

# Multi-Parameter<br/> Patient Monitor



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#### **Multi-Parameter Patient Monitor KPM-A1 Series**

Models of Portable Patient Monitor KPM-A1 Series has color TFT displays of 15", 12.1", 10.4", and 8.4". We delivers modern and flexible patient monitoring system which built in 8 different languages and commonly required parameters like NIBP, SPO2, Temp., Resp., PR.

#### **Features:**-

- Resolution is 1024×768 dpi, 800 ×600dpi
- Advance patient Manage: gender, full name, ID no., room no., bed no., weight, height, blood type, paced or not, remakes
- It provide Multi-display interface as Standard, Large font, Trend Coexist, OxyCRG dynamic, 7 full ECG waveforms
- Maximum 720h tabular and graphic trends of all parameters, 1000NIBP records and 200 alarm event
- There are 6 Parameters each for standard and optional: Standard – 5-lead ECG/HR, NIBP, SPO2, Temp., Resp., PR., Optional – 3/12-lead ECG, single/double IBP, double Temp., Sun Tech NIBP, Masimo/Nellcor Spo2, ETCO2,BIS,CO;
- Battery is Built-in 2 hours rechargeable lithium battery, and battery volume display 4 hours rechargeable lithium battery (optional)
- If monitor turn off suddenly, time delay switch-off function is available to save data
- Unique standby mode for energy saving and suspend monitoring
- Optional Features: Touch Screen, Printer, 3/12-lead ECG, 2/4-IBP,4-TEMP,2-SpO2, Nellcor SpO2, BIS, Phaisein/Respironics Multi-gas, ICG/CO, ETCO2, Sun Tech NIBP, Wall mount, VGA, Wifi

## **Applications:**

Portable Patient Monitor KPM-A1 Series is widely used for a broad clinical applications that includes:

- · Cardiac monitoring, ECG, etc.
- · Blood pressure and blood flow monitoring
- Blood glucose monitoring
  - Body temperature monitoring

## Technical Parameters:—

Model	KPM-A100	KPM -A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106		
Color TFT Display	15 inches	12.1 inches	12.1 inches	12.1 inches	10.4 inches	10.4 inches	8.4 inches		
Safety		Class 1, Type CF							
Patient Range			Neona	ite, Pediatric and	d Adult				
Environment Requirement									
Working	Working 0 + 40°C								
Transportation and Storage		-20 + 60°C							
Humidity			15-9	5% non-conder	nsing				
Power Supply									
External Power Supply	100-240V AC, 50/60Hz								
Internal Battery Power Supply		Recharge	eable li-lion, 12	V/4AH Max. 24	H charging, 4H	working			
			Tre	end					
Parameters graphic and tubular trends		5s/piece 8	3 hours, 1min/p	viece 168 hours	, 5 min/piece 1	000 hours			
			Stor	age					
NIBM				1000 groups					
Alarm				200 groups					
Full disclosure waveforms				1 hour					

## ECG:

Model	KPM-A100	KPM-A100 KPM-A101 KPM-A102 KPM-A103 KPM-A104 KPM-A105 K							
Lead Mode			5 –l	ead(R, L, F, N	, C)	1			
Lead Selection			,   ,	II, avR, avL, c	avF, V				
Waveform		3 and 7 channel selectable							
Gain selection		0.5mm/mv, 1mm/mv, 2mm/mv							
Sweep speed			12mm/	s, 25mm/s, 5	i0mm/s				
Heart rate change				lt: 15-300bp pediatric: 15					
Accuracy			+1bpm or +	-1%, whichev	er is greater				
Resolution				1bpm					
Filter			Surge	ery mode= 1-	20Hz				
Monitor model		0.5-40Hz							
Diagnostic model				0.05-130Hz					
Scaling signal				1mv, +3%					
Protection	Withstand 4	000VAC/50 v	oltage isolatio	n against elect	rosurgical inte	erference and	defibrillation		
Alarm range				15-350bpm					
Measurement range		$\mathbf{X}$	2	.0mV+0.2m	V				
Alarm range			-2	2.0mV+0.2m	v				
Accuracy			-(	).8mV+0.8m	V				
Error		0.002mV							
Arrhythmia analysis				YES					

## SPO<sub>2</sub>:

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106	
Measurement range		0-100%						
Resolution				1%				
Accuracy		+2% (70-100%); 0-69% unspecified						
Alarm range		0-100%						
Pulse rate				20-300bpm				
Resolution	1bpm							
Error			+1bpm or	+%, whicheve	er is greater			

## NIBP:

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106		
Method		Digital automatic oscillometric							
Operation mode		Manual/Automatic/Continuous							
Auto measurement time	Adjustable(1-480min)								
Measurement unit		mmHg/Kpa selectable							
Measurement types		Systolic, Diastolic, Mean							
Resolution				1mmHg					
Alarm			Systol	ic, Diastolic,	Mean				
Measuren	nent range								
Systolic pressure	Adult	: 40-270mm	n/Hg; Pediatri	c: 40-220mn	nHg; Neonat	e: 40-135mr	m/Hg		
Mean pressure	Adult	Adult: 20-235mm/Hg; Pediatric: 20-165mmHg; Neonate: 20-110mm/Hg							
Diastolic pressure	Adu	lt: 10-215m/	Hg; Pediatric	:: 10-150mm	Hg; Neonate	e: 10-100mm	n/Hg		

## TEMP:

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106	
Compatible probe		YSI or CYF						
Measurement range		5-50°C						
Resolution		0.1°C						
Accuracy				+0.1°C				
Refreshing time		About 1						
Average measuring time	<10s							

## **RESP**:

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106	
Method		Thoracic impedance						
Measurement range		Adult: 7-120rpm; Neonate/pediatric: 7-150rpm						
Apnea alarm				Yes, 10-40s				
Resolution		lrpm						
Accuracy	+2rpm							

# Optional: -

## **IBP**:

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106	
Channel		2 channels						
Range		50-300mmHg						
Resolution		1mmHg						
Accuracy		±4mmHg(±4%)						
Unit		mmHg, Kpa						
Converter sensitivity		5mV/V/mmHg						
Transducer sites		ART/PA/CVP/LAP/RAP/ICP						

## EtCO2 (side stream CO2, optional)

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106	
Measurement range		0-99mmHg						
Accuracy		+2mmHg (0-40mmHg)						
Sampling range		100ml/min						
Sampling rate accuracy		15%						
Respiration rate		0-120rmp						
Respiration accuracy				2rmp (0-70rm 5rmp (>70rm				
Respiration time		<240msec (10% to 90%)						
Delay time		<2s						

## Recorder (Optional)

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106	
Plethysmogram wavewform		2 channels						
Record mode		Manual, on alarm, time-defined						
Recording width		50mm						
Recording type			Froze	n waveform r	record			

## EtCO2: (mainstream CO2, optional)

Model	KPM-A100	KPM-A101	KPM-A102	KPM-A103	KPM-A104	KPM-A105	KPM-A106
Method		Infrared Spectrum					
Range		0.0-10% (0-76%)					
Resolution		1mmHg (0.1%)					
Accuracsy	<5% (±4.0 mmHg) Or <10% (of readings)						

#### **Multi-Parameter Patient Monitor KPM-A200**

We offer multi-parameter patient monitor which provides a comprehensive system simultaneously monitoring and recording vital parameters of ECG, NIBP, SpO2, RESP, PR and dual channeled TEMP. These parameters are flexible and different combinations can be chosen as per requirements.

#### Features:-

- The monitor has a 7 inch TFT color screen with 16:9 LCD display.
- Has various useful interfaces of standard, trend screen, OxyCRG screen, NIBP list, big font screen with central monitoring system
- Performs Real time S-T segment analysis and can detect pace-maker.
- Indicates incorrect manipulation and malfunction analysis.
- Has the feature of patient info input in the system.
- Feature of 96 hours of trend and graph recall, 400 groups of NIBP list and 60 alarm events records recall.
- Has a built-in rechargeable lithium battery with 5 hours of working capacity.



## **Applications:**

Patient sign monitors are of immense use in operating and emergency rooms and intensive and critical care settings for monitoring the health condition of the patient.



# Specifications:

Mod	el No.	KPM-A200
	Standard 3-lead or 5-lead	3-lead: RA,LA,LL; Lead method: I, II, III 5-lead: RA,LA,LL,RL,V; Lead method: I, II, III, aVR, aVL, aVF, V
	Gain	X250, X500, X1000, X2000
	HR measuring range	Adult: 15-300 bpm Paediatric/Neonatal: 15-350bpm
	HR accuracy	$\pm$ 1bpm or $\pm$ 1%, whichever is greater
	HR resolution	1bpm
	Sensitivity	>200µVP-P
	Differential Input Impedance	>5Mohm
	Bandwidth	Diagnostic mode: 0.05-130Hz Monitoring mode: 0.5-40Hz, Operation mode: 1-20Hz
	CMRR	Diagnostic mode: >90dB Monitoring mode: >100dB, Operation mode: >100dB
ECG Specifications	Electrode offset potential	±300mV
	Leakage current	<10µA
	Pacing pulse test	In accordance with following conditions: Range: ±2-±700mV Width: 0.1-2ms Rise time: 10-100µs
	Pacing pulse inhibition	When pacing analysis switch is on, pacing pulse in accordance with the following conditions are restrained, but affection against HR calculation: Range: ±2-±700mV Width: 0.1-2ms Rise time: 10-100µs
	Baseline recovery	<3s after defibrillation
	Signal range	±8mVP-P
	Calibrating signal	1mv (peak to peak value), Precision: ±5%
	Measuring range	-2.0mV ~ +2.0mV
ST measuring volume	Measuring precision	Ranging -0.8 mV ~ +0.8mV, measuring error is ±0.02mV or ±10%, the larger prevails. No definition for other ranges

	Measuring method	RA-LL Impedance		
	RESP Impedance measuring range	0.3-3Ω		
	Base Impedance range	200-4000Ω		
<b>RESP</b> specifications	Bandwidth	0.1-2.5Hz		
	RR measurement range	Adult: 0-120Brpm Paediatric and Neonatal: 0-150Brpm		
	RR resolution	1Brpm		
	RR precision	±2Brpm		
	Asphyxia alarm	10-40 seconds		
	Measuring method	Pulse wave Oscillometry		
	Work mode	Manual/Automatic/STAT		
NIBP specifications	Measuring Interval of Automatic Measuring 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 I	Range	40 - 240 bpm		
	Measuring Range	Adult Sys: 40~270mmHg Dia: 10~215mmHg Mean: 20~235mmHg Children Sys: 40~200mmHg Dia: 10~150mmHg Mean:20~165mmHg Neonatal baby Sys: 40~135mmHg Dia: 10~100mmHg Mean: 20~110mmHg		
	Static Pressure Range	0~300mmHg		
	Static Pressure Precision	±3mmHg		
	Pressure precision	Max. average error: ±5mmHg Max. standard deviation: 8mmHg		
	Over voltage protection	Adult mode: 300 mmHg, Children mode: 240 mmHg, Neonatal baby mode: 150 mmHg		

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SpO2 specification	Measuring range	0-100%
	Resolution	1%
	Precision	70~100%: ±2 DIGIT 0%~69%: no definition given
PR specification	Measuring range	20~300bpm
	Resolution	1bpm
	Precision	±3bpm
TEMP specification	Temperature sensor	YSI series, CYF series
	No. of channels	2 Channels
	Measuring range	0~50ºC
	Resolution	0.1ºC
	Precision	±0.1ºC(Excluding Sensor Error)

## **Optional Accessories:**

Availability of features of EtCO2 and TEMP and thermal printer with this monitor is optional.



#### **Multi-Parameter Patient Monitor KPM-A201**

Patient monitors play an important role in detection of various unknown and life threatening diseases. With same principle Kizlon introduces multi parameter patient monitor KPM-A201. To understand patient condition in depth, real time patient info is needed, hence this monitor helps to give out all the information.

#### **Features:**-

- It is multi-parameter Patient Monitor with 2ch ECG / SpO2 / NIBP / IBP / 2ch. Temp. / Resp.
- EtCO2 (option) displaying all the parameter through 10.4" TFT LCD display (7 parameters and 6 waveforms)
- This compact vital signs bedside/transport monitor operates with basic configuration fitted with Module 1 (3 or 5 lead ECG, RESP, SpO2, Temperature), PVC and ST level display detection, detection of 12 kinds of arrhythmia and central monitoring system
- The KPM-A100 is flexible and gives clinicians a set of both invasive and non-invasive measurements. Thus this concept makes it perfect for emergency departments and as well as specialist areas in the hospital
- Users can select from 4 modules and customize configurations to meet the demands of every clinical set up



## **Applications:**

Vital sign monitor are extensively used for monitoring all the possible vital signs of a diseased patient. It can help in to keep the patient's health under surveillance.

# Specifications:

Model No.	KPM-A201	
Display	Ultrasound 10.4"color LCD	
Battery operating time	3 hours	
SpO <sub>2</sub>	Measuring range:1-100% Pulse rate:20 ~ 200bpm	
ECG	Leads:3/5 leads Sweep speed:12.5,25, 25mm/s	
RESP	Resp:0 ~ 150 breaths/min Sweep speed:6.25,12.5,25mm/s	
NIBP	Mode: auto/manual STAT Auto mode(min):1,3,5,10,30,60,90,120,240 Neonate/adult systolic: 30/50,130/255mmHg Neonate/adult diastolic:20/30, 100/220mmHg	
Temperature	30-45°C	
Options	Printer, IBP, EtCO <sub>2</sub>	
PC Interface	RS232C or LAN	
External interface	VGA	
Certificate	CE	
Warranty	2years	
Dimension	257(W) x 158(D) x 236(H)mm	
Weight	3kg	
Power	Input : AC 100 ~ 240V (50/60Hz) Rechargeable Battery: Li-ion(11.1VDC / 2,200mAh)	



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