Practical performance

for quality without compromise

The PageWriter Trim II cardiograph offers fastpaced clinical environments a unique blend of cost-effective, practical and exceptionally versatile performance.

This compact, easily transportable unit enables you to conveniently view an exceptionally high-resolution monochrome display. The PageWriter Trim II is configured with a cart, complete with tray to easily transport supplies and accessories, as well.

Expedite operation and distribution

To optimize clinical efficiency, patient information can be quickly entered on a real alphanumeric keyboard or optional bar code scanner. Also, a trim knob allows users to quickly move through data screens.

The new digital Patient Interface Module (PIM) incorporates a color-coded lead diagram on the module, with leads intuitively arranged for quick, easy identification. In addition, each lead wire can be individually removed and replaced to help minimize maintenance costs. And streamline information sharing with options which include a magnetic card scanner, SMART card scanner, ECG storage card and modem card. The PageWriter Trim II's native XML implementation also establishes an open ECG standard to facilitate information sharing throughout the enterprise ... and beyond.



ECG records can be previewed prior to printing and storage to ensure quality.

PHILIPS

Features

ECG Acquisition

- ECG signal acquisition of up to 12 leads for both adult and pediatric patients
- Real-time display, with patient name and ID
- Automatic and configurable pacemaker detection

Metronome

• Metronome feature with configurable options to be used with the Master's Two-Step Stress Test

ECG Quality Monitor

- Real-time ECG signal quality indicators provide instant user feedback on the location of loose or inoperable electrodes
- Artifact, AC, and low and high pass frequency filters

ECG Memory and Transfer

• The PageWriter Trim II cardiograph provides storage memory for 50 ECGs, with easy transfer by optional modem, optional CF card, optional LAN connection, or optional USB storage device

Print Preview Capability

• Full-screen preview of ECG reports exactly as they appear when printed allows for quality assessment checks prior to printing

ECG Interpretation (Optional)

- Philips 12-Lead Algorithm for interpretive analysis of the amplitudes, durations and morphologies of ECG waveforms and associated rhythm for adult and pediatric patients
- This clinically proven interpretation program provides configurable levels of interpretive, reason and severity statements that are printed on the ECG report

Mobile Cart Integral Part of Cardiograph

• The mobile cart provides convenient transport for the PageWriter Trim cardiographs and accessories from bedside to bedside



The Philips PageWriter Trim II Cardiograph/Cart System.

Technical Specifications ECG Acquisition

- R/T (real-time) ECG (12 leads)
- AUTO (12 leads)
- RHYTHM (up to 12 leads)
- DISCLOSE (1 lead)

Keyboard

• Full alphanumeric keyboard

Display

- 640 x 480 pixel resolution
- Monochrome display

Signal Processing/Acquisition Sampling Rate

2000 samples per second per electrode/lead.
24-bit A/D conversion provides 5μV resolution.

Auto Frequency Response

 0.05-150 Hz, 0.15-150 Hz, 0.5-150 Hz, 0.05-100 Hz, 0.15-100 Hz, 0.5-100 Hz, 0.05-40 Hz, 0.15-40 Hz, 0.5-40 Hz

Rhythm Frequency Response

0.05-150 Hz, 0.15-150 Hz,
0.05-100 Hz, 0.15-100 Hz,
0.05-40 Hz, 0.15-40 Hz

Filters

- AC noise
- Artifact
- High and low pass

Printer Resolution

- High-resolution, digital-array printer using thermal-sensitive paper
- 200 dpi (voltage axis) by 500 dpi (time axis) at 25 mm/sec

Report Formats

- 3x4 (1R, 3R)
- 6x2 (Standard, Cabrera)
- Rhythm (up to 12 selected leads plus Cabrera)
- 12-Lead Extended Measurements
- Disclose (1 minute of continuous waveform data for 1 selected lead)
- Pan-12 (Cabrera)
- 12x1 (Standard, Cabrera)

Battery Capacity

- Typically 40 ECGs on a single charge or 30 minutes of continuous rhythm recording
- No fail operation during ECG printing

Battery Recharge

- Internal: Eight hours to full capacity
- External: Four hours to full capacity (optional)

Network Connection (optional)

• 10 Base-T IEEE 802.3 Ethernet LAN card (Not compatible with optional Interpretation)

FAX Capability

- Group 3, Class 1 or 2 fax modem protocol
- Support for PCMCIA fax modem

Modem (optional)

• V.90, K56flex, enhanced V.34, V.32bis, V.32, V.22bis and below

Barcode Reader (optional)

- Reads Code 39 Symbology
- Flexible data entry

Magnetic Card Reader (optional)

- ISO-7810, 7811-1,-2,-3,-4,-5
- Four configurable patient ID fields

ECG Storage

- Internal: 50 ECGs
- External: 150 ECGs
 - Optional PCMCIA card
 - Optional USB Storage card

ECG File Formats

- XML and XML SVG
- Stored at 500Hz

Power and Environment

Line Power

• 100-240 Vac, 50/60Hz, 65 VA max

Environmental Operating Conditions

- 10° to 40°C (50° to 104°F)
- 15% to 80% relative humidity (non-condensing)
- Up to 4,550 m (15,000 ft.) altitude

Environmental Storage Conditions

- 0° to 50°C (0° to 122°F)
- 15% to 90% relative humidity (non-condensing)
- Up to 4,550 m (15,000 ft.) altitude

Cardiograph Dimensions

• 388 x 310 x 176 mm (15.3 x 12.2 x 6.9 in)

Cardiograph Weight

7.38 kg (16.3 lb): Includes battery, patient module, lead wires, alligator clips, electrode pack and paper pack.

Patient Interface Module

• Remote, microprocessor-controlled, highresolution module

Safety & Performance

Meets the following requirements for Safety and Performance:

- IEC 60601-1: 1988 +A1:1991 +A2:1995 General Requirement for Safety
- IEC 60601-1-2: 2001 General Requirements for Safety for Electromagnetic Compatibility
- IEC 60601-2-25: 1993 + A1:1999 Safety of Electrocardiograms
- UL 2601-1: 1997 US General Requirements for Safety
- CAN/CSA-C22.2 No. 601.1-M90 S1:1994 B:1996
- AAMI EC11 1991: Diagnostic Electrocardiographic Devices
- CISPR11: 1997 + A1:1999 + A2:2002 Radio Frequency Disturbance, Limits and Methods of Test Group 1 Class B
- JIS T 1202: 1998 Japanese Industrial Standard for Electrocardiographs

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