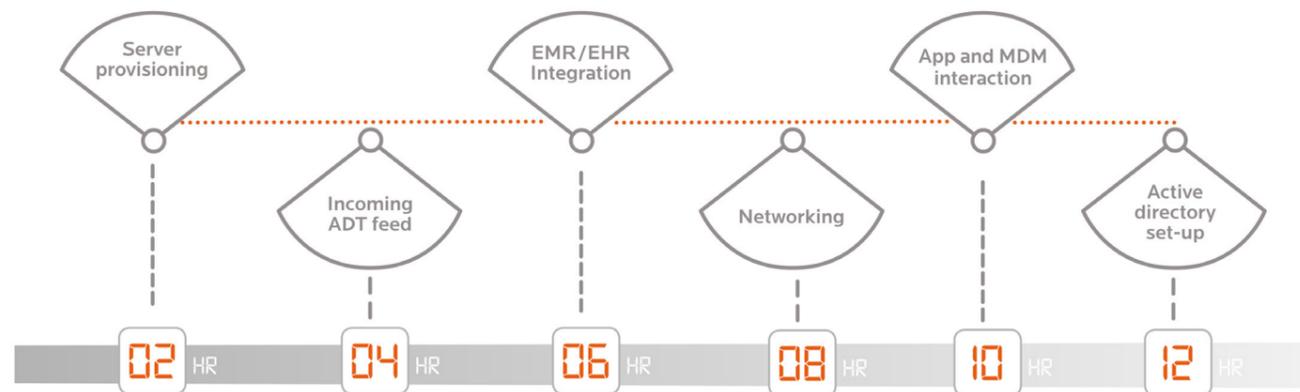# Sensium®

EFFORTLESS
IT DEPLOYMENT

Technical set-up is effortless

Sensium® has a dedicated technical implementation team to ensure that set-up and installation of the **Sensium®** system runs smoothly and requires minimum effort from the IT department. Depending on your environment and infrastructure, **Sensium®** will aim to execute the majority of the setup via remote access. However there are some areas that will need minimal collaboration from the Hospital, as illustrated in the diagram below.

IT department support required
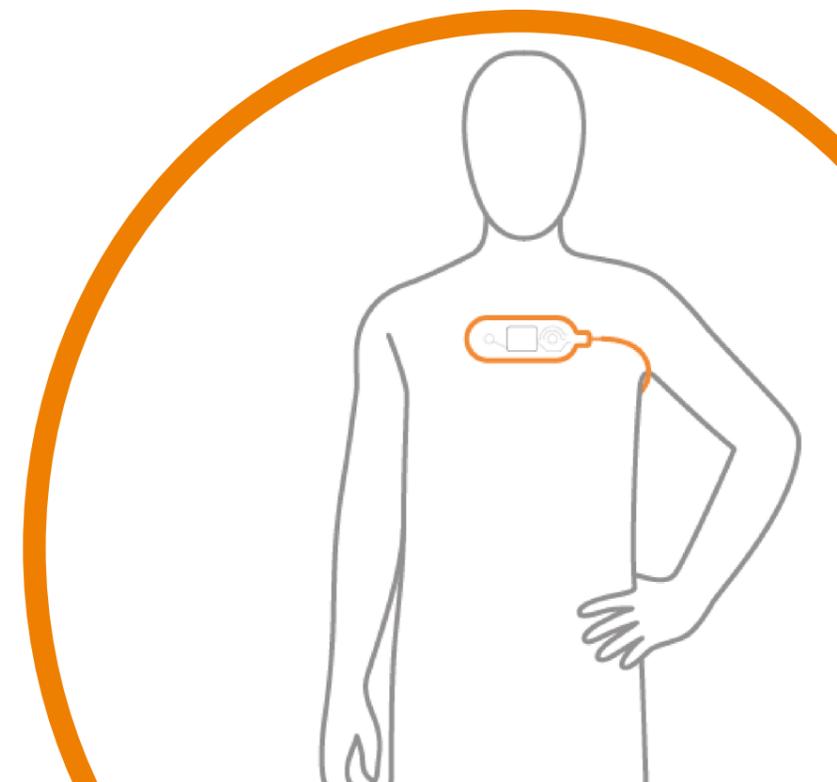

Hassle-free technical set-up

Sensium execute the majority of the deployment via remote access
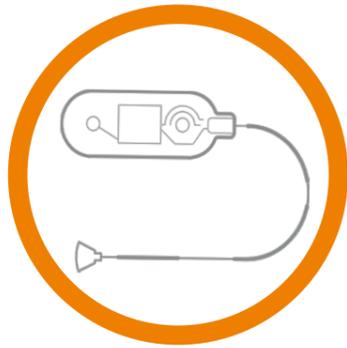
Seamless integration

Uses HL7 protocols to easily integrate with ADT and third party systems

Minimum disruption

Deployment has minimum impact on ongoing IT operations

Specifications

Application Server
- Windows Server 2012 R2 or later (x64) [Windows 2016 Recommended]
- 8 CPU Cores (Intel Xeon E5 ~3.20GHz or equivalent)
- 16GB RAM
- 300GB Storage (Split 200/100 C/D)
- I/O Performance: 10Krpm SAS equivalent
- Global SSL Certificate installed
- NET 4.6.2 .NET Core Hosting 2.2.7
- Optional: SQL Server Management Tools (if database is customer-cluster-hosted)

Database Server
- Windows Server 2012 R2 SP1 or later (x64) [Windows 2016 Recommended]
- SQL Server 2014 or later
- 8 CPU Cores (Intel Xeon E5 ~3.20GHz or equivalent)
- 16GB RAM
- 400GB Storage (Split 200/200 C/D)
- I/O Performance: 10Krpm SAS equivalent
- SQL Server Management Tools
- SQL Reporting Service & SQL System Integration Service

Network and Sensium Bridge
- 10baseT Ethernet (Full duplex) or 802.11 b/g Wireless Ethernet (a variety of security protocols are supported such as WPA TKIP or Enterprise)
- Power over Ethernet (POE) – provided either by switch or injector /midspan
- Fully routed TCP/IP network between Bridges and Application Server
- UDP port 123(NTP) and TCP port 4444 open between bridges and Application Server

Mobile apps
- Wi-Fi- Security WPA2 or above
- iOS operating system: 11*
- Android operating system: 7,8,9, 10*

*Contact Sensium for a list of complatibale devices and full IT specifications

Sensium® Patch

Patch

The disposable **Sensium®** patch accurately and reliably monitors and reports heart rate, respiration rate and axillary temperature, the leading indicators of patient deterioration, providing data every two minutes. **Sensium®** utilises proprietary radio frequency (RF) technology to wirelessly communicate this physiological information via safe and secure low power.
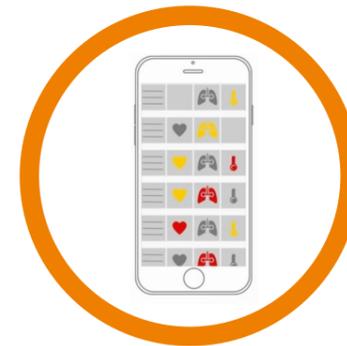
Sensium® Apps

Sensium® Desktop

Sensium® Bridge

Bridge

The wireless patch seamlessly communicates with any bridge with-in range. Using **Sensium®**'s proprietary RF communication ensures a long-range connection and allows multiple patches to connect to the same bridge, minimising the number of bridges required per ward. In contrast communication modalities like Bluetooth require a 1:1 connection and do not natively support roaming. The **Sensium®** technical team will perform a survey to indicate the best location for the bridges resulting in professional installation of bridges by estates.
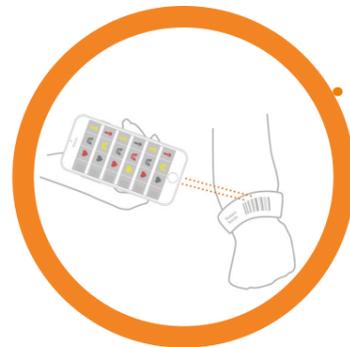
**Sensium® Link
(Server software)**

User Interfaces

Clinical staff can view **Sensium®** data using a desktop PC, iOS®/ Android® apps or third party application. Mobile/tablet devices use Wi-Fi to connect to the network. **Sensium®** allows the ability to enter additional patient observations, in conjunction with pre-populated vital sign values from the **Sensium®** patch, in order to calculate an Early Warning Score (e.g. NEWS2) and record electronic observations. **Sensium®** ensures that it's easy to deploy its mobile app via your MDM.

Hospital ADT feed

Third party platforms

EMR

ADT feed

Industry standard HL7 messages are used to seamlessly transfer patient data into **Sensium®**. The company use an integration engine to manage the transfer of HL7 feeds. Integration with the hospital admission, discharge and transfer (ADT) feed means that clinical staff can locate patients in **Sensium®,** avoiding the risk of relying on manual entry.

Third Party Platforms

All **Sensium®** data can be sent via industry standard HL7 messages to any third party platform. This allows clinical staff to realise the benefits of the **Sensium®** system and its data within the most convenient platform. **Sensium®** understands that no two hospital ADT feeds are setup the same. Even if your hospital doesn't conform 100% to HL7 standards, **Sensium®** has the expertise to manage the integration.

Server

Sensium® has two major server-side components, an Application Server and Database Server. The Application Server requires its own machine (virtual or physical) whilst the Database Server can either be run on its own dedicated machine (virtual or physical) or can be part of a your pre-existing Microsoft SQL Server cluster. **Sensium®** will ask you to provision the two servers, based on your own processes and infrastructure standards and use them to set up the application environment for you. The Company have experience with a range of physical hardware and virtualized environments and will work with you to tailor the deployment based on your needs. Depending on your environment and infrastructure **Sensium®** will also arrange suitable access for remote support where applicable. All **Sensium®** data is stored locally on the hospital network, giving you complete control and security.