



# CARDIOTECH GT-8X/10X/12X

## Patient Monitors



Primary Care



ASC



Dental

### Optional Features & Parameters:

6/12 Lead ECG, G2 CO2, Cardiac Output (GT-12X), Thermal Recorder, Nurse Call (with CMS), Defibrillator Synchronization

### Standard Features & Parameters:

3/5 Lead ECG, HR, RESP, SpO2, NIBP, PR, 2-Temp, Touch Screen, WiFi, USB, VGA Output, 8GB Internal Memory, IBP Slots

# Optimized Performance

Discover the GT-8X/10X/12X, sophisticated and modern units designed to deliver extensive monitoring capabilities across diverse healthcare settings. The X Series showcases a high-resolution color display, offering crisp and detailed vital sign information for effortless interpretation.

Boasting a user-friendly interface, portability, and robust functionality, these patient monitors stand as indispensable tools in contemporary healthcare facilities. Elevate patient safety and enhance overall clinical outcomes with the advanced technology of the X Series patient monitors.

## Features

- 240 Hour trend review
- 1200 NIBP measurements
- 120 Seconds frozen waveform
- Accessories for all patient types
- User-friendly interface for easy operation
- Comprehensive connectivity options for easy data transfer
- High-precision vital signs monitoring with extensive data storage
- G2 CO2 water traps can be used with male luer-lock cannula
- Advanced patient monitoring algorithm with alerts and notifications



High-Resolution Touch Screen



Bi-directional Communications with Central Monitoring System



High-Resolution Touch Screen

# What's the Difference?

## GT-8X Patient Monitor

- ✓ Optional CO2
- ✓ 8" Touch Screen
- ✗ Optional Dual IBP Slots
- ✓ WiFi
- ✗ Optional Cardiac Output

## GT-10X Patient Monitor

- ✓ Optional CO2
- ✓ 10" Touch Screen
- ✓ Optional Dual IBP Slots
- ✓ WiFi
- ✗ Optional Cardiac Output

## GT-12X Patient Monitor

- ✓ Optional CO2
- ✓ 12" Touch Screen
- ✓ Optional Dual IBP Slots
- ✓ WiFi
- ✓ Optional Cardiac Output



# Proprietary Algorithms & Technologies

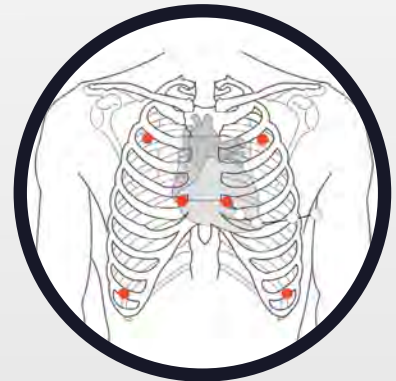
## EDAN G2 CO2 (Sidestream)

- Superior water trap design for accurate monitoring
- iCARB™ algorithm with intelligent CO2 pseudo wave identification technology
- Sampling rate as low as 50ml/min



## ECG

- 12-lead ST analysis optional with additional internal module upgrade
- Automatic lead type detection
- Industry leading iSEAP™ algorithm with auto-detection of 33 types of arrhythmias
- SEMIP® algorithm with 208 ECG findings over age/gender diversities



## NIBP

- Dual dust filter design makes no blockage inside and provides accurate NIBP readings.
- Unique cleaning mode for routine maintenance.
- iCUFSTM algorithm with smart deflation technology.

## SPO2

- iMAT algorithm with motion resistance and low perfusion resistance performance.
- Reference reading of Perfusion Index (PI) from 0 to 10 according to perfusion changes.
- Simultaneous measurements of SpO2 and NIBP of the same limb.



# Specifications

## PHYSICAL SPECIFICATION

GT-8X  
Dimensions:  
236 mm(W)×236 mm (H)×147 mm (D)  
Weight: approx. < 2.4 kg

GT-10X  
Dimensions:  
261 mm (W)×246 mm (H)×146 mm (D)  
Weight: approx. < 2.8 kg

GT-12X  
Dimensions:  
306 mm (W)×309 mm (H)×151 mm (D)  
Weight: approx. < 3.5 kg

## DISPLAY

GT-8X  
Color TFT LCD: 8"  
Resolution: 800x600  
Waveforms Displayed: Up to 13

GT-10X  
Color TFT LCD: 10"  
Resolution: 800x600  
Waveforms Displayed: Up to 13

GT-12X  
Color TFT LCD: 12"  
Resolution: 800x600  
Waveforms Displayed: Up to 13

## EKG

Lead Mode: 3 Electrodes: I, II, III  
5 Electrodes: I, II, III, aVR, aVL, aVF, V  
6 Electrodes: I, II, III, aVR, aVL, aVF, and leads corresponding to Va Vb.

10 Electrodes:  
I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6  
Sweep Speed:  
6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s  
CMRR:

Diagnosis: > 95 dB  
Diagnosis I: > 105 dB (when

Notch is turned on)  
Monitor: > 105 dB  
Surgery: > 105 dB  
Enhanced: > 105 dB  
Customized: > 105 dB  
(Low-pass Filter < 40Hz) >95 dB  
(Low-pass Filter > 40 Hz)  
Sampling Frequency: 1000 Hz  
Range:

ADU: 15 bpm to 300 bpm  
PED/NEO: 15 bpm to 350 bpm

Accuracy: ±1% or 1 bpm  
Resolution: 1 bpm  
Sensitivity: 300 VPP

## SPO2

Measuring Range: 0% to 100%  
Resolution: 1%  
Data Update Period: 1 s  
Accuracy:  
Adult /Pediatric 2% (70% to 100% SpO2)  
Undefined: (0% to 69% SpO2)  
Neonate: 3% (70% to 100% SpO2) Undefined:  
(0% to 69% SpO2)  
Sensor:

Red Light (660+/-3) nm I  
Infrared Light (905+/-10) nm  
Emitted Light Energy: < 15 mW

PI:  
Measuring Range: 0-10, invalid  
PI value is 0.  
Resolution: 1

## RESP

Method:  
Impedance between RA-LL, RA-LA  
Measurement lead:  
Options are lead I and II. The default is Lead II.  
Calculation Type: Manual, Automatic  
Baseline Impedance Range: 200 to 2500  
(with ECG cables of 1 K resistance)

Measuring Sensitivity:  
Within the baseline  
impedance range: 0.3  
Waveform Band width:  
0.2 Hz to 2.5 Hz (-3 dB)  
Respiration Excitation Waveform: Sinusoid,  
45.6 kHz (10%), < 350 A RR Measuring  
Range:  
Adult: 0 rpm to 120 rpm  
Neo/Ped: 0 rpm to 150 rpm  
Resolution: 1 rpm  
Accuracy:  
Adult: 6 rpm to 120 rpm: 2 rpm 0  
rpm to 5 rpm: not specified  
Neo/Ped 6 rpm to 150 rpm: 2 rpm 0  
rpm to 5 rpm: not specified  
Gain Selection: 0.25, 0.5, 1, 2, 3, 4, 5  
Sweep: 6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s  
No RR Detected Delay:  
10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s;  
default value is 20 s.

## TEMP

Technique: Thermal resistance  
Position: Skin, oral cavity, rectum Measure  
Parameter: T1, T2, TD(the absolute value of  
T2 minus T1)  
Channel: 2  
Sensor Type:  
YSI-10K and YSI-2.252K Unit: °C, °F  
Measuring Range: 0 °C to 50 °C (32 °F to 122 °F)  
Resolution: 0.1 °C (0.1 °F)  
Accuracy: 0.3 °C  
Refresh Time: Every 1 s to 2 s  
Temperature Calibration:  
At an interval of 5 to 10 minutes  
Measuring Mode: Direct Mode  
Transient Response Time: 30 s

## NIBP

Technique: Oscillometry  
Mode: Manual, Auto, Continuous, Sequence  
Measuring Interval in AUTO Mode  
(unit: minutes): 1/2/3/4/5/10/15/30  
/60/90/120/180/240/360/480 and User Define  
Continuous: 5 min, interval is 5 s  
Measuring Parameter: SYS, DIA, MAP, PR  
Pressure Unit: kPa, mmHg, cmH2O  
Measuring Range:

Adult Mode:  
SYS: 25 mmHg to 290 mmHg  
DIA: 10 mmHg to 250 mmHg  
MAP: 15 mmHg to 260 mmHg  
Pediatric Mode:  
SYS: 25 mmHg to 240 mmHg  
DIA: 10 mmHg to 200 mmHg  
MAP: 15 mmHg to 215 mmHg  
Neonatal Mode:  
SYS: 25 mmHg to 140 mmHg  
DIA: 10 mmHg to 115 mmHg  
MAP: 15 mmHg to 125 mmHg

Alarm Type: SYS, DIA, MAP, PR (NIBP)  
Cuff Pressure Measuring Range:  
0 mmHg to 300 mmHg  
Pressure Resolution: 1 mmHg  
Maximum Mean Error: ±5 mmHg  
Maximum Standard Deviation: 8 mmHg  
Maximum Measuring Period:  
Adult/Pediatric: 120 s  
Neonate: 90 s  
Typical Measuring Period: 20 s to 35 s  
(depend on HR/motion disturbance)

## IBP

Complies with IEC 60601-2-34: 2011.  
Technique Direct invasive measurement  
Channel 2 channels  
Measuring Range  
Art (0 to +300) mmHg  
PA/PAWP (-6 to +120) mmHg  
CVP/RAP/LAP/ICP (-10 to +40) mmHg  
PI/P2 (-50 to +300) mmHg  
Resolution 1 mmHg  
Accuracy (not including sensor) ± 2 % or ±1  
mmHg, whichever is greater  
ICP: 0 mmHg to 40 mmHg: ± 2 % or ±1  
mmHg, whichever is greater;  
-10 mmHg to -1 mmHg: undefined

Pressure Unit kPa, mmHg, cmH2O  
Pressure sensor Sensitivity 5 V/V/mmHg  
Impedance  
Range: 300 to 3000  
Filter DC~ 12.5 Hz; DC~ 40 Hz  
Zero Range: ± 200 mmHg  
Pressure Calibration Range  
IBP (excluding ICP) 80 mmHg to 300 mmHg  
ICP 10 mmHg to 40 mmHg  
Volume Displacement: 17.4 x 104 mm3 / 100 mmHg

CO2  
Complies with ISO 80601-2-55: 2011.  
Intended Patient: Adult, pediatric, neonatal  
Measure Parameters: EtCO2, FICO2, AwRR  
Unit: mmHg, %, kPa Measuring  
Range:  
EtCO2 0 mmHg to 150 mmHg (0 % to 20%)  
FICO2 0 mmHg to 50 mmHg  
AwRR 2 rpm to 150 rpm

Resolution:  
EtCO2 1 mmHg  
FICO2 1 mmHg  
AwRR 1 rpm

Accuracy EtCO2:  
± 2 mmHg, 0 mmHg to 40  
mmHg Typical conditions:  
Ambient temperature: (25 ± 3) °C  
Barometric pressure: (760 ± 10) mmHg  
Balance gas: N2  
Sample gas flowrate: 100 ml/min  
± 5% of reading, 41 mmHg to 70 mmHg  
± 8% of reading, 71 mmHg to 100 mmHg  
± 10% of reading, 101 mmHg to 150 mmHg  
± 12% of reading or ± 4 mmHg

AwRR ± 1 rpm  
Sample Gas Flowrate 70 ml/min  
or 100 ml/min (default), accuracy: ±15 ml/min  
Warm-up Time Display reading within 20 s; reach to the  
designed accuracy within 2 minutes.  
Rise Time < 400 ms (with 2 m gas sampling tube, sample  
gas flowrate: 100 ml/min) < 500 ms (with 2 m gas  
sampling tube, sample gas flowrate: 70 ml/min)  
Response Time < 4 s (with 2 m gas sampling tube,  
sample gas flowrate: 100 ml/min/70 ml/min)  
Work Mode Standby (default), measure  
O2

Compensation  
Range: 0% to 100%  
Resolution: 1%  
Default: 16%

N2O  
Compensation  
Range: 0% to 100%  
Resolution: 1%  
Default: 0%

AG  
Compensation  
Range: 0% to 20%  
Resolution: 0.1%  
Default: 0%

Humidity Compensation Method ATPD (default), BTPS  
Barometric Pressure Compensation Automatic (The change  
of barometric pressure will not add additional errors to the  
measurement values.)

Zero Calibration Support:  
Calibration Support (It is recommend to be  
operated by trained personal.)

Alarm: EtCO2, FICO2, AwRR  
No RR  
Detected Delay:  
10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s; default value is 20 s.

Data Sample Rate: 100 Hz EtCO2  
Change!  
AwRR 80 rpm, meet the accuracy  
mentioned above;  
AwRR > 80 rpm, EtCO2 descends 8%;  
AwRR > 120 rpm, EtCO2 descends 10%;  
with 2 m gas sampling tube, sample  
gas flowrate: 100 ml/min)  
AwRR 60 rpm, meet the accuracy mentioned above;  
AwRR > 60 rpm, EtCO2 descends 8%;  
AwRR > 90 rpm, EtCO2 descends 10%;  
AwRR > 120 rpm, EtCO2 descends 15%;  
with 2 m gas sampling tube, sample gas flowrate: 70  
ml/min