Autocorr® Plus
Pulse Oximeter/ECG

The BCI® Autocorr® Plus
Pulse Oximeter/ECG monitor is a cost-effective, easily transportable multi-parameter monitor that takes pulse oximetry to another level. Plus, 3 or 5-lead ECG and respiration capabilities expand your monitoring options. Analog output feature interfaces with most polysomnographic equipment to allow monitoring of additional data during overnight sleep studies. Add other parameters as needed for demanding clinical environments with our extensive family of advanced monitoring solutions.

For more information visit smiths-medical.com/bci.

PATIENT MONITORING

Autocorr® Plus Pulse Oximeter/ECG

- Patented Serial Autocorrelation (SAC) technology identifies pulse detection artifact, analyzing a digitized signal at a rate of 120 times per second, creating dynamic templates to validate the very latest signals for optimal performance in challenging environments.

- Features 3 or 5-lead ECG with pacemaker detect/reject and respiration rate.

- Bright, dual trace electroluminescent display.

- Optional recorder provides crisp, high resolution printing.

- Optional mounting assemblies enhance system flexibility.

- Genuine BCI® reusable and disposable sensors available.

Technical Specifications

DISPLAYS
- **Display**
  Electroluminescent
- **Resolution**
  160 x 80 pixels
- **Waveforms**
  ECG, Plethysmogram
- **Graphic Trends**
  SpO_2, pulse rate (heart rate), pulse signal strength and respiration
- **SpO$_2$**
  3-digit (LED display)
  .56 inches (14.2 mm high)
- **Pulse Rate/Heart Rate (ECG)**
  3-digit (LED display), 0.43 inches (10.9 mm) high
- **Pulse Strength**
  Logarithmically scaled 10-segment LED bar graph
- **Respiration**
  3-digit 10 x 14 pixel front (EL panel)

INDICATORS
- **Low Battery**
  LOW BATTERY message when 10 minutes of battery life remains
- **Audio Disabled**
  SILENCED BELL icon indicates temporary or indefinite status
- **Asystole Alarm**
  ALARM LED will flash, ASYSTOLE message on screen flashes
- **Lost Pulse Alarm**
  ALARM LED will flash, LOST PULSE message on screen
- **SpO$_2$ Sensor**
  Message indicates sensor problem
- **SpO$_2$ Search**
  Message indicates monitoring is searching for a pulse
- **Artifact**
  Message indicates the presence of excess motion or other artifact
- **ECG/Lead Fail**
  Message indicates a lead disconnect condition
- **Charge**
  Green LED indicates external power and battery is charging

- **Pace Detect**
  A tic mark appears on ECG waveform when pacemaker signal is detected

SPO$_2$
- **Range**
  0 to 100% SpO_2 (functional)
- **Accuracy**
  ±2% at 70-100%; ±3% at 50-69%
- **Averaging**
  4, 8, or 16 pulse beat average
- **Alarm Range**
  High: 50 to 100% and OFF (1% steps)
  Low: 50 to 100% and OFF (1% steps)

PULSE RATE (SPO$_2$) OR HEART RATE (ECG):
- **Range**
  30-254 bpm
- **Accuracy**
  > of ±2% or ±2 bpm
- **Alarm Range**
  High: 30-254 bpm and OFF (1 bpm steps)
  Low: 30-254 bpm and OFF (1 bpm steps)
- **Averaging**
  8 or 16 second average

ECG
- **Configuration**
  3 or 5-lead
- **Lead Selection**
  I, II, III, aVR, aVL, aVF and V
- **Gain**
  X1, X2, X4, X8
- **Pace Detect**
  Yes
- **Pace Reject**
  Yes
- **Sweep Speed**
  12.5 or 25 mm/sc

RESPIRATION
- **Measuring Method**
  Impedance Pneumography
- **Rate**
  5 to 150 breaths/min
- **Accuracy**
  > of ±2% or ±2 breaths per minute over full range

PRINTER
- **Output**
  Serial/Analog – RS232C serial output of data
  Optional digital (remote alarm) interface cable
- **Optional**
  Catalog #3408 Printer provides data log (Interval) trends and waveform printouts

POWER REQUIREMENTS
- **Battery**
  Standard Lead-Acid battery
- **AC Charger**
  Wall Mount: 105-125 VAC, 60 Hz
  100 VAC, 50 Hz (optional)
  Table Top: 230 VAC, 50/60 Hz

DIMENSIONS
3.5" H x 10.0" W x 5.5" D
(8.89 cm H x 25.4 cm W x 13.97 cm D)

WEIGHT
5 lbs. (2.27 kg)

ENVIRONMENTAL
- **Operating Temperature**
  32°F to 131°F (0°C to 55°C)
- **Storage Temperature**
  -40°F to -167°F (-40°C to 75°C)
- **Relative Humidity** (non-condensing)
  10-95% (storage)
  15-95% (operating)

STANDARDS
EN60601-1 EN60601-1-1, UL 544, CSA Std. C22.2 No. 125-1984, EMC: EN60601-1-2

REGULATORY COMPLIANCE
ISO 9001/ISO 13485

CATALOG NUMBER
- **3404-001**
  Autocorr® Plus Pulse Oximeter/ECG/Respiration Version
- **3404-000**
  Autocorr® Plus Pulse Oximeter Oximetry Only Version
- **3408**
  Graphics Printer
- **Available Languages**
  English, German, French, Italian, Spanish and Portuguese

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