

***ELK-1500DX & 1200DX  
PLUG-IN TYPE  
PATIENT MONITOR***



# Flexible Modular Design and Comprehensive Monitoring

## ELK -1500DX

15" TFT LCD, Resolution: 768" 1024Module

## ELK -1200DX

12" TFT LCD, Resolution: 800\*600 Module

### For all E series modular monitor:

**Standard Config:** 3/4 lead ECG, RESP, SpO<sub>2</sub>, PR, NIBP, 2-Temp, Lithium Battery, Touch Screen

**Option Module:** 2-IBP, Nellcor SpO<sub>2</sub>, Maslimo SpO<sub>2</sub>, Sidestream/Microflow/Mainstream EtCo<sub>2</sub>, Mainstream /Sidestream C.O.

**Other option:** 9 lead ECG, Printer, Rolling stand, Wall mount, VGA, WIFI, SD Memory card, Touch Screen



### Microstream/Mainstream EtCO<sub>2</sub> Sidestream EtCO<sub>2</sub>

Sidestream/Microstream/Mainstream EtCO<sub>2</sub> is optional. Various option can be suitable for intubated patient, ventilation relied patient, non-intubated patient.



### 2-IBP

2-IBP measurement with waveform, Systolic, Diastolic, Mean Pressure on ART, CVP, ICP, PA, LAP etc to fulfill different positions invasive blood pressure measuring demands.



### C.O.

Enables hemodynamic monitoring using thermodilution method. Provides an important measurement of the blood flow and oxygen delivery to the tissues.

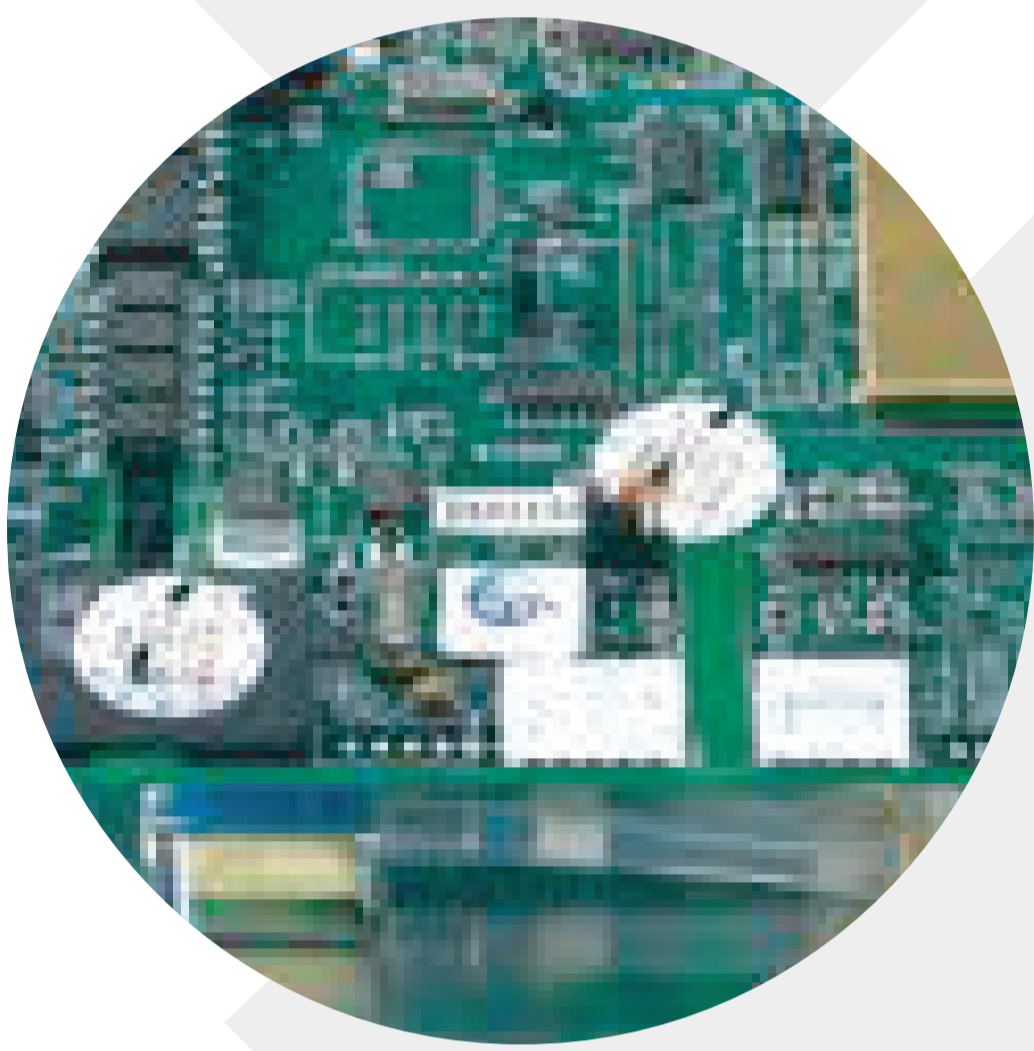
New streamlined appearance design possesses modernized style and beautiful shape



360 degree visible three-level alarm for physiology & technology

High resolution color LCD touch screen & user-friendly display interface meet clinical requirements to operate and observe

Brand new user operation software, unlimited upgrade functions, perfect user experience



E Series achieve long time monitoring, inside board also can change to separate board : ECG Board, SpO<sub>2</sub> board, NIBP Board to achieve high accuracy



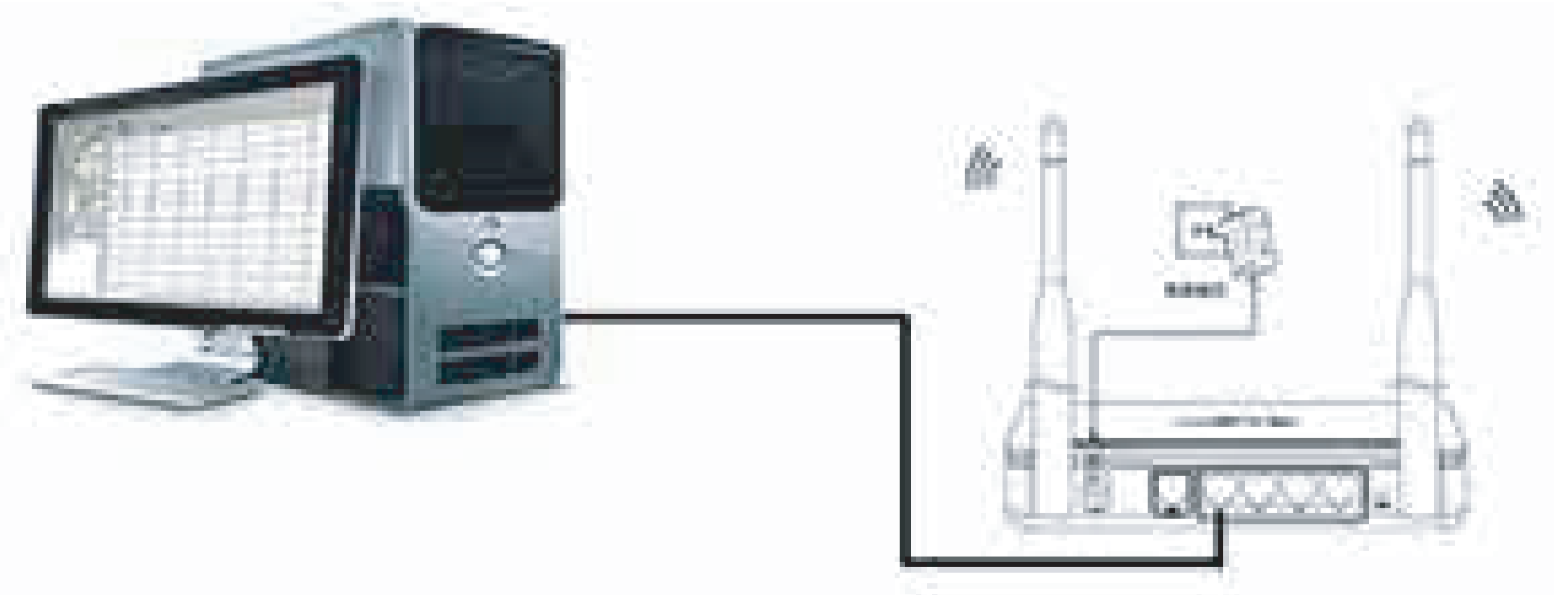
Low power consumption and fanless design can achieve high requirements of dust-off and without noise & pollution-free in clinical departments.



Optimized circuit design, reduce energy consumption, Battery run time increase 25%

**Central Monitor System**

**Router**



**WIFI with smart IT solutions**

- Wireless integration with Central Monitoring Station
- Dynamic trends provide up to 240 hours of useful information for review
- 8 traces per monitor and 16 monitors on one screen
- View up to 32 maximum bed on one platform in real-time
- Review and manage patient data anytime and anywhere in and pre-hospital



# TECHNICAL SPECIFICATIONS

## Quality Standards and Classification

CE, ISO13485

SFDA: Class II b

Anti-electroshock degree:  
Class I equipment (internal power supply)

TEMP/SPO<sub>2</sub> /NIBP: BF

ECG/Resp: CF

## Application Range

Adult/Pediatric/Neonatal/Medicine/Surgery/  
Operating Room/ICU/CCU

## Display

12.1", 15" real color TFT optional touch screen

## Environment

### Operating environment

Temperature: 0~40°C  
Humidity: ≤85%  
Altitude: -500 - 4600m

### Transport and Storage environment

Temperature: -20 ~ 60°C  
Humidity: ≤93%  
Altitude: -500-13100m

## Power Requirements

AC: 100-240V, 50Hz/60Hz

DC: Built-in rechargeable battery

Battery:  
4000mA 11.1V lithium battery  
2h operating after full charge(one piece)  
5min operating after low battery alarm

## ECG

5 Leads: RA, LA, LL, RL, V

Lead mode: I, II, III, aVR, aVL, aVF, V

Increase: x250, x500, x1000, x2000

Sensitivity: > 200 uV (Peak-to-peak value)

Input impedance: > 5 (megohm)

Bandwidth: Surgery 1 ~ 20 Hz

Monitor 0.5 ~ 40 Hz

Diagnostic 0.05 ~ 130 Hz

CMRR: ≥ 100dB

Polarization Voltage: ± 300mV

Baseline Recovering Time: After defibrillation  
< 3 seconds

Signal Range: 8 mV (Peak-to-peak value)

Calibrating Signal: 1mV, precision ±5%

## RESP

Method: RA-LL impedance

Resp Impedance range: 0.3 ~ 3 Ω

Base Impedance range: 200Ω - 4000Ω

Bandwidth: 0.1~2.5Hz

Resp rate:  
Adult 0 ~ 120BrPM  
Neonatal/Pediatric 0 ~ 150BrPM  
Resolution: 1B/PM  
Precision: ±2 BrPM

Asphyxia Alarm: 10~40 seconds

## ST Segment

ST Segment Range: -2.0mV ~ +2.0mV

Accuracy: 0.02mV

## Dimension and Weight

### Equipment:

E12: 303 mm x 160 mm x 287 mm; 3.78 kg E15: 360 mm x 162 mm x 321 mm; 4.47 kg

### Package:

E12: 380 mm x 350 mm x 300 mm; 6.1 kg E15: 420 mm x 380 mm x 321 mm; 7.3 kg

## SpO<sub>2</sub>

Range: 0~100%

Resolution: 1%

Precision: 70% ~ 100% : ±2

DIGIT: 0% ~ 69% no definition given

## Pulse Rate

Range: 20~300bpm

Resolution: 1bpm

Precision: +3bpm

## Temperature

Channel 2

Measure & alarm range: 0~50°C

Resolution: 0.1°C

Precision (no sensor): ±0.1 C

## Standard Accessories

NIBP cuff & tube

ECG cable & electrodes

SpO<sub>2</sub> sensor

TEMP probe

Lithium-ion battery

Power cable

Operator's manual

## NIBP

Method: Pulse wave oscillometry

Work mode: Manual/ Auto/ STAT

Measure interval of auto mode: 1, 2, 3, 4, 5, 10, 15, 30, 60, 90, 120, 180, 240, 480 minute(s)

Measuring Time of STAT Mode: 5 minutes

PR range: 40~240bpm

Measure & alarm range:

Adult

SYS 40 ~ 270mmHg

DIA 10~215mmHg

MEAN 20~235mmHg

Pediatric

SYS 40 ~ 200mmHg

DIA 10~150mmHg

MEAN 20~165mmHg

Neonatal

SYS 40 ~ 135mmHg

DIA 10~100mmHg

MEAN 20~110mmHg

Static pressure range: 0~300mmHg

Precision: ±3mmHg

Pressure precision:

Max. average error: ±5mmHg

Max. standard deviation: ±8mmHg

Overvoltage protection:

Adult 300mmHg

Pediatric 240mmHg

## Optional Accessories

CO<sub>2</sub> module

IBP module

Trolley bracket

Hanging bracket

Monitor recorder

Touch screen

## Date Storage

Trend diagram/table: 7x24h

NIBP review: 400 events

Wave review: 100min

Alarm review: 100 alarm events

Support drug concentration titration analysis

## CO<sub>2</sub>

Side/Main/micro stream

Measurement Infrared radiation absorption  
technique measurement range 0 ~ 99mmHg

Precision 0~40mmHg ±2mmHg  
41 ~ 76mmHg ±5mmHg  
77-99mmHg ±10mmHg

Resolution 1mmHg

Pumping rate 70ml/min, 100ml/min

Accuracy 15% or 15ml/min big  
AwRR measuring range 0~120BrPM

Precision  
0-70BrPM: ±2BrPM  
>70BrPM: ±5BrPM

## IBP

Label ART, PA, CVP, RAP, LAP, ICP, P1, P2

Measuring and alarm range

ART 0 ~ 300 mmHg

PA -6~120 mmHg

CVP/RAP/LAP/ICP -10 ~ 40 mmHg

P1/P2 -10~300 mmHg

Press Sensor

Sensitivity 5 uV/V/mmHg

Impedance 300-30000Ω

Resolution 1 mmHg

Accuracy ±2% or ±1mmHg, which great

Actualization interval: about 1 Sec.