

# Atria 3100 ECG

The compact, simple-to-use ECG choice for medical professionals

Resting ECG  
System



*Atria™*  
3100

## Features

- Automatic, manual or 12-lead rhythm operation for maximum flexibility
- Advanced functionality in a compact package
- Easy to use keyboard and menu driven interface
- Industry-leading warranty and service program
- Optional, powerful interpretation algorithm based on five clinically significant criteria, as well as pediatric analysis and pacemaker enhancement
- Communication options including both wired Ethernet and wireless 802.11 provide cutting-edge connectivity

*Simple to use, compact and reliable, the Burdick Atria™ 3100 ECG is the ideal choice for the physician's office. The Burdick Atria 3100 collects the same high-quality 12-lead ECG tracings as higher priced models at a price that even small practices can afford.*

## Streamline ECG Collection And Analysis

The lightweight and compact device operates either manually or automatically, printing 3-, 4-, 6- or 12-lead ECG tracings. The combination of a standard QWERTY keyboard and dedicated function keys make the Atria 3100 easy to use.

The Atria 3100 also features advanced functionality, including Burdick's exclusive AccuPrint™ functionality, which restricts ECG printing if lead wires are not attached properly.

**BURDICK®**

# Atria 3100 ECG



## Big Functionality In A Small Package

- Automatic or manual operation facilitates STAT operation.
- High resolution thermal printer prints on standard size or A4 paper for easy reading and storage.
- A variety of printout choices, including 3-, 4-, 6- or 12-lead ECG printouts and 3-, 4-, 6- or 12-lead rhythm printouts, to suit the requirements of your practice.
- Extended life battery allows you to print up to 300 pages of continuous rhythm between recharges.
- Data storage for 50 ECGs.

## Advanced Features Improve Accuracy

- AccuPrint restricts ECG printout when leads are not properly attached.
- STABLE baseline filter decreases the level of artifact by assuring that the ECG baseline is stable with no distortion of ST measurements.
- Pacemaker algorithm accommodates patients with pacemakers.
- Choice of QTc calculation formulas includes Hodges, Bazett, Framingham and Fridericia.
- Beat-to-beat R-R intervals may be printed out on reports.

## Intuitive Operation Saves Time

- Alphanumeric keyboard with intuitive menu selections simplifies operation.
- Backlit LCD screen is easy to read, even in low light situations.
- Easy loading paper saves time.

## Upgrade Options To Suit Your Changing Needs

With a variety of upgrade paths, the Atria 3100 ECG will expand and change with growing needs.

- Units purchased without Burdick's powerful interpretation option can be upgraded at any time.
- Communications upgrade options allow the Atria 3100 to communicate by fax, modem and Ethernet as well as wireless Bluetooth® and 802.11. The communications options can be added to the Atria 3100 after the initial purchase.

## A Second Opinion That You Can Count On

The Burdick Atria 3100 utilizes the proven University of Glasgow algorithm, for interpretation, providing a silent second opinion. Unlike competitive products, which limit algorithm criteria to age, the University of Glasgow algorithm, developed in the 1970s and continuously updated, bases its analysis on five clinically significant criteria: gender, age, race, medication and classification.

This is critical because ECG results for patients with different demographic profiles and medical conditions can vary greatly. For example, subtle T-wave changes that are considered abnormal for a white male are considered normal for a black male of the same age. An ECG that would represent LVH in a 50-year-old female may be normal for a 50-year-old male. These are two examples of the many clinical issues that can arise when analyzing without the five criteria.

# Communications Options

HEART CENTRIX  
COMPATIBLE

For physicians looking for a traditional ECG and advanced communications with electronic storage feature, the Burdick Atria 3100 ECG with communications options combines the best of both worlds.

## Flexible Connectivity Options

The Atria 3100 offers cutting-edge communications capabilities, including wired Ethernet and wireless 802.11. Advanced encryption tools ensure the highest level of data transmission security.

## Bi-directional Communication with HeartCentrix

The ideal choice for device integration with your EMR. Download orders with patient demographics from your EMR. Upload test results back to HeartCentrix. The reports can then be viewed, edited and confirmed from the patient's chart in the EMR.

## Transmit Test Results via XML

Test results can be electronically transmitted from the exam room to your network and EMRs through an XML data transfer. Discrete data and a PDF of the report can be sent. No more scanning and keeping hard copies. Imagine the convenience of attaching an ECG report to the patient's electronic medical record, keeping all information in one file.

## E-mail Colleagues Test Results

E-mail capability allows you to send test results directly from the Atria in a PDF format to colleagues for collaborative efforts. The industry-accepted diagnostic quality PDF allows any recipient to review results without purchasing proprietary software.

## Print Test Results to Plain-paper Printer

Send results wired or wirelessly from the exam room to a network or standalone plain-paper printer using options 802.11, USB, Bluetooth, or Ethernet. The diagnostic-quality printouts contain all the information found on the traditional thermal paper printouts.

## FAA Compliant

Atria 3100 with advanced communications includes modem transmissions that comply with FAA system requirements for ECG testing.



Basic Communications Upgrade*	Advanced Options*
Ethernet (RJ45)	Fax/Modem (FAA)
USB	Bluetooth wireless
Analog out	802.11 wireless
Standard RS232	

\*Available at additional charge

Communicate with HeartCentrix  
Store on Network (PDF) or Stand-alone PC  
Send to EMR (PDF and XML)  
Plain Paper Print  
E-mail (PDF)  
Send to FAA Fax

Wired Connections							
Ethernet (RJ45)	•	•	•	•	•		
USB type A				•			
Standard RS232 (9 pin "D")	•						
Fax/Modem RJ11 telephone line interface Group 3, Class 1 and 2 fax modem protocol	•					•	•
Analog output (3.5" phono plug)							
Wireless Connections							
802.11g Standards – IEEE 802.11g (compatible with 802.11b networks); 64 bit/128bit WEP encryption codes; Data Transfer Rate – 55 mbits/sec.	•	•	•	•	•		
Bluetooth				•			

Specifications are subject to change without notice.

# Atria 3100 ECG

## TECHNICAL SPECIFICATIONS

Dimensions	15.0" x 13.125" x 5.5" (381 x 334 x 140 mm)
Weight	11 lbs (5 kg) (including external power supply)
Display	Backlit 2 x 40 character LCD
Keyboard	Full alphanumeric keypad plus designated quick keys
Data storage	50 records
Network connection	Wired: 10/100 MBPS Ethernet via RJ45; Wireless: 802.11g (compatible with 802.11b networks), security options including WEP (64/128 bit), WPA / WPA2 (Personal and Enterprise, including AES), EAP-TLS, PEAP/MSCHAPv2, LEAP, RADIUS servers (including Microsoft IAS, Cisco ACS and Cisco Aironet 1200), roaming across WAPs of various configurations and support for mixed 802.11 / Ethernet networks.
Power requirements	AC operation: 115/230 V AC +/-10%, 50/60 Hz at external power source; Battery operation: 14.4 V NiMH rechargeable battery pack; Battery duration: 300 pages continuous printing without communications option
Printout	Printout device: 216 mm thermal dot array; Paper dimensions: 8-1/2 x 11 (US letter) or A4; Paper type: Thermal sensitive (Burdick Assurance® or Heartline™ paper recommended); Chart speeds: 12.5, 25, 50 mm/sec; Gain: 5, 10, 20 mm/mV Chest or Limb (may be split); Printout formats: 3-, 4-, 6-, or 12-channel; additional rhythm formats
Acquisition	Lead selection: I, II, III, aVR, aVL, aVF, V1, V2, V3, V4, V5, V6, V4R; supports Cabrera and alternate chest lead (chest lead selection V2R thru V9R + V7,V8,V9); Measurement (standard), Interpretation (optional): Diagnosis, measurements and reason statements based on five demographic criteria; Meets IEC 60601-2-51; Pacemaker display capability: meets or exceeds ANSI/AAMI EC11-1991; Modes: Automatic, rhythm or manual; Frequency response: Meets or exceeds ANSI/AAMI EC11-1991 standard; Input impedance: Meets or exceeds ANSI/AAMI EC11-1991 standard; Electrode offset tolerance: +/- 300 mV; A/D conversion: 8,000 samples/second, 2.5 µV LSB RTI; Artifact filter response: 40 Hz, -3db; Data storage resolution: 500 samples/second, 2.5 µV LSB RTI
Environmental specifications	Operating temperature: 50°F to 104°F (10°C to 40°C); Operating relative humidity: 20% to 90%, noncondensing; Operating atmospheric pressure: 1060 hPa to 700 hPa (-500 ft to 10,000 ft reference to sea level); Storage temperature: -4°F to 115°F (-20°C to 45°C); Storage relative humidity: 10% to 90%, noncondensing; Storage atmospheric pressure: 1060 hPa to 190 hPa (-500 ft to 40,000 ft reference to sea level)
Conforms to standards	ANSI/AAMI EC11-1991 EN 60601 CAN/CSA C22.2 no. 0-M91 EN 60601-1-2:2001 CAN/CSA C22.2 no. 601.1S1 UL 60601-1 CAN/CSA C22.2 no. 601.2.25, Amend. 1 EN 60601-2-51:2003 CAN/USA C22.2 no. 601.1-M90 EN 60601-1-4:2000
Safety	Leakage current: Patient <10 µA, chassis <100 µA; Defibrillation protection: to 5000 V, 360J
Warranty	3 years with return of warranty card

## Warranty and Service Offerings Protect Your Investment

With warranty and service offerings we help protect your investment from unforeseen service costs. The Atria 3100 has a 3-year warranty when the warranty card is returned.

## ORDERING INFORMATION

### Standard Configuration

**A31-1DI01 3100, interpretive, English, AHA accessories**

### A31-1 X X XX

D	No communications
E	Basic communications, includes Ethernet, serial, USB, analog out
F	Basic communications with fax modem
H	Basic communications with fax modem and 802.11g
R	Basic communications with 802.11g
I	With interpretation
K	Measurements only
01	Accessory kit 1 (AHA cable, letter, 120v)
02	Accessory kit 2 (IEC cable, A4, 220v)
03	Accessory kit 3 (AHA cable, A4, 220v)
04	Accessory kit 4 (IEC cable, letter, 220v)

### Example configuration:

**A31-1 D I 01**

**040-1501-00 Upgrade Kit, Bluetooth**

**716-0237-00 Assurance paper**

**047029 CardioSens® Ultra II Electrodes**

**012-0844-00 Patient Cable, AHA, 10 non-replaceable leads**

**007704 Patient Cable, AHA, 10 replaceable leads**

**010-1639-01 Standard Duty Atria Cart**

Phone: 800-777-1777, 608-764-1919 • Fax: 608-764-7188 • www.burdick.com • info@burdick.com  
Cardiac Science Corporation • 3303 Monte Villa Parkway, Bothell, WA 98021, USA

Due to continuing product innovations, specifications are subject to change without notice. AccuPrint, Atria, Assurance, Burdick, CardioSens, HeartLine, and Pyramid are trademarks of Cardiac Science Corporation. Other brands and products are trademarks of their respective owners. ISO 13485