

Sentinel 11.5 is a web-based Cardiology Information Management System which provides a paper-free environment for non-invasive Diagnostic Cardiology. Sentinel has been designed using the latest programming technology and is easy to install and to use.

Sentinel uses Microsoft SQL Server and provides security against unauthorized access to customer data. Scalable solutions are available ranging from single PC workstations to client-server installations sharing data between regional hospitals.

Sentinel contains technology licensed from the University of Glasgow to provide 12-Lead ECG interpretations.



Features

Primary features

- User friendly web browser interface.
- Interactive review of Resting, Rhythm and ABP data.
- Interactive review of Ambulatory ECG with optional Pathfinder SL or Lifescreen PRO analyzers.
- Electronic review, signing, printing and exporting of reports.
- Side-by-side comparison of ABP and Resting ECG.
- Convenient secure transfer of tests to and from remote Sentinel installations.
- Patient Centric workflows.
- Case (per visit) specific workflows.
- Manual creation of orders within Sentinel.
- HL7: Configurable ADT, OMG, ORM and ORU message support.
- DICOM: Worklist (order) input, encapsulated PDF and wave form output.
- Security: Audit trail, role-based security and patient access security.
- Optional off-line working mode.

Modalities:

- Ambulatory BP.
- 3/6/12/15/18-Lead ECG: Resting
- 3/6/12-Lead Rhythm ECG (when using CD12USB)
- Ambulatory ECG
- Stress
- Event
- Customer specified modalities

Additional Modalities supported via GDT

- Spirometry
- Ergospirometry
- Body-plethysmography
- Custom

Interfaces

3/6/12/15/18-Lead ECG	CD12USB (PC-ECG, 3/6/12-Lead ECG and Windows 7 only) CardioExpress (Resting ECG only) SL3 (connection via usb stick only), SL6, SL6A, SL12, SL12A, SL18A
Ambulatory BP	OnTrak (90227), 90207, 90217A
Ambulatory ECG	evo, Lifecard CF, Lifecard 12, Eclipse PRO and Eclipse MINI
3rd party ECG carts	DatamedFT
GDT	Slave and Master
DICOM	Encapsulated PDF for all modalities. Waveform and encapsulated PDF for Resting ECG
HL7	Note: HL7 and DICOM are not supported for simultaneous use

Security

Security options	<ul style="list-style-type: none"> Windows authentication Sentinel authentication Active Directory (incl. LDAPS) Single sign on HTTPS support Configurable role-based security with 43 configurable permissions Patient record level security Recordings, Analyses and Reports held on Sentinel server 	<ul style="list-style-type: none"> Audit trail feature Option of no PHI on ABP & Ambulatory ECG Recorders Encrypted server data Password strength enforced Password history enforced Lockout on password fails Inactivity logout View current logins
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Structure

Flexible	<ul style="list-style-type: none"> Single stand-alone system to enterprise wide network solution. Expandable structure to allow installations to expand and grow.
Configurability	<ul style="list-style-type: none"> Staff member roles Search result columns and filters Report formats Data entry validation Data entry visibility Web site color and logo image Automated activities (incl. print on sign) Custom test types Custom data fields Admin notification to users Multiple organizations Multiple facilities HL7 DICOM field mapping and transformation

Connect and Licensing

Connectivity	<ul style="list-style-type: none"> HL7 (incl. ADT19) LDAP / LDAPS (multi domain/forest) DICOM HearTwave II Mortara Q-Stress reports HTTP / HTTPS GDT SCI-Store DataMedFT Philips Stress VUE reports
Licensing	<p>Multi-feature licensing, activate features via licensing model such as for instance: ABP, Ambulatory ECG, Resting, Rhythm, Stress, ECG interpretation (Glasgow algorithm), DICOM, HL7 ADT messages, HL7 orders.</p> <p>Dongleless Licencing available on Sentinel Windows Server hosted systems.</p>
Import / Export: Import / Export patient and test data in the following formats, refer to the Operations Manual for a complete list.	<p>ABP formats: ABP, PB0, ART, RPT, G (import only), MON (import only)</p> <p>Resting formats: SCP, FDA / XML, third-party ECG carts (via DatamedFT)</p> <p>All modalities: SNTL, RSNTL, DCM, PDF report</p>
Mobile devices	<ul style="list-style-type: none"> iPad iPhone Android Microsoft Surface 3 <p>Mobile devices only support reviewing and electronically signing PDF reports</p>

System Requirements

Operating Systems: The Sentinel software has been verified and validated for installation and use on the following operating systems.	<ul style="list-style-type: none"> 3.1 GHz Pentium IV Processor, (i5 Dual Core recommended / i7 best performance) 2 GB RAM (16GB for workstation or 32GB for server installations is required when sending / receiving recordings longer than 20 days via RDT) Minimum Display Resolution 1024x768. 500 GB HDD Windows 7 SP1 Professional, Ultimate and Enterprise (64 bit) Windows 10 Professional and Enterprise (64 bit) Windows Server 2012 R2 Windows Server 2016 & 2019
Databases	<ul style="list-style-type: none"> SQL Server 2016, 2017, 2019 (Standard and Enterprise editions).

For current information about hardware requirements please contact your local Spacelabs Healthcare representative.

Standards

EN 60601-1:2006 / A1:2013

CE marked in accordance with the Medical Device Directive 93/42/EEC.

