



# Always in touch

Philips PageWriter TC50 cardiograph

You need to fit a lot into every day. That's why we've fit a lot into the Philips PageWriter TC50 cardiograph. It's an affordable and compact solution, packed with advances to make it easier to help you meet the demands you face every day. Easy to use, it also has the reliability, workflow performance, and clinical decision support tools to enable you to simply focus on your patients.

## Key advantages

- It's as Easy as 1-2-3; each button lights in sequence guiding the user to take an ECG
- Philips DXL ECG Algorithm provides industry-leading ECG interpretations and a suite of advanced STEMI decision support tools
- Scalable system streamlines your ECG workflow, providing optimal performance and long-term value



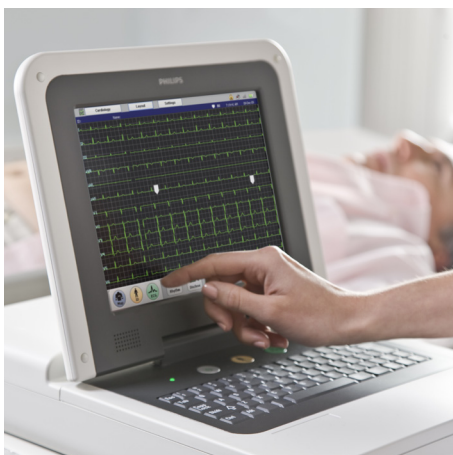
# PHILIPS

# Features

## PageWriter TC50 Cardiograph (p/n 860310)

| ECG functions                     |                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------|
| Simultaneous lead acquisition     | Up to 16 leads                                                                                      |
| ECG reports: 12-lead              | 3x4, 3x4 1R, 3x4 3R, 3x4 1R 8ST, 3x4 1R 10ST, 6x2, 12x1 Standard and Cabrera formats Pan-12 Cabrera |
| ECG reports: Extended leads (H22) | 3x4 3R ST, 3x5, 3x5 1R, 3x5 1R ST, 3x5 3R, 4x4, 4x4 1R, 4x4 1R ST Standard and Cabrera formats      |
| Rhythm strips                     | Up to 16 configurable leads                                                                         |
| Event marking                     | 10 independent events can be marked for later review and analysis                                   |
| Full disclosure                   | Ten minute history of all 16 leads<br>Complete ECG report of any 10 seconds                         |
| Timed ECG                         | Support for pharma stress protocols                                                                 |
| Report storage/transfer           | Full fidelity at 500 Hz of all 10 sec for up to 16 leads<br>XML format (schema published)           |
| Philips DXL 16-Lead ECG Algorithm |                                                                                                     |
| Interpretive statements           | >600 interpretive statements<br>Integrated pediatric analysis                                       |
| Leads used in diagnosis           | Standard 12 leads plus V3R, V4R, V5R, V7, V8 and V9                                                 |
| Borderline statement suppression  | Three configurable settings                                                                         |
| Standard measurements             | Ten interval, duration, and axis measurements<br>Configurable QT correction method                  |
| Extended measurements             | 46 measurements of morphology analysis in each of the 16 leads<br>21 parameters of rhythm analysis  |
| Reasons                           | Selectable explanations of all interpretive statements                                              |
| Nomenclature                      | Conforms to 2007 AHA/ACCF/HRS recommendations                                                       |

| STEMI Clinical Decision Support                         |                                                                                                   |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Graphical ST vector                                     | Five ECG reports with polar ST Maps<br>Frontal and transverse planes                              |
| Unique right heart statements                           | 9 statements called by right-chest leads                                                          |
| Unique posterior MI statements                          | 16 statements called by posterior leads                                                           |
| STEMI-CA                                                | Criteria that suggest any of 4 probable sites of the occlusion                                    |
| Critical Values                                         | Highlights 4 conditions requiring immediate clinical attention                                    |
| Networked features (when networked with TraceMasterVue) |                                                                                                   |
| Central time management                                 | Time can be synchronized to a networked time master                                               |
| Last ECG                                                | Automated retrieval of previous ECG                                                               |
| Orders                                                  | Configurable rules to retrieve cardiograph-specific Worklists                                     |
| Signal quality indicators                               |                                                                                                   |
| Leads off advisory                                      | Anatomical lead map displays the location and label of any loose or disconnected leads/electrodes |
| Lead color                                              | Four colors to indicate levels of waveform quality                                                |
| LeadCheck                                               | Lead placement software detects 19 different lead reversals                                       |
| Heart rate                                              | Continuous display of patient heart rate                                                          |
| Print preview                                           | Full screen preview of complete 16-lead report prior to printing                                  |
| Application help                                        | Integrated graphical Help screens for primary functions                                           |
| Self-paced                                              | Computerized, interactive, dynamic animation covering all major clinical functionalities          |



The PageWriter TC50 is so user friendly an experienced clinician can successfully take an ECG report without any training.



Clinical decision support tools from the DXL ECG Algorithm help guide patient care.



Designed around you, the compact system provides advanced features to support a variety of workflows.

# Technical Specifications

| User interface                        |                                                                                                                                  |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Touchscreen                           | 1-2-3 operation<br>Context-sensitive application<br>5-wire, resistive touchscreen                                                |
| Keyboard                              | 65 button, standard full alphanumeric keyboard<br>Special characters supported                                                   |
| Display                               |                                                                                                                                  |
| Size                                  | 10.4" TFT active matrix                                                                                                          |
| Resolution                            | 800 x 600 SVGA                                                                                                                   |
| Colors                                | 64K colors                                                                                                                       |
| Signal processing                     |                                                                                                                                  |
| Sampling rate                         | 8,000 samples per second per lead wire                                                                                           |
| Patient interface module              | Remote, microprocessor-controlled digital module provides 5µV resolution                                                         |
| Printer                               |                                                                                                                                  |
| Resolution                            | High-resolution, digital-array printer using thermal-sensitive paper; 200 dpi (voltage axis) by 500 dpi (time axis) at 25 mm/sec |
| Connectivity                          |                                                                                                                                  |
| Modem (H11)                           | V.90, K56flex, enhanced V.34, V.32bis, V.32, V.22bis and below                                                                   |
| Fax (included in H11)                 | Group 3, Class 1 or 2 fax modem protocol                                                                                         |
| LAN connectivity                      | 10/100 Base-TX IEEE 802.3 ethernet via on-board RJ45                                                                             |
| Wireless connectivity (D21)           | 802.11(b), 802.11(g)                                                                                                             |
| Wireless security (included in D21)   | 802.11(i), WPA, WPA2, CCX                                                                                                        |
| Internal storage                      | 200 ECGs                                                                                                                         |
| External storage                      | 200 ECGs with optional USB device                                                                                                |
| Automated data input                  |                                                                                                                                  |
| Bar code reader (H12)                 | Reads Code 39 Symbology<br>Flexible field data entry                                                                             |
| Magnetic card reader (H13)            | Four configurable Patient ID fields<br>ISO 7810, 7811-1,-2,-3,-4,-5                                                              |
| Smart "IC" card reader (H14)          | ISO 7816 and EMV 3.1.1;<br>supports SLE 4418/28 and SLE 4443/42                                                                  |
| Pre-processing filters                |                                                                                                                                  |
| AC noise                              | 50 or 60 Hz                                                                                                                      |
| Signal processing                     | Artifact Rejection and Baseline Wander                                                                                           |
| Presentation filters - 10 sec reports |                                                                                                                                  |
| High pass                             | 0.05, 0.15 and 0.5 Hz                                                                                                            |
| Low pass                              | 40, 100 and 150 Hz                                                                                                               |
| Presentation filters - rhythm         |                                                                                                                                  |
| High pass                             | 0.05 and 0.15 Hz                                                                                                                 |
| Low pass                              | 40, 100 and 150 Hz                                                                                                               |

| Electrical                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery                                 | Lithium ion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Second battery (H15)                    | Hot swappable (not printing)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Battery capacity (per battery)          | Typically 30 ECGs on a single charge or 30 minutes of continuous rhythm recording;<br>No fail operation during ECG printing                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Battery recharge                        | 4 hours per battery to full capacity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Mains power                             | 100-240 VAC, 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Power consumption                       | 60 W max                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mechanical                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Dimensions                              | 31 x 40 x 11 cm ( 12 x 16 x 4 in)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Weight                                  | 9.8 Kg (21.6 lb)<br>Includes battery, patient module, lead wires, alligator clips, electrode pack and paper pack                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Environmental                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Operating conditions                    | 10° to 40°C (50°F to 104°F);<br>10% to 90% relative humidity (non-condensing);<br>Up to 3,000 m (10,000 ft.) altitude                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Storage conditions                      | -20°C to 50°C (-4°F to 122°F);<br>10% to 90% relative humidity (non-condensing);<br>Up to 4,550 m (15,000 ft.) altitude                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Safety and performance                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| International standards and regulations | General Requirement for Safety<br>IEC 60601-1: 1988 +A1:1991 +A2:1995<br><br>General Requirement for Safety for<br>Electrocardiographs<br>IEC 60601-2-25: 1993 + A1:1999<br><br>Particular Requirements for Safety<br>IEC 60601-2-51: 2003<br><br>US General Requirements for Safety<br>UL 2601-1: 2003 1997<br><br>Diagnostic Electrocardiographic Devices<br>AAMI EC11 1991 (R: 2001)<br><br>General Requirements for Safety and<br>Electromagnetic Compatibility<br>IEC 60601-1-2:2001<br><br>CAN/CSA-C22.2 No. 601.1-M90 S1:1994<br>B:1996 |

**Philips Healthcare is part of  
Royal Philips Electronics**

**How to reach us**

[www.philips.com/healthcare](http://www.philips.com/healthcare)

[healthcare@philips.com](mailto:healthcare@philips.com)

fax: +31 40 27 64 887

Asia

+852 2821 5888

Europe, Middle East, Africa

+49 7031 463 2254

Latin America

+55 11 2125 0744

North America

+1 425 487 7000

800 285 5585 (toll free, US only)

Philips Healthcare

Global Information Center

P.O. Box 1286

5602 BG Eindhoven

The Netherlands



Please visit [www.philips.com/cardiograph](http://www.philips.com/cardiograph)



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