

# Technical Specifications

## ECG

Input dynamic range:	±(0.5mVp~5mVp)
Differential input impedance:	≥10MΩ
Bandwidth:	0.05~150Hz (Diagnostic) 0.5~40Hz (Monitoring) 1~20Hz (Operation)
CMRR:	≥90dB (Diagnostic) ≥105dB (Monitoring & Operation)
Sensitivity selection:	×1/4, ×1/2, ×1, ×2, ×4 and Auto
Sweeping speed:	6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
HR measuring range:	15~350bpm
HR accuracy:	±1% or ±2bpm, whichever is greater
Pacemaker pulse detection and rejection function	

## RESP

Measuring range:	0~120rpm
Measuring accuracy:	±5% or ±2 rpm, whichever is greater

## TEMP

Measuring range:	21.0~50.0 C
Measuring accuracy:	±0.2 C from 25~45 C

## NIBP

Technique:	Oscillometric method
Typical measurement time:	<30 seconds (adult cuff)
NIBP measuring range:	SYS: 40~275mmHg (Adult) 40~200mmHg (Pediatric) 40~135mmHg (Neonate)
NIBP measuring range:	DIA: 10~210mmHg (Adult) 10~150mmHg (Pediatric) 10~95mmHg (Neonate)
NIBP measuring range:	MAP: 20~230mmHg (Adult) 20~165mmHg (Pediatric) 20~110mmHg (Neonate)
NIBP measuring accuracy:	Mean difference: ±5mmHg Standard deviation: 8mmHg
NIBP measurement mode:	Manual, Auto, STAT, Multi-cycle mode
Auto measuring intervals:	1-480min

## SpO2

Technique:	Dual-wavelength optical method
Measuring range:	0%~100%
Measuring accuracy:	Arms is not greater than 2% for SpO2 range 70~100%.
PR measuring range:	30~250bpm
PR measuring accuracy:	±2bpm or ±2%, whichever is greater
Low perfusion performance:	As low as 0.3%.

## CO2

Technique:	Infrared optical method
Sampling mode:	Sidestream or Mainstream
Measuring range:	0~150mmHg
Measuring accuracy:	0~40mmHg ±2mmHg 41~70mmHg ±5% of reading 71~100mmHg ±8% of reading 101~150mmHg ±10% of reading
Flow rate:	50ml/min ±10 ml/min (Sidestream)

## Cerebral State Monitoring (CSM)

EEG sensitivity:	±400μV
Noise level:	<2μVp-p, <0.4μV rms (1~250Hz)
CMRR:	>140dB
Input impedance:	>50Mohm
CSI and update:	0-100, filter: 6-42Hz, 1 sec. update
EMG%:	0-100 (logarithmic) filter: 75-85 Hz, 1 sec. update.
BS%:	0-100, filter: 2-42 Hz, 1 sec. update

## IBP

Technique:	Strain gauge transducer
Input sensitivity:	5μV/mmHg
Measuring range:	-50~300mmHg
Measuring accuracy:	±2% or ±4mmHg, whichever is greater
Measuring positions:	ART, RAP, PA, LAP, CVP ICP, AUXP1, AUXP2
Calibration:	zero calibrating

## Cardiac Output (C.O.)

Blood temperature measuring range:	23-43 C, accuracy: ±0.5 C
Injecta temperature measuring range:	0-20 C, accuracy: ±0.5 C
Measuring range:	0.2~20 L/min
Measuring accuracy:	±0.2 L/min or ±10%, whichever is greater

## Other Specifications

Power supply:	AC 100V-240V, 50/60Hz, 60VA
Built-in lithium battery:	11.1V/4400mAh
Display:	12.1 inch TFT display
Alarming method:	3 levels audible-visible alarm
Networking:	Ethernet

## Standard configuration

ECG, Respiration, SpO2, PR, NIBP, Temperature

## Options

2-IBP, EtCO2, Nellcor SpO2, SunTech NIBP, 12-lead ECG  
Cardiac Output, Cerebral State Monitoring, CMS, Touch Screen

# K12 Patient Monitor



# K12 Patient Monitor



12.1" display with LED backlight  
9-waveform on screen

360-degree visible indicator  
with 3-level alarm



Li-ion battery up to 4 hours  
continuous monitoring

Integral 3-channel  
thermal recorder



Accessory box for standard configuration



Parameter case for optional parameters

## Features



12.1" high resolution display  
Touch screen optional



9 traces on-screen waveforms  
and maximal up to 13



User customized NIBP measuring  
cycles up to 5-phase



Data export and software upgrade



Versatile clinical calculations for  
application convenience



HL7 protocol, Bed to bed view  
and 12-lead ECG available



SpO2 sensor



NIBP cuff



ECG cable



Temperature probe

## Comprehensive calculations for clinical application

- \* Hemodynamics calculation
- \* Respiration calculation
- \* Oxygenation calculation
- \* Drug concentration calculation
- \* Renal function calculation



Software upgrade



Bed to bed view via  
central monitor station



HL7 protocol connect  
to hospital system