

**PHILIPS**

Diagnostic  
Cardiology Solutions

ST80i Stress  
Test System

Workflow that  
works for **you**

# ST80i Stress Test System specifications

## Display

All-in-one computer with 24 in. HD (1920 x 1080) touchscreen or customer-provided display and Windows PC  
Accepts 19 in to 24 in display with 1920 x 1080 resolution

## Wireless Patient Interface Module (PIM)

Dimensions: 9.0 cm x 8.6 cm x 2.2 cm

Wireless data transmission to AIM: 2.4 GHz, O-QPSK, 6 dBm max transmission power (802.15.4 ISM band)

On-device display of:

- Lead map with lead connection status LEDs
- Battery level indicator with power status
- Signal strength indicator (only during an exam)

Run time: Up to 900 min on single AA battery (30 min/test x 6 tests/day x 5 days)

Power-save mode (after 3-15 min inactivity - configurable)

On-off button for power-down when not in use

## Advanced Interface Module (AIM)

Wireless receiver for PIMs

Can support multiple PIMs to support workflow

Output for echo and NBP sync: 2x analog, 1x TTL

## Applications

Navigation bar with elapsed time, test phase and protocol to support workflow

Philips CAIg Stress Algorithm

- HR calculation
- Beat detection, representative beat, beat classification
- Real-time comparison of ST segment changes
- Arrhythmia notifications

DXL Algorithm

- Used with 12-lead resting ECG option
- Same as PageWriter TC cardiographs

User configurable parameters

- Pre-programmed standard exercise protocols
- Create, store and edit up to 100 protocols
- Three default user profiles (with different functions); administrator, clinician, technician
- Create up to 100 user profiles with specific user names and passwords
- Default event labels with ability to add new event labels
- User name and password (including Windows and/or domain user name and password)

Direct control of connected exercise devices (treadmill, ergometer)

Monitor patient during recovery phase

Store and review up to one hour of full disclosure waveform data

Replay exam

Review, edit and electronically sign on stress system, Remote Review station or IntelliSpace ECG with Stress Enterprise Solution

Export reports in PDF, XML, PDR, DICOM

## Security

Configurable security mode; boot system directly into ST80i application

De-identify feature supports confidentiality

Supports user's Windows and/or domain user name and password if desired

Supports external authentication via MS Active Directory

Supports SSL

## Interoperability

Flexibility to integrate data and reports into EMR, PACS and CVIS systems

File export: PDF, XML, PDR (HL7 when used with IntelliBridge Enterprise)

DICOM (native)

- DICOM Modality Worklist
- Enhanced Structured Report
- DICOM Encapsulated PDF
- DICOM Conformance Statement available ([www.usa.philips.com/healthcare/resources/support-documentation](http://www.usa.philips.com/healthcare/resources/support-documentation))

Integrated workflow with Philips Diagnostic Cardiology Workspace

IntelliBridge Enterprise Interoperability

- Patient demographics acquisition and updates from ADT and orders via HL7 from HIS

IntelliSpace ECG

- View, edit, update, electronically sign, export and store ST80i stress exam at enterprise level
- With IntelliBridge Enterprise
- Patient demographic integration with HIS
  - Study level results export with optional encapsulated PDF (ORU) to HIS

IntelliSpace Cardiovascular

- Review full stress report via PDF and ECG Anywhere application
- IntelliBridge Enterprise solution
  - Patient demographic integration with HIS
  - Study level results export with optional encapsulated PDF (ORU) to HIS

## Supported peripherals

Treadmills

- Trackmaster TMX428 series treadmills
  - 115 V (0.5 to 10 mph; 0.8 to 16 km/h) or 220 V (0.5 to 12 mph; 0.8 to 19 km/h)
  - Elevation: 0 to 25%
  - Footprint: 200 cm (78.5 in) x 84 cm (33 in)
  - Maximum patient capacity: 227 kg (500 lb)
  - Available from Philips (North American market only)
- Lode Katana, Valiant 2, and Lode OEM treadmills; verify model number and date code with Lode
- Other supported treadmills
  - Cardiac Science TM55
  - GE T2100
  - H/P/Cosmos treadmill
  - Trackmaster TMX425

Ergometers

- Ergoline Ergoselect
- Lode Corival

Virtual device support for non-interfaced treadmills and ergometers

MGC Diagnostics Ultima™ Series metabolic testing system

SunTech Tango+ and Tango M2 NBP/SpO<sub>2</sub> monitors

## Trolley

### Features

- Mounting for all-in-one PC or customer-supplied wall-mountable display using VESA adapter
- Integrated isolation transformer
- Wire storage tray
- Wire accessory basket
- Cable hook
- Paper tray
- Large writing surface
- Storage drawer
- Cabling with covered cable management
- 4 x locking casters

### Options

- LED surface light
- Mounting arm for NIBP device
- Shelf for laser printer or customer-supplied PC
- Cable hooks
- Wire accessory basket

### Specifications

- 76 cm (30 in) x 66 cm (26 in) x 183 cm (72 in)
- 90 kg (198 lb)
- 10 kg (22 lb) capacity

## Technical requirements

### Workstation operating system

- Windows 10 (standard, recommended) 32-bit and 64-bit
- Windows 8.1 Professional 32-bit and 64-bit

### Workstation hardware

- RAM: 4GB
- Hard drive: 160 GB
- DVD drive
- LAN for in-hospital networking
- 2 x RS232 ports (RS232-to-USB adapters available)
- 4 x USB ports

### Keyboard and mouse

Display: 19 in to 24 in display with 1920 x 1080 resolution

### Printers and recorders

- Optional thermal printer
- Customer-supplied laser or network printer

### Leads

- 10-lead wire, single connector lead set
- AAMI or IEC color coding
- Snap or grabber connector
- Two lengths: 1050 mm (41 in) and 1450 mm (57 in)

### Filters

- AC: 50 or 60 Hz
- High pass: 0.92, 0.05, 0.15 Hz
- Low pass: 40, 100, 150, 300 Hz
- Baseline wander and artifact filters
- ECG data stored unfiltered: 0.02 - 300 Hz

### Power supply

- Isolation transformer input voltage per local requirements, included with trolley
- 120 V or 240 V
- Output power ratings of 600 VA
- Maximum four output receptacles

## Available product configurations

**860343 Option A01** ST80i Stress Test System, including AIO PC, thermal printer, trolley, wireless PIM, AIM, software CD, leadset, IFU, physician guide, quick reference card

**860343 Option A02** ST80i Stress Test System, including trolley, wireless PIM, AIM, software CD, leadset, IFU, physician guide, quick reference card (customer-supplied PC, display and printer)

**860343 Option A03** ST80i Stress Test System, including wireless PIM, AIM, software CD, leadset, IFU, physician guide, quick reference card (customer-supplied PC, display, printer and mounting)

860344 ST80i Stress Test System trolley

860351 ST80i Stress Test System upgrade

## Optional accessories

Part number	Description
989803196121	Trackmaster treadmill TMX428 220 V
989803195861	Trackmaster treadmill TMX428 110 V
989803197451	Tango M2 BP monitor
989803197221	Tango M2 SpO <sub>2</sub> adult finger kit with cable
989803180801	Patient belt
989803180811	Wireless PIM holder
H01	Additional wireless PIM
989803180121	12-lead Complete Lead Set (AAMI), standard length, grabber, 1.05 m
989803180141	12-lead Complete Lead Set (AAMI), standard length, snaps, 1.05 m
989803180131	12-lead Complete Lead Set (IEC), standard length, grabber, 1.05 m
989803180151	12-lead Complete Lead Set (IEC), standard length, snaps, 1.05 m
989803180161	12-Lead Complete Lead Set (AAMI), long, grabber, 1.45 m
989803180181	12-Lead Complete Lead Set (AAMI), long, snaps, 1.45 m
989803180171	12-Lead Complete Lead Set (IEC), long, grabber, 1.45 m
989803180191	12-Lead Complete Lead Set (IEC), long, snaps, 1.45 m
40420A	High-tack foam wet gel ECG electrode
40493D/E	Adult foam ECG disposable electrode
M2202A	Adult radio translucent foam electrode
M1708A	Paper - English no header
M1710A	Paper - Metric no header
M2481A	Thermal paper with header, 8.5 x 11 in
M2483A	Thermal paper with header, A4
M2485A	Anti-fade paper with header, 8.5 x 11 in



Philips Medical Systems  
3000 Minuteman Road  
Andover, MA 01810



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