

*At The Point of Care*



**INFINIUM<sup>®</sup>**  
**CLEO2<sup>™</sup> Vital Signs Monitor**

## Vital Signs Monitoring System

Available with **NIBP** ▽ **SpO2** ▽ **Temp** ▽ **Pulse** ▽ **EtCO2**

**TOUCHSCREEN:** 10.1-inch high-resolution, multi-touch capacitive touchscreen display, featuring an intuitive user interface

**OPERATION MODES:** Workflows for continuous monitoring or spot check

**SpO2 TECHNOLOGY:** Options include Nellcor, or Infinium

**NIBP:** Measures with manual, automatic, average, and STAT modes for flexibility in clinical applications

**ETCO2:** Optionally available with integrated sidestream EtCO<sub>2</sub> with measurements of EtCO<sub>2</sub>, & awRR with waveform display

**PATIENT SCORING:** Early warning scoring systems like MEWS and NEWS for clinical decisions. Customizable scoring systems

**PATIENT DATA:** Quickly access up to 120 hours of patient trend data

**NETWORKING & INTEROPERABILITY:** Wired or wireless configurations. Bi-directional HL7 communication with HIS/EMR systems

**PRACTICAL ATTACHMENTS:** Connect a barcode scanner, keyboard, or mouse to enhance your workflow

**OPTIONAL INFRARED TEMP:** Highly accurate temperature measurement with infrared technology from Infinium or Exergen

**OPTIONAL PRINTER:** Integrated thermal printer for parameters & waveforms. 60mm, up to 3 channels



OPTIONAL ROLLING STAND



### Includes:

Internal rechargeable lithium batteries; standard configuration includes one battery (up to 4 hours operation), expandable to two batteries for up to 8 hours of operation. Accessory Kit for Adults including SPO2 Finger Sensor and NIBP Cuff. Power Cord.



## Enhance Patient Care, Team Efficiency, & User Experience

The CLEO2 Vital Signs Monitor offers a range of tools and adaptable operating modes to suit various clinical needs. Built with transmission capabilities, it allows clinicians to send monitoring data from the bedside, simplifying workflows, increasing operational efficiency, and reducing potential errors. Network features enable centralized access to patient information. Wireless connectivity supports movement between patients and direct data transfer to compatible systems. As a provider of vital signs monitoring solutions, Infinium Medical focuses on practical, high-value devices for healthcare professionals. The CLEO2 supports cost-effective ownership through compatibility with standard networks, durable construction, and reliable performance when maintained per guidelines.

### Connect. Measure. Transmit.

At the bedside, clinicians can enter patient information and send vital signs data to connected systems, improving workflow.



### Interoperability Features

View multiple patient trends centrally via network connections  
Links to hospital systems with HL7 protocol support for bidirectional communication and report access. Includes Ethernet port, multiple USB interfaces, and WLAN for wireless options.



### Quality and Durability

Constructed with materials rated for clinical use, including IPX2 protection against water ingress. Designed to maintain performance in specified environmental conditions. Mobility for

### Clinical Use

Compact, portable unit with rechargeable lithium-ion battery providing up to 8 hours runtime with two batteries.  
Accommodates accessories for easy transport between patients.



# CLEO2™ - Specifications

<b>Dimension</b>	7.87" (W) x 10.83" (H) x 6.50" (D) (200 mm (W) x 275 mm (H) x 165 mm (D))	<b>Sound Volume</b>	6 levels (OFF, 1-5; default 2)
<b>Weight</b>	≤7.17 lbs (≤3.250 kg) (mainframe, without accessories)	<b>Speaker IEC 60601-1-8</b>	Alarm sounds (45-85 dB), button sounds, pulse sounds; multi-level volume
<b>Screen</b>	10.1-inch TFT-LCD, 1280 x 800 pixels at 60 Hz (24-bit colors), multi-touch capacitive touchscreen	<b>Alarm Output Sound Pressure</b>	40 dB(A) to 85 dB(A) within 1 meter
<b>Electrical protection</b>	Class I, with internal power. Type CF defibrillation proof for SpO2, NIBP, EtCO2	<b>Communication Ports</b>	Ethernet (1000M), 2x USB 2.0, USB Type C; Equipotential, Nurse Call
<b>Water Protection</b>	IPX2 (protection against vertically falling water drops when enclosure tilted up to 15°)	<b>Ethernet</b>	IPv4, DHCP/Static IP (default DHCP)
<b>Environment Temp</b>	Operating: 5 °C to 40 °C (41 °F to 104 °F); Storage: -20 °C to 55 °C (-4 °F to 131 °F)	<b>USB Extensions</b>	Keyboard, mouse, flash disk, code scanner, hub (limited devices recommended)
<b>Environment Humidity</b>	Operating: 15% to 95% Storage: 10% to 95%	<b>Layout</b>	Up to 4 parameters; 32 color sets
<b>Barometric Pressure</b>	80 kPa to 105 kPa (600 mmHg to 788 mmHg)	<b>Modes</b>	Monitor Mode, Spot Check Mode
<b>Voltage, Current, Frequency</b>	100 to 240 V 1.3 to 0.5 A 50/60 Hz	<b>Internal Storage</b>	8 GB (usable 3 GB)
<b>External DC Power Interface</b>	1 (11.1 V, 5.2 A; requires Class I, IEC 60601-1 certified, 2MOPP adapter)	<b>External File System</b>	USB flash disk (FAT32/NTFS)
<b>Battery</b>	Rechargeable lithium, 11.1 V DC, 5200 mAh x 2; Dims 5.7" x 2.5" x 0.85" (145 mm x 64 mm x 21.5 mm); Weight 0.75 lbs (340 g)	<b>Brightness</b>	6 levels (0-5; default 3; night mode 0)
<b>Battery Run Time</b>	≥ 8 hours (two batteries, new fully charged, 25 °C (77 °F), normal conditions); ≥ 4 hours (one battery)	<b>System Time</b>	24H/12H format; auto-sync with WLAN
<b>Battery Charge Time</b>	OFF: 0-90%: < 4 hours; 0-100%: < 5 hours ON: 0-90%: < 7 hours; 0-100%: < 10 hours	<b>Patient Data Information Setup</b>	Indexed by patient ID; 5 x 24 hours trend parameter data; time-sorted patient review; Up to 20 patient sets; data deletion confirmation
<b>Battery Shutdown Delay</b>	≥ 15 minutes (from first low battery alarm)	<b>Data Export</b>	USB flash disk; Via Data Manager app over WLAN
<b>Thermal Printer</b>	Thermal dot array, 2.36" (60 mm), 25 mm/s, 1, 2, or 3 channels	<b>Module Setup</b>	NIBP, SpO2, EtCO2, Temp
<b>Alarms &amp; Indicators</b>	Alarm lamp (red, yellow, cyan); AC Power (green); Battery Status (green)	<b>Configurations</b>	Up to 30; export/import supported
<b>Alarm Levels</b>	High (red, 2 Hz flash), Medium (yellow, 1 Hz flash), Low (cyan)		

# CLEO2™ - Specifications Cont.

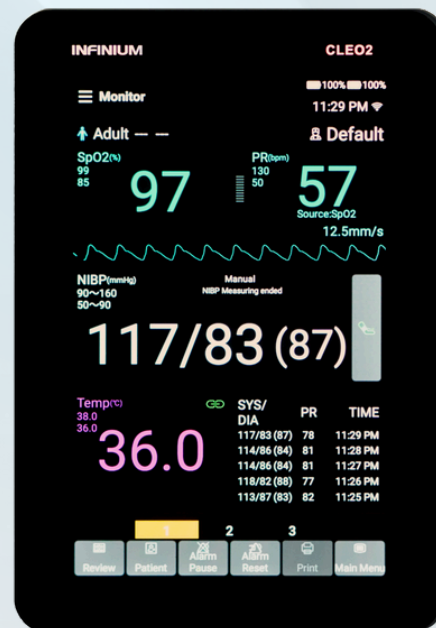
<b>Physiological Parameters</b>	SpO2, PR, NIBP-SYS/DIA, EtCO2, awRR, Temp	<b>NIBP Modes</b>	Manual, Average, Auto (2-240 min intervals), STAT (5 cycles)
<b>Alarm Lists</b>	Current/history (100 sets each for physiological/technical)	<b>NIBP Measurement Types</b>	Oscillometry - Adult, Pediatric, Neonate
<b>Technical Alarms</b>	Sensor off, low battery, hardware malfunction, etc.	<b>NIBP Features</b>	Resolution 1mmHg; Defib recovery < 5 s; Inflation memory; Total listings 1024; Max time 180 s (Adult/Ped), 90 s (Neonate); Up to 86,400 historical records
<b>HL7</b>	Two-way, patient management, view report	<b>NIBP Initial Inflation</b>	Adult (80-240 mmHg, default 180); Ped (80-240, default 140); Neo (60-120, default 100)
<b>Transmission</b>	Export/import via LAN network (patient data, configurations); History export via PC Data Manager software	<b>NIBP Static Pressure</b>	0-300 mmHg, ±3 mmHg
<b>Smart Upgrade</b>	System firmware; automated over network	<b>NIBP Dynamic Pressure Ranges</b>	Adult SYS 40-270/DIA 10-210; Ped SYS 40-230/DIA 10-150; Neo SYS 40-135/DIA 10-95 mmHg
<b>SpO2 Features</b>	Sweep speed 12.5 mm/s, 25.0 mm/s, Defib Recovery <5 s; Measurement range 0%-100%; Alarm response ≤12 s	<b>NIBP Dynamic Accuracy</b>	Max mean error ±5 mmHg; max std dev 8 mmHg
<b>SpO2 Modules</b>	Infinium, Nellcor	<b>NIBP Overpressure Protection</b>	297±3 mmHg (Adult/Ped), 147±3 mmHg (Neo)
<b>SpO2 Resolution</b>	1% (Infinium/Nellcor)	<b>NIBP PR Range</b>	40-240 bpm; Accuracy: ±3 bpm or 2%, greater
<b>SpO2 Accuracy (70-100%)</b>	Infinium: ±3% (with motion), ±2% (no motion); Nellcor: ±2% (Adult/Ped), ±3% (Neonate)	<b>EtCO2 Features</b>	Infrared absorption; Warm up 10s; Rise time ≤500 ms; Response ≤8 s; Debib recovery <5 s
<b>SpO2 Response Time</b>	≤30 s (Infinium/Nellcor); refresh 1 s	<b>EtCO2 Flow Rate</b>	Rate 75 ml/min (±15% or ±15 ml/min, greater); Range 0-150 mmHg (0-20%, 0-20 kPa)
<b>SpO2 Low Perfusion</b>	0.3-20% (Infinium)	<b>EtCO2 Accuracy</b>	0-40: ±2 mmHg; 41-76: ±5%; 77-99: ±10%; 100-150: ±(3 mmHg +8%) - 1mmHg resolution
<b>PR (from SpO2) Range</b>	30-250 bpm (Infinium), 20-300 bpm (Nellcor), 25-240 bpm (Masimo) - 1bpm resolution	<b>awRR Range</b>	0-150 rpm; Accuracy: ±1 rpm; Res: 1 rpm
<b>PR (from SpO2) Accuracy</b>	Infinium: ±2 bpm (no motion), ±3 bpm (motion); Nellcor: ±3 bpm (20-250 bpm); Masimo: ±3 bpm (no motion), ±5 bpm (motion)	<b>EtCO2 Gas Interference</b>	(±1 mmHg) - N2O ≤ 60 %, HAL ≤ 4 %, SEV ≤ 5 %, ISO ≤ 5 %, ENF ≤ 5 %, He ≤ 50 %, Xe ≤ 100 %, (±2 mmHg) - DES ≤ 15 %
<b>Temp Features</b>	Infrared method; Response time 0.5s; Resolution 0.1 °C (0.2 °F); Units °C/°F; Comm USB	<b>Wi-Fi Standards</b>	IEEE 802.11b/g/n (2.4G); Frequency 2412-2462 MHz (HT20); 2422-2452 MHz (HT40); Modulation DSSS (802.11b), OFDM (802.11g/n)
<b>Temp Sensors</b>	<b>Infinium</b> HTD8808C (34.0 °C to 42.9 °C (93.2 °F to 109.2 °F), accuracy ±0.2-0.3 °C (±0.4-0.5 °F)); <b>Exergen</b> TAT-5000S (16.0 °C to 43.0 °C (60.8 °F to 109.4 °F), accuracy ±0.1 °C (±0.2 °F))	<b>Wi-Fi Radiation Power</b>	<20 dBm (average); <30 dBm (peak)

# CLEO2™ Flexible Vital Signs Monitoring

## Spot-Check Applications



## Flexible General Use



### Available Parameters

NIBP	SpO2	Temperature	Pulse Rate	EtCO2
118 mmHg ART	99 %	98.6 °F	85 bpm	36 mmHg

### Modern Tech & Feature Options



# INFINIUM®

Infinium Medical  
12151 62nd St North #5  
Largo, FL 33773 • USA

(1) 866-918-8434  
infiniummedical.com  
sale@infiniummedical.com