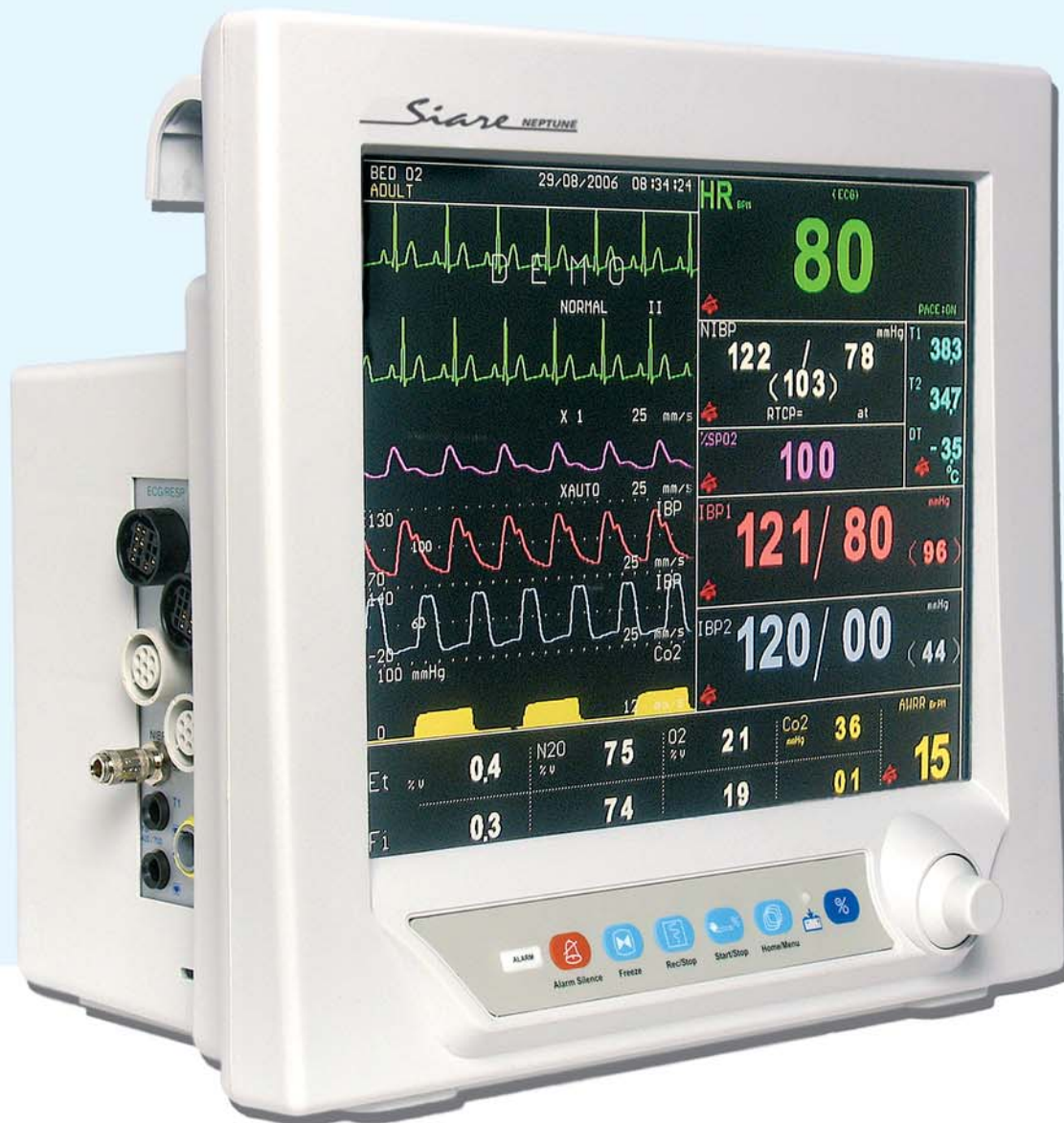


NEPTUNE 12
 Multi-Parameter Patient Monitor



new generation patient monitor



NEPTUNE 12 Multi-Parameter Patient Monitor TFT 12"

- 12" TFT LCD COLOR DISPLAY
- 5 LEAD ECG - SPO₂ - NIBP - 2 IBP - 2 TEMP - PRINTER
- CSI ANAESTHESIA DEPTH ANALYS
- MULTI-GAS
- NETWORKED TO 16 BEDSIDE MONITORS

DISPLAY

Display	TFT COLOR 800 x 600, 12"
Waveforms	ECG (4), SPO ₂ , IBP1, IBP2, RESP/CO ₂ (Freezable)
Numeric Parameters	HR, SPO ₂ , NIBP (SYS, DIA, MAP), IBP1 (SYS, DIA, MAP), IBP2 (SYS, DIA, MAP), RR, T1, T2, DT, EtCO ₂ , FiCO ₂ , AWR
Operation Method	Membrane and rotary knob

ECG

Leads	Selectable 3 or 5 Wires For 3 wire: I, II, III For 5 wire: I, II, III, V, aVR, aVF, aVL
Waveform	4 channel
Dynamic Range	± 5 mV
Leakage Current	< 10 ⁻⁹ A
Lead Off Current	< 90 nA
Gain	4, 2, 1, 1/2, 1/4, Auto
Calibration	1mV, 0.5sec
Filters	"MONITOR" (0.5 - 28 Hz) "NORMAL" (0.5 - 40Hz) "EXTENDED" (0.05 - 100Hz)
CMRR	> 98dB
Internal Noise	< 30 ⁻⁹ V RTI
Input Impedance	> 5 Mohm
QRS Detection	Duration: 40 to 120 msec Amplitude: 0.5 to 5 mV for Adult 0.2 to 5 mV for Neonate
Heart Rate Range	25 - 250 bpm
Accuracy	± 1% or 2 bpm
Tall T-Wave	Reject up to 1.2 mV Amp.
Pacer Detection/Rejection	Duration: 0.1 - 2 msec Amp: ± 2 to ± 700 mV (Without over/undershoot)
Protection	Defibrillator and Electro surgery
Standards	ANSI/AAMI EC-13 ARRHYTHMIA DETECTION

ARRHYTHMIA DETECTION

Arrhythmias	VF, VT, RUN, AIVR, BGM, TGM, CPT, TACH, BRDY, PAUS, ASYS.
Features	<ul style="list-style-type: none"> ■ Event Recall Screen ■ Identification of 11 Alarm Condition by priority. ■ Rapid Learning only 30 Second Required for ■ Recognition of Dominant Rhythm. ■ Real Time Arrhythmia Detection with Innovative Feature. ■ Up to 80 ARR event records (Parameters and waveform)

ST ANALYSIS

Measurement Range	-2mv to +2mv
Alarm Range:	-2mv to +2mv User-Adjustable Isoelectric and ST Point Trending of ST Values

NIBP

Measurement method	Oscillometric
Measurement mode	Manual/Automatic
Measurement time	18-26 sec (excluding cuff pressurization time)

Measurement Range	Adult: SYS 25 ~ 250 mmHg DIA 10 ~ 220 mmHg MAP 15 ~ 250 mmHg
	Neonate: SYS 25 ~ 135 mmHg DIA 10 ~ 110 mmHg MAP 15 ~ 125 mmHg
Pressure Transducer accuracy	± 3 mmHg full range
Initial inflation Target	Adult 150 mmHg, Neonate 70 mmHg
Memory	100 Records

SPO₂

Method	2 Wave Length Pulse Wave Type
Range	50 to 100 %
Accuracy	2% (SPO ₂ 71 - 100%) 3% (SPO ₂ 50 - 70%)
Pulse Rate Range	25 - 250 BPM

TEMPERATURE

Probe Type	YSI-700/ YSI 400 Compatible
Range	0 - 50 °C
Accuracy	± 0.2 °C

RESP

Method	Impedance
Base Resistance	250 - 1250 Ohm
Dynamic Range	0.2 - 2 Ohm
Breath Rate Range	6 - 150 BrPM
Accuracy	± 2% or 2 BrPM

IBP

Channel	2
Press Sensor Sensitivity	5 ⁹ V / V / mmHg
Press Sensor Impedance	300 ~ 2500 Ohm
Resolution	1 mmHg
Accuracy	1 % or 1 mmHg

CSI (CEREBRAL STATE INDEX) - OPTIONAL

The Cerebral State Index measuring is based on EEG signals.	
Measured parameters	CSI (Cerebral State Index) BS (Burst Suppression Indicator) EMG (Electromyographic Activity) SQI (Artifact and Noise Control)
Graphics	EEG waveform
Trend	CSI BS EMG SQI
Alarms	CSM module CSI, SQI

The Cerebral State Monitor module connects to patient monitor by wireless technology.

MULTI-GAS (MAINSTREAM) - OPTIONAL

Method	Infra-red absorption
Measuring mode	Mainstream
Et and Fi parameters	IRMA CO ₂ CO ₂ , CO ₂ waveform IRMA OR CO ₂ , O ₂ , N ₂ O, anesthetic agents (HAL, ISO, ENF, SEV, DES) 5 settable waveforms)