

Specifications

- **Product Name:** BioZ Dx
- **Part Number:** 5101
- **Technology:**
Impedance Cardiography (ICG)
- **Signal Processing:**
AERIS™ (Adaptive Extraction and Recognition of Impedance Signals)
- **Cardiac Output Calculation:**
Z MARC® (Impedance Modulating AoRtic Compliance) Algorithm

System

- **Operating Temperature & Humidity**
Range: 10 °C to 40 °C (50 °F to 104 °F)
15% to 80% Relative Humidity (non condensing)
- **Operating Altitude Range:**
-650 ft (-198 m) to 5,350 ft (1,631 m)
- **Designed to Meet the Following Safety Standards:**
IEC 60601-1 (Class I Type BF)
IEC 60601-1-2 (CISPR 11, Grp. 1, Class A)
IEC 60601-2-25
UL 2601
CAN/CSA-C22.2 No. 601.1
JIST 1202
AAMI EC11

Cardiograph

- **Physical Dimensions:**
12.2 x 15.3 x 6.9 in (31.0 x 38.8 x 17.6 cm)
- **Weight:** 16.3 lbs (7.4 kg)
- **Display Type:**
640 x 480 pixel resolution color TFT display
- **Printer Type:**
High-resolution, digital-array printer using thermal-sensitive paper
- **Printer Resolution:**
200 dpi (voltage axis) by 500 dpi (time axis)
- **Battery Type:**
Rechargeable lead-acid
- **Printer Capacity:**
Typically 30 ICG report capacity
- **Battery Charge Time:**
Eight hours to full capacity
- **Power Requirements:**
100-240 VAC, 50-60 Hz, 65 VA max
- **Optional Module:**
12-lead resting ECG capability from Philips Medical (see ECG specification sheet)

Cable

- **BioZ AdvaSense® System:**
ICG patient cable and lead wires
- **Cable Length:** 8 ft (2.44 m)
- **Lead Wire(s) Length:**
27 - 48 in (69 - 122 cm)

- **Defibrillation Protection:**
Meets the applicable sections of AAMI EC-53

Patient Interface Module

- **Physical Dimensions:**
7.638 x 4.528 x 2.677 in (19.4 x 11.5 x 6.8 cm)
- **Weight:** 1.8 lbs (0.82Kg)
- **Measurement Current:**
2.5 mA, rms +/-10%; 70 kHz +/-10%

Features

- **Programmable:**
Report Parameters
Displayed Parameters
Automatic Data Save Intervals
Event Labeling
Height / Weight Units
Password Protection
Electronic Medical Records Interface (PDF, XML, CSV file formats)
- **Report:**
Thera Track™ Hemodynamic Status Report with visit-to-visit data comparison
- **Parameters:**
Acceleration Index (ACI)
Base Impedance (Z_0)
Cardiac Output / Index (CO / CI)
Diastolic Blood Pressure (DBP)
Heart Rate (HR)
Heather Index (HI)
Left Cardiac Work / Index (LCW / LCWI)
Left Ventricular Ejection Time (LVET)
Left Stroke Work / Index (LSW / LSWI)
Mean Arterial Pressure (MAP)
Pre Ejection Period (PEP)
Q-C Time Interval (QC)
Stroke Systemic Resistance Index (SSRI)
Stroke Volume / Index (SV / SI)
Systemic Vascular Resistance / Index (SVR / SVRI)
Systolic Blood Pressure (SBP)
Systolic Time Ratio / Index (STR / STRI)
Thoracic Fluid Content / Index (TFC / TFCI)
Total Arterial Compliance / Index (TAC / TACI)
Velocity Index (VI)



Specifications Continued

Noninvasive Integrated Blood Pressure Module

Method of Measurement:

Oscillometric. Diastolic values correspond to Phase 5 Korotkoff sounds.

Systolic Range:

40 – 260 mm Hg

Diastolic Range:

20 – 200 mm Hg

Mean Arterial Range:

27 – 220 mm Hg

HR Range:

40 – 250 BPM (beats per minute)

Cuff Deflate Rate:

Deflation step rate varies with HR, cuff pressure, and cuff volume

Initial Inflation Pressure:

160 mm Hg (default). Variable from 120 to 280 mm Hg.

Transducer Accuracy: ± 3 mm Hg under normal operating conditions

Patient Safety:

Maximum cuff inflation time is limited to 50 seconds

Duration of blood pressure reading is limited to 130 seconds

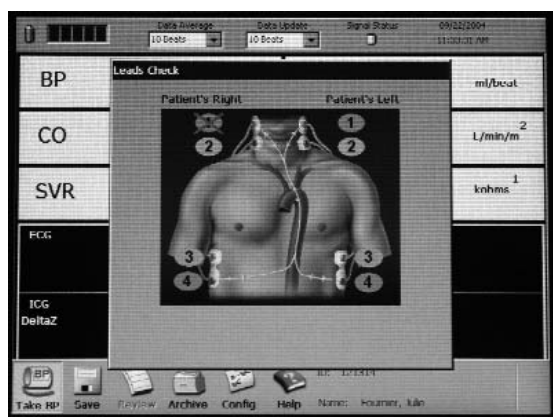
Additional redundant safety circuitry oversees normal operation and will override to abort a reading if:

Cuff pressure exceeds 300 mm Hg or the cuff has been inflated for 180 seconds

Meets all relevant parts of the following safety standards:

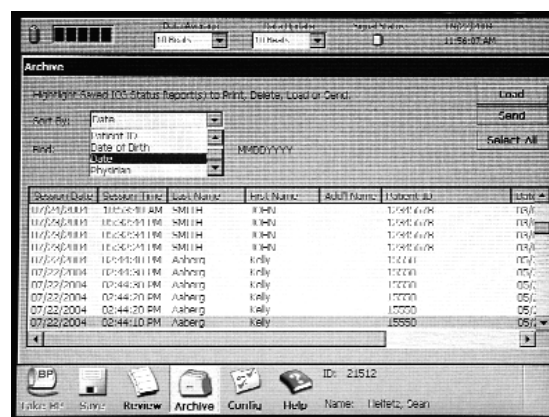
IEC-60601-1
IEC-60601-2-30
AAMI SP10
EN1060-1
EN1060-3
UL 2601

Display Screens



Leads-Off Detection

Automatically identifies detached ICG sensors or cable malfunctions



Archive

Storage capability of up to 15,000 ICG reports and allows printing, deletion, or transfer of saved files