

nGenuity CO₂ Patient Monitor

Vital signs monitoring in a simple-to-use, lightweight, and portable design. This comprehensive, cost-effective solution is perfect for the bedside or in transport.

Models:

- 8100E1** (no printer)
- 8100EP1** (with printer)
- 8100E1-ST** (no printer, with ST)
- 8100EP1-ST** (printer and ST)

Custom Configurations

- Standard: ETCO₂, INCO₂, ECG, ComfortCuff™ NIBP, DOX™ SpO₂, HR, Temperature, Respiration, and Nurse Call interface connection.
- Optional: Arrhythmia and ST analysis, printer.

Features

- Monitors End-tidal CO₂ and Inspired CO₂ 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 activity.
- Compatible with popular Electronic Medical Records (EMR) systems for both large facilities and small offices.
- Easy-to-read 10.4" active color TFT display.
- Easy to learn, easy to use – simplified menus and dedicated function keys.



Focus on your patients, not your monitor.

The nGenuity™ 8100E1 series patient monitors are the perfect choice for busy departments demanding accurate, reliable performance.

Compact and lightweight, the nGenuity 8100E1 series patient monitor can monitor adult and pediatric patients in virtually every department - at bedside or in transit. The innovative user interface features simplified menus and dedicated function keys for timely set-ups. The big, bright display with large numerics can easily be seen, even from across the room.

The nGenuity 8100E1 series patient monitor mounts quickly and easily to walls and rollstands.

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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:	x1/2, 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:	± 0.2mm 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

Non-Invasive Blood Pressure

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

Heart (Pulse) Rate

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

Capnometry (CO₂)

Units:	mmHg; %; kPa; Torr
Method:	Non-dispersive infrared; autocalibrating
N ₂ O Compensation:	Manual; On/Off, user selectable
Range:	0 to 99mmHg; 0 to 12.5%
Resolution:	1mmHg; 0.1%; 0.1 kPa; 0.1 Torr
Flow, Sample Rate:	Sidestream; 200ml/min
Accuracy:	±2mmHg, ±0.3 volume %, ±0.3 kPa, or ±2 Torr at 200 ml/min & respiratory rate ≤ 120 bpm
Rise Time:	170ms (10-90%) at 200ml/min

Respiration

Rate:	6 to 150 breaths/min
Resolution:	1 breath/min
Accuracy:	±1% or ±1 breath/min, whichever is greater
Source:	User selectable: Smart, CO ₂ , ECG-TTI

Alarms

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

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

Trends

Memory:	24 hr at 30 second intervals with an 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" active color TFT
Resolution:	640 x 480 pixels
Waveforms:	6, maximum
Waveform Types:	ECG leads I, II, III, aVR, aVL, aVF, V; Respiration; CO ₂ , Pleth; ST Histograms
Sweep Speed:	6.25, 12.5, 25, 50mm/sec
Languages:	English, French, German, Italian, Portuguese, Spanish, Russian, Chinese

System Outputs

Com Ports:	RS 232-compatible; DB9 (Com1); Mini-DIN 8 (Com2)
Nurse Call:	Contact switch; 3.5mm jack, 14mm length
Defib/Sync:	BNC connector
Video Port:	High density D-sub 15-pin

Printer

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

Physical Properties

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

Power Requirements

Voltage:	100, 120, 220, 240 VAC; 50/60 Hz
Power Consumption:	35 W, typical
Battery:	1 sealed lead acid; life: 3 hrs, typical; recharge time: 4.5 hr

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 9001 and CE marking per Annex II, Clause 3 of Council Directive No. 93/42/EEC concerning medical devices.

Specifications subject to change without notice.



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