



# CARDIOTECH GT-450

EKG Machine

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Auto Lead Placement  
Detection

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10.1" Touch Screen &  
On-screen Toolbar with  
Customizable Hotkeys

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Waterproof Keys for  
Effortless Sterilization

**File Export Options:** PDF, JPG, FDA XML,  
DICOM ECG Waveform/Worklist, HL7

**Leading-Edge Technology:**  
ST-view (Intuitive Display of ST-segment) LAN/WIFI

# Maximize Your Workflow

The CardioTech GT-450 EKG Machine provides a comprehensive set of cardiac diagnosis tools, delivering cutting-edge technologies to support your clinical decisions. The GT-450 is equipped with an exquisite glass-covered surface which supports easy cleaning and disinfection. Powerful hardware and soft tools ensure excellent performance in each practice.

## Features

- 1000 ECG test storage
- Pacemaker detection
- Auto arrhythmia detection
- 12-lead standard resting ECG
- 9-lead resting ECG tailored for neonates
- Vector ECG & timed vector ECG (VCG&TVCG)
- Signal-average ECG (SAECG)
- Heart Rate Variability (HRV)



## Exceptional Diagnostic Support

### Long-time Sampling

- To assist with pre-treatment diagnosis or post-treatment evaluations, an extended practice session of 1800 seconds can be utilized.

### Enhancing ECG Accuracy

- Innovative color visualization for precise lead placement detection.

### Auto Arrhythmia Detection

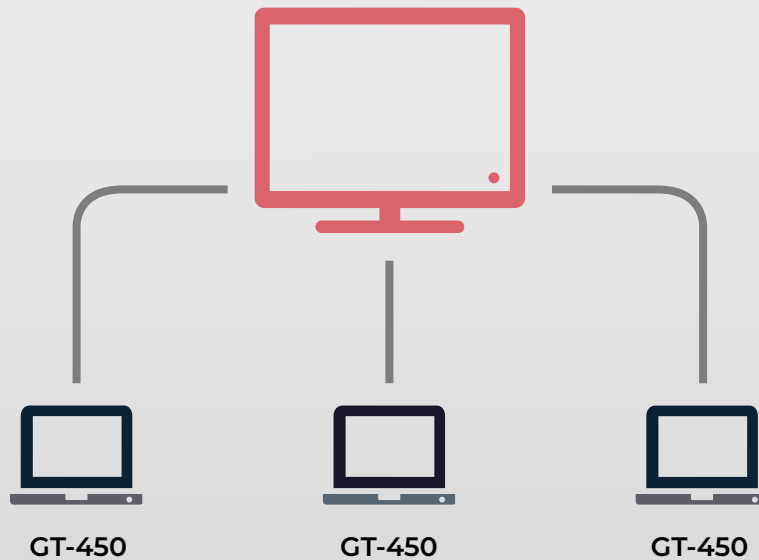
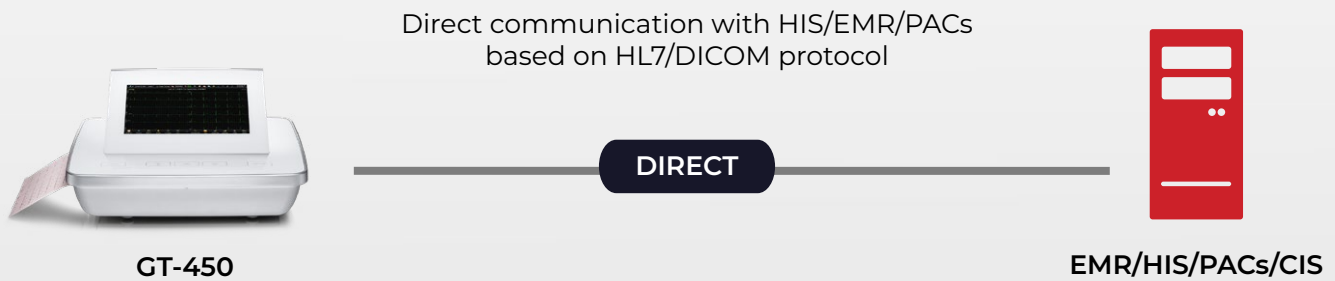
- Segments of arrhythmia traces can be emphasized on display, with automatic saving strips for further analysis.



# On-Screen Diagnosis

Designed as an “All-in-One” workstation, the GT-450 allows a complete paperless workflow with all measurements and diagnosis on screen, correctly and coherently. Any waveform segments can be amplified and measured. Any report can be edited and confirmed. Any two reports can be selected and compared.

# Streamlined Data Connectivity



Workflow enhancement with access to HIS/EMR/PACs through SE-1515 Data Management System

# Specifications

## PHYSICAL SPECIFICATION

Device Dimension:  
400 mm×360 mm×90 mm

Weight: 6.5 kg

## DISPLAY

Screen Size: 10.1"  
Resolution: 280×800 multicolor  
LCD Screen The display can be flipped  
25 degrees clockwise.

## POWER SUPPLY

Mains Supply:

Operating Voltage  
= 100V-240V~  
Operating Frequency  
= 50Hz/60Hz  
Input Current  
= 0.9A ~ 0.4A

Internal Lithium Battery:

Typical Capacity: 2500 mAh  
100% Recharge: 3 hours  
90% Recharge: 2.5 hours  
Typical Capacity: 5000 mAh  
100% Recharge: 6 hours  
90% Recharge: 5 hours

When the battery is fully charged  
and GT-450 operates at 23°C (±3°C),  
the performance is as follows.

## RECORDING

Recorder:

Thermal dot-matrix recorder  
Printing Density:  
8 dots per mm / 200 dots per  
inch (amplitude axes)  
40 dots per mm / 1000 dots per  
inch (time axes, @ 25 mm/s)

Recorder Paper:

Folded thermal paper: 210  
mm×295 mm×100 pages  
Folded thermal paper: 215  
mm×280 mm×100 pages  
Folded thermal paper: 210  
mm×295 mm×200 pages

Effective Width:

210 mm

Paper Speed:

5 mm/s, 6.25 mm/s, 10 mm/s,  
12.5 mm/s, 25 mm/s, 50 mm/s  
(±3%)

## HR

HR Range: 30 bpm ~300 bpm  
Accuracy: ±1 bpm

## EKG

Leads: 9 or 12 standard leads  
Acquisition Mode:  
9 or 12 leads acquisition simultaneously  
Analog-to-Digital Converter:

Sampling Frequency:  
64,000 /sec/channel

A/D:

24 bits

Resolution:

0.1192 V/LSB

Time Constant:

5s

Frequency Response:

0.01~350Hz(-3dB)

Gain:

1.25 mm/mV, 2.5 mm/mV, 5  
mm/mV, 10 mm/mV, 20  
mm/mV, 10/5 mm/mV, AGC  
(mm/mV), ±5%

Input Impedance: 100 M (10Hz)

Input Circuit Current: 0.01 A

Input Voltage Range: ±5 mVpp

Calibration Voltage: 1 mV±2%

DC Offset Voltage: ±900 mV, ±5%

Minimum Amplitude: 20 Vp-p (10Hz)

Noise: 12.5 Vp-p

Multichannel crosstalk: ≤0.5 mm

## PACEMAKER DETECTION

Amplitude: ±500 V to ±700mV

Width: 30 s to 2.0ms

Sampling Frequency:

80,000 /sec/channel, Rhythm Lead

## WIFI (OPTION)

Radio Technology: 802.11 a/b/g/n

Frequency Range:

FCC: 2412 MHz ~ 2462 MHz, 5180  
MHz ~ 5825 MHz

CE: 2412 MHz ~ 2472 MHz, 5180  
MHz ~ 5825 MHz

Modulation:

DBPSK, DQPSK, CCK, BPSK,  
QPSK, 16-QAM, 64-QAM

Output Power:

<20 dBm (CE requirement:  
detection mode - RMS)

<30 dBm (FCC requirement:  
detection mode - peak power)

Transmit rate:

IEEE 802.11b: 1 Mbps to 11 Mbps

IEEE 802.11g: 6 Mbps to 54 Mbps

IEEE 802.11n: 6.5 Mbps to 72.2 Mbps

IEEE 802.11a: 6 Mbps to 54 Mbps

Bandwidth:

2.4 GHz & 5 GHz

20 MHz

## 4G (OPTION)

Bands:

FDD LTE: Band 1, Band 2,  
Band 3, Band 4, Band 5,  
Band 7, Band  
8, Band 20, all bands with  
diversity

WCDMA/HSDPA/H  
SUPA/HSPA+: Band 1, Band  
2, Band 5, Band  
8, all bands with diversity

GSM/GPRS/EDGE: 850  
MHz/900MHz/1800  
MHz/1900 MHz

Rate:

GPRS: UL 85.6 kbit/s; DL  
85.6 kbit/s  
EDGE: UL 236.8 kbit/s; DL  
236.8 kbit/s  
WCDMA CS: UL 64 kbit/s;  
DL 64 kbit/s  
WCDMA PS: UL 384 kbit/s;  
DL 384 kbit/s  
HSPA+: UL 5.76 Mbit/s; DL  
21.6 Mbit/s  
DC-HSPA+: UL 5.76 Mbit/s;  
DL 42 Mbit/s  
LTE FDD: UL 50 Mbit/s; DL  
150 Mbit/s@20M BW cat4