

**SAZGAN  
GOSTAR**  
Patient Care Monitor System



**CE**  
0434



**VISTA**

12.1" TFT Display  
ECG, SPO2, NIBP, 2 Temp, Resp  
Options:  
2 IBP, EtCO<sub>2</sub>, Thermal Printer,  
Drug calculation,  
ST Analyser, Arrhythmia Detection

## Display

LCD	12.1-inch , TFT color , 800× 600 Pixel
Wave Forms	ECG PLETH IBP 1,2 ( 2 Traces ) Respiration EtCo2 (OPTIONAL)
Sweep Speed	6.25 , 12.5 , 25 mm/sec ( Respiration ) 12.5 , 25 , 50 mm/sec ( for others )
Trace Length	6 sec @ 25 mm/sec
Wave Form Freeze	All Waveforms
Operation Method	MEMBRANE & KNOB
Numeric Parameters	Heart Rate, ST level , % SpO2 , Pulse Rate ,IBP1, IBP2, NIBP ( Systolic , diastolic ,Mean), Body Temperature T1 , T2 ,ΔT & EtCO2 , FiCO2 ,Respiration Rate ,Apnea

## ECG ( Adult & Neonate )

Lead	I , II , III , aVR , aVL , aVF , V ( 5-Lead )
Rate	10 to 250 bpm
Averaging	4 , 8 , 12 Seconds
Maximum Input	± 8mv
DC Offset	up to± 300mv
Leakage Current	< 10 μA
Filters	" MONITOR" (0.5-40 Hz ) " OP. ROOM" (1-20Hz)"DIAGNOSTIC" (0.05 -100 Hz ) + SELECTABLE HUM FILTER
CMRR	> 90 dB
Internal Noise	< 30 mv RTI
Gain	1/8 , 1/4 , 1/2 , 1 , 2 & AUTO
Pacer Rejection	Duration : 0.1-2 msec Amplitude :±2 to ±700mv Type: Sync.with any distance from QRS or Async.Heart Rate Counter is not affected by pacemaker signals which have no overshoot
R_Wave Sync.	Max. 35 ms after R_Wave Detected
Alarm Limits :	Lower 15 to 298 bpm & off ( no greater than Upper limit )Upper : 17 to300bpm & off( no less than Lower limit )
Asystole Detection	Less Than 10 Sec after loss of QRS
Protection	Defibrillator & Electrocuttery Protected
Standards	ANSI / AAMI EC13-2002 & IEC601-2-27

## ST segment measurement

Measurement Range	-2.0 to +2.0 mV
Precision	± 0.02 mV or ±10%Whichever is greater
Update period	10s

## Arrhythmia analysis

Type	ASYSTOLE , VFIB/VTAC , PVC , COUPLET , VT>2 , BIGEMINY , TRIGEMINY , R on T , MISSED BEATS , TACHY , BRADY , PNC & PNP
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## Respiration :

Respiration Method	Thoracic impedance
Lead	Optional : Lead I & Lead II
Range	0.3 -3 ohm ( base impedance= 200-2500 ohm )
Gain	1/4 , 1/2 , 1 , 2 , 4
Apnea Alarm	10-40 sec
Respiration Rate	0 to 120 breath / min

## Pulse Oximeter ( Adult & Neonate )

Range	0 -100%
Accuracy	±2% (70-100%) ±3% (50-70%) Unspecified ( 0 -50% )
Resolution	1%
Averaging	8 , 16 beats
Gain	1/4 , 1/2 , 1 , 2 , 4 , AUTO
Pulse Range	25 - 250 bpm
Sensor Type	Dual wavelength LED(finger&Y-sensor) Novamatrix compatible
STANDARD	ISO 9919

## Invasive Blood Pressure ( IBP )

Range	-50 To 300 mmHg
Zero Adjustment	±150 mmHg
Accuracy	±2% or±1 mmHg ,whichever is greater
Numeric Parameters	Systolic , Diastolic , Mean
Transducer Sensitivity	5 μV/V/ mmHg
STANDARDS	IEC 601-2-34

## Non - Invasive Blood Pressure ( NIBP ) ( Adult & Neonate )

Measuring Method	Oscillometric
Pressure Range	Systolic ,Adult :40 - 270 mmHg Diastolic ,Adult :10 - 210 mmHg MAP ,adult :20 - 230 mmHg Systolic ,Pediatric :40 - 200 mmHg Diastolic , Pediatric :10 - 150 mmHg MAP , Pediatric :20 - 165 mmHg Systolic ,Neonate :40 - 135 mmHg Diastolic ,Neonate :10 - 100 mmHg MAP ,Neonate :20 - 110 mmHg Pulse Rate :40 - 240 bpm
Accuracy	± 5 mmHg
Resolution	1 mmHg
Safety Features	Automatic over pressure limit Redandant over pressure switch operating limit
Overall System Efficacy	Meets accuracy requirements of ANSI/AAMI SP -10 / 1992
STANDARDS	AS 3655 & IEC 601-2-30

## Temperature 1,2 ( Adult & Neonate )

Measure Range	25 - 50°C
Accuracy	±0.1°C
Probe Type	YSI 400 Series Compatible
STANDARDS	OIML R114

## Memory

Trendgraphs	HR , RR , SpO2 , T1 , T2 , IBP
Trend Time	2 , 4 , 24 hours
Trend Resolution	20 seconds with cursor
Recall Store Mode	Alarm , Manual
Recall Paged	70 Pages
Recall Stored Data	to see all waveforms all parameters, Alarm ID Save Time & Date
NIBP List	800 Records

## Alarm

Limits	Tunable for HR , PR , SpO2 , IBP , NIBP, Resp, TEMP, Apnea
Alarm On / Off	Selectable for each
Alert	Blinking on display , volume selectable audio Alarms

## General

Safety Standard & Class	IEC 60601-1, Class I, Type CF & BF IPX-1
Protection	Against Electrosurgery & Defibrillation
Power	100 - 240 VAC , 50/60Hz , 140VA
Requirements	
Dimension	35 (W) x15 (D) x 30(H) cm
Weight	Approx 4 Kg

## Environmental

Temperature	Operation : 0 to 50°C ( 32 to 122°F ) Storage : -20 to 60°C
Humidity	10 - 90% ( noncondensing ) @ T= 40 ... 50°C

## OPTIONS :

CARDIAC OUTPUT
CAPNOGRAPH
RECORDER (INTERNAL)
RECHARGEABLE BATTERY (INTERNAL)