nGenuity™ Series Patient Monitors

USER CONFIGURABLE I MINI-TRENDS I OPTIONAL CO2

Improve patient outcomes with a comprehensive, user-configurable patient monitoring system covering the needs of multiple departments within hospitals and outpatient facilities.

Configurations

- STANDARD: , ECG, ComfortCuff™ NIBP, DOX™ SpO2, HR, Temperature, Respiration and Nurse Call interface connection.

- OPTIONAL: $ETCO_2$, $INCO_2$, Arrhythmia and ST analysis, printer.

Features

- Monitors end-tidal CO_2 and inspired CO_2 accurately at high respiration rates.

- Gas monitoring with full occlusion clearing and high capacity water trap.

- Mini-Trends can display condensed tabular vital signs data to show recent monitoring activities.

- Compatible with popular Electronic Medical Records (EMR) systems for both large facilities and small offices.

- Easy-to-read 10.4" TFT color display.

- Easy to learn, easy to use - simplified menus and dedicated function keys.

Focus on your patients, not your monitor. The nGenuity™ Series patient monitors are the perfect choice for busy departments demanding accurate, reliable performance.

The nGenuity™ can monitor adult and pediatric patients in virtually every department. The innovative user interface features simplified menus and dedicated function keys for timely setups. The big, bright display with large numerics can be easily seen from across the room.

The nGenuity™ mounts quickly and easily to walls and rollstands.

Technical Specifications

ECG

Number of Leads:	3- or 5-Lead
Lead View:	User-selectable; I, II, III, aVR, aVL, aVF, V (5-Lead); I, II, or III (3-Lead)
Gain Selection:	x0.5, x1, x2, and x4
Frequency Response:	Diagnostic: 0.05 to 100 Hz (-3dB); Monitor: 0.5 to 40 Hz (-3dB); ST: 0.05 to 40 Hz (-3dB)
Electrosurgery Protection:	Yes
Defibrillator Protection:	Yes
Pacer Detection/Rejection:	Yes
ST Accuracy:	±0.2 mm or ±5% of reading, whichever is greater, over heart range of 30 to 120 bpm
ST Range:	-6.0 to 6.0 mm

Pulse Oximetry

Range:	1% to 99%
Resolution:	1%
Accuracy:	70% to 99% range: ±2%; 50% to 69% range: ±3%; < 50%: unspecified; complies with ISO 9919
Method:	Dual wavelength LED

NIBP (Non-Invasive Blood Pressure)

Technique:	Oscillometric during inflation
Range:	Adult/Pediatric: 30 to 300 mmHg; Neonate: 20 to 150 mmHg
Measurement Cycle:	< 40 sec. typical
Automatic Measurement Cycles (Selectable):	2, 3, 5, 10, 15, 30 min; 1, 2, 4 hr
STAT Mode:	5 minutes of continuous readings
Max. Allowable Cuff Pressure:	Adult/Pediatric: 300 mmHg; Neonate: 150 mmHg
Resolution:	1 mmHg
Transducer Accuracy:	±2 mmHg or ±2% of reading, whichever is greater
Clinical Accuracy:	Complies with AAMI SP-10:2002

Heart (Pulse) Rate

Source:	User selectable: Smart, ECG, Pleth, NIBP
Range:	20 to 300 bpm (30 to 240 bpm NIBP)
Accuracy:	±1 bpm or ±1% (ECG) whichever is greater; ±2 bpm or ±2% (NIBP) whichever is greater

Capnography (CO_2)

Units:	mmHg; kPa; Torr; %
Method:	Non-dispersive infrared; autocalibrating
N_2O Compensation:	Manual; On/Off, user selectable
Range:	0 to 99 mmHg; 0 to 12.5%
Flow, Sample Rate:	Sidestream; 200 ml/min
Accuracy:	±2 mmHg, ±0.3 volume %, ±3 kPa, or ±2 Torr at 200 ml/min & respiratory rate <= 120 bpm
Rise Time:	170 ms (10 to 90%) at 200 ml/min

Respiration

Rate:	6 to 150 bpm (ECG); 2 to 120 bpm (CO2)
Resolution:	1 breath/min
Accuracy:	±1% or ±1 breath/min, whichever is greater
Source:	User selectable: Smart, CO2, ECG-TTI

Temperature

Channels:	1
Range, Accuracy:	68° to 113°F (20° to 45°C): ±0.1°C
Display Resolution:	±0.1° C
Probe:	YSI-400 and YSI-700 Series

Alarms

Indication:	Audible; Visual
Silence:	Yes; 2 minutes or permanent

Trends

Memory:	24 hr at 30 second intervals with a NIBP reading every 3 minutes
Display:	tabular, graphical

Interface & Display

Keys:	9; membrane activated
Rotary Knob:	Push and rotate; 24 steps/turn
Screen:	10.4 inch active color TFT
Resolution:	Internal Display: 640 x 480 pixels; External Display: 640 x 480 pixels
Waveforms:	6, maximum
Waveform Types:	ECG Leads I, II, III, aVR, aVL, aVF, V; Respiration; CO2; Pleth; ST Histograms
Sweep Speed:	6.25, 12.5, 25, or 50 mm/sec
Languages:	English, Chinese, Czech, French, German, Italian, Polish, Portuguese, Russian, Spanish, Turkish

System Outputs

COM ports:	RS 232 compatible; DB9 (Com1); Mini-DIN 8 (Com 2)
Nurse Call:	Contact switch; 3.5 mm jack, 14 mm length
Defib/Sync	BNC connector
Video Port:	High density D-sub 15-pin Serial VGA compatible

Printer (optional)

Type:	Thermal line printer
Paper Speed:	12.5, 25 or 50 mm/sec

Physical Properties

Weight:	14 lbs; 6.4 kg
Size:	11 in (H) x 13 in (W) x 10.3 in (D); 28 cm (H) x 33 cm (W) x 26.2 cm (D)

Power Requirements

Voltage:	100, 120, 220, 240 VAC; 50/60 Hz
Power Consumption:	35 Watts, typical
Battery:	1 sealed lead acid
Battery Life:	3 hours, typical
Recharge Time:	4.5 hours, typical

Environmental

Operating Temperature:	59° to 95°F (15° to 35°C)
Storage Temperature:	23° to 122°F (-5° to 50°C)
Operating Humidity:	15% to 90%, noncondensing

Classification

Medical Device:	Class II Equipment (IIb EU)
Electrical Protection:	Class I Equipment
Degree of Protection:	Type CF, Defibrillator-proof
Protection Against Ingress:	IPX1

Quality systems registered to ISO 13485 and CE marking per Annex II, Clause 3 of Council Directive No. 93/42/EEC concerning medical devices.

Configurations Available

8100E	Standard
8100EP	Standard with printer
8100E-ST	Standard with ST
8100EP-ST	Standard with ST, printer
8100E1	Standard with CO2
8100EP1	Standard with CO2, printer
8100E1-ST	Standard with CO2, ST
8100EP1-ST	Standard with CO2, ST, printer

CSI CRITICARE SYSTEMS, INC.

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Specifications subject to change without notice.

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