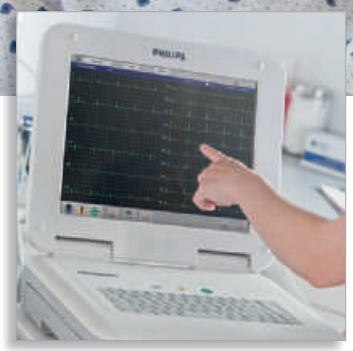


The right touch

Philips PageWriter TC70 cardiograph

Now there's a state-of-the-art cardiograph that simplifies diagnostic ECG testing and streamlines workflow – Philips PageWriter TC70. With a 15-inch touch screen, illuminated buttons, and color-coded signal quality indicators, it's simple to get it right the first time. Automated workflow acquires, prints, saves, transfers, and retrieves ECGs through wired and wireless connectivity via XML, HL7, and DICOM standards. PageWriter's native DICOM interoperability provides direct access to ECG orders from your current DICOM MWL provider and storage of resulting DICOM format ECGs to your existing PACS. Allowing for direct bi-directional communication with your DICOM service provider without an integration engine. The DXL Algorithm provides extended clinical information with 18-lead interpretation and advanced STEMI diagnostic decision support tools.

DXL

Key advantages

- Easy 1-2-3 operation with 15-inch touch screen
- Automated workflow with one button push via XML, HL7, and native industry-standard DICOM
- Clinical decision support with exceptional 18-lead DXL Algorithm

PHILIPS

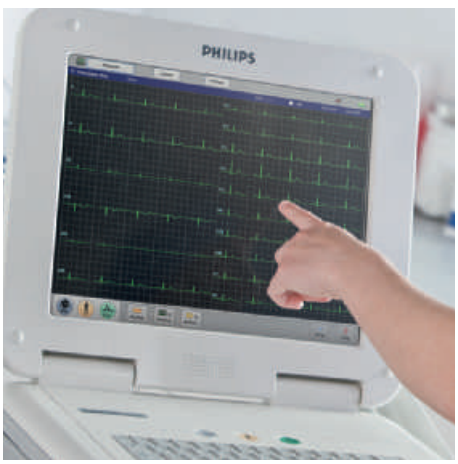
Features

PageWriter TC70 Cardiograph (860315)

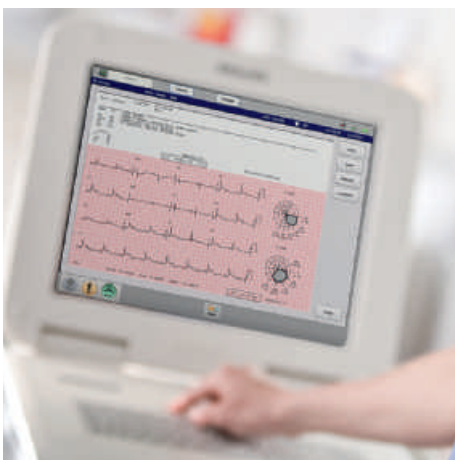
ECG functions	
Simultaneous lead acquisition	Up to 18 leads
ECG reports: 12-lead	• 3x4, 3x4 1R, 3x4 3R, 3x4 1R plus ST Maps, 6x2, 12x1 • Standard and Cabrera formats, plus Pan 12 Cabrera
ECG reports: Extended leads *(H22)*	• 3x5, 3x5 1R, 3x5 3R, 4x4, 4x4 1R, 6x3, 6x3 1R, 3x5 + 1x3 1R, 3x4 + 2x3 1R, 3x4 + 2x3 • Standard and Cabrera formats, plus PAN 18 Cabrera
Rhythm strips Full disclosure	Up to 18 configurable leads • Twenty minute history of all 18 leads • Complete ECG report of any selected 10 seconds
Event marking	• Fifteen independent events can be marked for later review and analysis • Event markers appear on ECG reports
Timed ECG	Support for pharma stress protocols
Report storage/ transfer	Full fidelity at 500Hz of 10 seconds for up to 18 leads
Data format	PDF, XML, DICOM 12-lead ECG, and DICOM General ECG formats

Philips DXL 18-Lead ECG Algorithm	
Interpretive statements	>600 interpretive statements Integrated pediatric analysis
Unique right heart statements	Nine statements called by right-chest leads
Unique posterior MI statements	16 statements called by posterior leads
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 • Configurable QT correction method
Extended measurements	• 46 measurements of morphology analysis in each of the 18 leads • 21 parameters of rhythm analysis
Reasons	Selectable explanations of all interpretive statements
Nomenclature	Aligned with 2007 AHA/ACCF/HRS Recommendations, Part II[1]
STEMI clinical decision support	
Graphical ST presentation	• Two polar ST Maps • Frontal and transverse planes
Age and gender criteria	Based upon 2009 AHA/ACCF/HRS Recommendations, Part VI: Acute Ischemia/Infarction[2]
STEMI-CA (Culprit Artery)	• Criteria that suggest any of four probable sites of the occluded coronary artery • Based upon 2009 AHA/ACCF/HRS Recommendations, Part VI[2]
Critical values	Highlights four conditions requiring immediate clinical attention

1 AHA/ACCF/HRS Recommendations for the Standardization and Interpretation of the Electrocardiogram, Part II: Electrocardiography Diagnostic Statement List. J Am Coll Cardiology, 2007; 49:1128-135.
2 AHA/ACCF/HRS Recommendations for the Standardization and Interpretation of the Electrocardiogram, Part VI: Acute Ischemia/Infarction. Circulation, 2009; 119:e262-e270.



The PageWriter TC70 is so user friendly an experienced clinician can successfully take an ECG report with minimal training.



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

PageWriter TC70 can be configured to automatically print, save, transfer, and retrieve a previous ECG with one touch of a button.

Technical specifications

Advanced bi-directional network communications[3]	
Central time management	Time can be manually or automatically synchronized to a Network Time Server via IntelliSpace ECG or IntelliBridge Enterpirse
Orders worklist	• Download of orders worklist from networked server • Supported by native DICOM • User-configurable drop down lists (e.g., by location, user, or shift) • Ad-hoc query for specific orders based upon multiple user-entered or scanned search criteria (e.g., Patient ID, Last/First Name) • Supported by Open Worklist with IntelliSpace ECG and select departmental systems • Supported by standard HL7 and DICOM interfaces via IntelliBridge Enterprise for departmental and hospital systems • Supported by DICOM modality worklist with DICOM MWL system
ADT	• Query and retrieval of patient demographic information • Based upon user-entered or scanned search criteria (e.g., Patient ID, Last/First Name) • Supported by standard HL7 interface via IntelliBridge Enterprise for hospital systems
Last ECG	• Automatic retrieval of previous ECG or list of available ECGs for current patient • Supported by IntelliSpace ECG
Interactive query	• Retrieval of selected ECGs based upon user-entered search criteria • Supported by IntelliSpace ECG
Manual orders	Create patient worklists with complete demographic information for later retrieval
DICOM ECG result output *(D08)*	• Create DICOM 12-lead ECG • Create DICOM General ECG
Signal quality indicators	
Leads-off advisory	Anatomical lead map displays the location and label of loose or disconnected leads/electrodes
Lead color	Four colors to indicate quality of individual leads
LeadCheck	Lead-placement software detects 20 different lead reversals
Heart rate	Continuous display of patient heart rate
Print preview	Full-screen preview of ECG waveforms prior to printing
User training and self help	
Application help	Integrated graphical help for primary functions
Self-paced training	PC-based, interactive, dynamic animation covering all major clinical functions
Training mode	Integrated waveform simulation

User interface	
Touchscreen	• 1-2-3 operation • Context-sensitive application • Five-wire, resistive touchscreen
Keyboard	• Backlit 1-2-3 buttons • 65-button, standard full alphanumeric keyboard • Special characters supported
Membrane keyboard cover	Silicone-based flexible cover protects keyboard from particulate and liquid ingress
Display	
Size	15in TFT active matrix
Resolution	1024 x 768 XGA
Colors	64K colors
Patient connections	
Patient Interface Module (PIM)	• Remote, microprocessor-controlled digital module provides 5µV resolution • Acquire data at 8,000 samples per second, per lead for 12/18 lead ECG
Long lead set *(H23)*	Extended-length lead wires enabling greater distances between the PIM and the patient connections
End connectors (adaptors)	
Alligator clips *(E01)*	Alligator clips for tab electrodes
Wide tab *(E02)*	Flat adaptor for tab electrodes reduces twisting (AAMI only)
Welsh bulbs *(E04)*	Six Welsh bulbs and four limb clamps
Snap/Tab adaptor *(E06)*	Fits both snap and tab electrodes with metal on both sides
Printer	
Resolution	High-resolution, digital-array printer using thermal-sensitive paper; 200dpi (voltage axis) by 500dpi (time axis) at 25mm/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	10/100 Base-TX IEEE 802.3 ethernet via on-board RJ45
Wireless *(D21)*	802.11(b/g), 802.11(i), WPA, WPA2
Wireless *(D22)*	802.11(a/b/g), 802.11(i), WPA, WPA2
Wireless credential	Cisco compatible CCX v4
FIPS certificate	FIPS 140-2 validated
Internal storage	200 ECGs
External storage	200 ECGs with optional USB device

cisco Compatible

3 When networked with select hospital and departmental solutions; refer to supplier specifications

Technical specifications

Automated data input	
Bar code reader *(H12)*	• Reads Code 39 Symbology • Flexible field data entry
Smart "IC" card reader *(H14)*	• ISO 7816 and EMV 3.1.1 • Supports SLE 4418/28 and SLE 4443/42
Pre-processing filters	
AC noise	50 or 60Hz
Signal processing	Artifact Rejection and Baseline Wander
Presentation filters – 10 sec reports	
High pass	0.05, 0.15, and 0.5Hz
Low pass	40, 100, and 150Hz
Presentation filters – rhythm	
High pass	0.05 and 0.15Hz
Low pass	40, 100, and 150Hz
Electrical	
Battery	• Lithium Ion • Two modules; hot swappable
Battery capacity	• Typically 50 ECGs on a single charge or 60 minutes of continuous rhythm recording on a full charge • No fail operation during ECG printing
Battery recharge	Five hours to full capacity
Mains power	100-240VAC, 50/60Hz
Power consumption	75W max
Mechanical	
Dimensions	40 x 33 x 16cm (15.7 x 13 x 6.3in)
Weight	13Kg (28lb) 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) • 10% to 90% relative humidity (noncondensing) • Up to 4,550m (15,000ft) altitude
Storage conditions	• -20°C to 50°C (-4°F to 122°F) • 10% to 90% relative humidity (noncondensing) • Up to 4,550m (15,000ft) altitude
Safety and performance	
International standards and regulations	• General Requirement for Safety IEC 60601-1: 1988 +A1:1991 +A2:1995 • Particular Requirement for Safety of Electrocardiographs IEC 60601-2-25: 1993 + A1:1999 • Particular Requirements for Safety IEC 60601-2-51: 2003 • US General Requirements for Safety UL 2601-1: 2003 1997 • Diagnostic Electrocardiographic Devices AAMI EC11 1991 (R: 2001) • CAN/CSA-C22.2 No. 601.1-M90 S1:1994 B:1996

Please visit www.philips.com/cardiograph

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www.philips.com/healthcare
healthcare@philips.com

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