 Performance Enhancement Module 10: CMMS Interface
5000C-11 Performance Enhancement Module 11: ESU
5000C-12 Performance Enhancement Module 12: SpO2
5000C-13 Performance Enhancement Module 13: Pacer
5000C-14 Performance Enhancement Module 14: NIBP
5000C-WEDGE Wedge Adapter (eight 25 in serial ports, as well as AT or PS/2 keyboard port)
9513-0212 Mini PC-Style External Keyboard (83 keys, AT or PS/2, wedge adapter required)
9513-0221 Laser Barcode Gun (wedge adapter required)
5000C-PRINTER 5000C-PRINTER, Brady TLS Test Label Printer Kit medTester 5000C V 5.10 or greater and 115 V ac only
9530-0066 Multipurpose Hard-sided Carrying Case for medTester 5000C without wedge adapter
Call Interface Cables for specific test-device connection

About Fluke Biomedical

Fluke Biomedical is the world's leading manufacturer of quality biomedical test and simulation products. In addition, Fluke Biomedical provides the latest medical imaging and oncology quality-assurance solutions for regulatory compliance. Highly credentialed and equipped with a NVLAP Lab Code 200566-0 accredited laboratory, Fluke Biomedical also offers the best in quality and customer service for all your equipment calibration needs.

Today, biomedical personnel must meet the increasing regulatory pressures, higher quality standards, and rapid technological growth, while performing their work faster and more efficiently than ever. Fluke Biomedical provides a diverse range of software and hardware tools to meet today's challenges.

Fluke Biomedical Regulatory Commitment

As a medical test device manufacturer, we recognize and follow certain quality standards and certifications when developing our products. We are ISO 9001 and ISO 13485 medical device certified and our products are:

- CE Certified, where required
- NIST Traceable and Calibrated
- UL, CSA, ETL Certified, where required
- NRC Compliant, where required

Fluke Biomedical.

Better products. More choices. One company.

Fluke Biomedical

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