CardioLaptop® AT-110

The new high-end CardioLaptop for Cardiologists!

SCHILLER

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The Art of Diagnostics
AT-110: High performance in Laptop format

The new CardioLaptop AT-110 is a Schiller’s innovative and proven diagnostic capabilities yet another step further! This professional Windows NT solution unifies all cardiological diagnostic features within a handy Laptop format, by a simple one-key-operation. Resting ECG recordings give measurements, interpretation, average cycles and rhythm sections of all 12 leads as standard. All leads and measurements can be printed out on the integrated high resolution thermal printer (or optionally on an external printer), in the format most convenient to the physician. Favourite print formats can be predefined so that obtaining an ECG printout with analysis is a single key operation. Exercise testing is an option, which includes predefined stress protocols and dedicated keys to perform a complete exercise test. The user interface of the CardioLaptop AT-110 has been extensively researched to ensure an ergonomic and user friendly system designed to be clear and to ensure quick, intuitive use.
Features:

- Simple one-key-operation with dedicated function keys and icons
- Colour active 15" TFT display
- Resting ECG with measurements and average cycles
- Resting ECG rhythm
- Storage facilities for ECGs
- Interface for external blood pressure unit
- Interfaces for control digital ergometers/treadmills
- Interfaces for dc input and dc output
- Automatic and manual ECG recording
- Selectable print formats with integrated quality thermal printer or optional external printers
- Internal battery
- QRS Trigger
Software Options:
- Pacemaker measurement
- Exercise ECG with analysis program with ST measurement, average complexes and trends. Full disclosure of all 12 leads is a further option with exercise ECG
- ECG interpretation

Hardware Options:
- External blood pressure unit BP-200
- External Printer
- External pointing device (e.g. mouse, trackball)
- External keyboard

AT-110 Philosophy and User Rights:
The operating philosophy of the AT-110 is that users have access to all the functions of the unit, that they require. Several user levels are available with defined user rights.
**Technical Data:**

**CardioLaptop® AT-110:**

- **Dimensions:** 100 x 285 x 350 mm
- **Weight:** 6.8 kg / 15 lbs
- **Monitor:** 15" TFT display, high resolution 1024 x 768 pixels
- **Interfaces:** RS-232 interfaces, 1 LPT bi-directional, Centronic interface, Ethernet LAN RJ45
- **Operator interface:**
  - Alphanumeric PC keyboard with glide point
  - Direct function keys
  - PC mouse and external PC keyboard (optional)
- **Power consumption:** 75 VA
- **Power supply requirements:** 100 - 240 V, 50/60 Hz

**Battery:**
- 24 V Lithium non rechargeable (built in charger); giving bridging power for at least 45 min

**Processor:**
- Industrial single board computer
- Memory media: Integrated hard disk
- Network card: Integrated

**Printing process:**
- Integrated high-resolution thermal print head, 8 dots/mm (time axis), 8 26 mm/s
- Paper speeds: 10 / 25 / 50 mm/sec (manual)
- Chart paper: Thermo reactive, Z-folded, letter size, ready-to-file
- Frequency response of digital recorder: 0.1 to 160 Hz (IEC/AHA)
- Recording tracks: 6 channels, positioned at optimal width on 200 mm, automatic baseline adjustment
- Sensitivities: 5 / 10 / 20 mm/mV

**External printer (optional):** Windows™ standard

**ECG Measuring Data:**
- **ECG amplifier:**
  - Simultaneous, synchronous recording of all active electrode signals
  - Dynamic range: ± 10 mV AC
  - Sampling frequency: 100 Hz
  - Frequency response: 0.05 to 100 Hz (-3dB)
  - Digital resolution: 5 µV
  - Minimum electrode potential: ±500 mV DC
  - Time constant: 3.2 sec
  - Common mode rejection: >100 dB / 50 or 60 Hz
  - Input Impedance: > 100 M Ohm

**Filters:**
- Myogram filter (muscle tremor filter): on/off
  - Noise Frequency filter: Distortion-free suppression of superimposed 50 or 60 Hz and induced interferences by adaptive digital filtering
  - SCHILLER smoothing filter (SSF)
  - SCHILLER baseline stabilizer (SBS): Filter to suppress or greatly reduce baseline fluctuations without changing the measurement values

**Safety Standards:**
- Patient input: fully floating and isolated, defibrillation protected (only with original SCHILLER patient cable)
- Safety standards:
  - IEC/EN 60601-1 (systems) and IEC/EN 60601-1-2
  - CF according IEC 60601-1 and IEC 60601-2-25
- Protection class:
  - Class I according IEC 60601-1, with internal power supply
  - Class IIa according MDD 93/42/EEC

**Conformity:**
- According to MDD 93/42/EEC

**Environmental conditions:**
- Temperature, operating: 10° to 40°C
- Temperature, storage: -10° to 50°C
- Relative humidity: 20 to 95 % (no condensation)
- Pressure: 700 to 1060 hPa

Technical data are subject to change without notice.
Answer fax

Yes, I am interested in the innovative products from SCHILLER. Please send me more information about:

- Resting ECG:
  - CARDIOVIT AT-1
  - CARDIOVIT AT-1 smartprint
  - CARDIOVIT AT-2
  - CARDIOVIT AT-2 plus

- Exercise ECG (Multi-tasking Systems):
  - Cardioweg® A100
  - CARDIOVIT CS-300
  - CARDIOVIT AT-04
  - CARDIOVIT AT-05
  - ECG geometry

- Spirometry:
  - SPIROVIT SP-1
  - SPIROVIT SP-2
  - CS-300 by spirometrics
  - PC spirometry

- Monitoring:
  - ARGUS PRO System
  - PHYSIOSARD MACS 100
  - PHYSIOSARD MACS 90
  - Pulse Defibrillator QR
  - Magnetic Resonance Monitoring (MM1)
  - ARGUS CM Monitor
  - DEFIBARD (1002, 3002 H, 4002)
  - REPD®
  - REPD easy

- Holter ECG: AT-100/200

- Telemedicine: VLF 03/200 and AT-111LE

- SIMA 201 data management system

- BR-102 blood pressure recorder

- M5S PatchECG

- MAC-100 vacuum electrode system

- ECG & SpO2 accessories

Name: ____________________________
Hospital: __________________________
Position: __________________________
Address: __________________________
Phone (daytime): ____________________
Fax: ________________________________
e-mail: _____________________________

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