

## Effortless IT deployment





**TECHNICAL SET UP**

Sensium® has a dedicated technical implementation team to ensure that set-up and installation of the Sensium® system runs smoothly. 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.

## BRIDGE



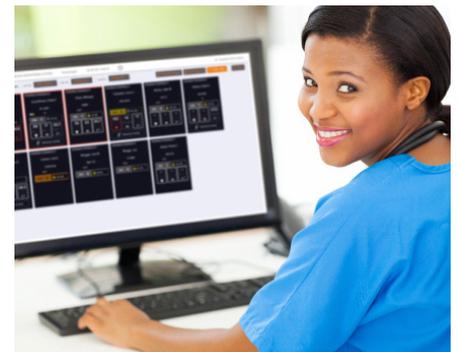
The wireless patch seamlessly communicates with any bridgewith-in range. Using Sensium®'s proprietary RF communication ensures a long-range connection and allows multiple patches to connect to the same bridge, minimising the number of bridges required per ward. In contrast communication modalities like 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.

## PATCH



The disposable Sensium® patch accurately and reliably monitorsand 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 informationvia safe and secure low power.

## USER INTERFACES



Clinical staff can view Sensium® data using a desktop PC, iOS®/ Android® apps or third party application. Sensium® allows the ability to enter additional patient observations, 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.

## 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 preexisting 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.

## INTEGRATION AS STANDARD

Sensium utilises years of experience to rapidly deploy scalable, remote monitoring solutions to all clinical areas. Sensium's in built integration engine and years of deployment experience means that seamless integration into existing hospital systems is both easy and quick with Sensium's dedicated team of engineers executing most of the work remotely. Sensium's integration engine can be used to configure inbound and outbound HL7 messages allowing patient identifiable information to be streamed into the Sensium database and actionable clinical insights, notifications and current vitals information to be passed back into an EMR system. The open API architecture of the Sensium system means that with a few simple API calls the full functionality of the Sensium User Interface can be fully embedded into a 3rd party EMR system.



## FLEXIBLE INTEGRATION OPTIONS

- Leverage investment in existing IT infrastructure (EMRs or notification management systems)
- User Interface can be viewed on any existing hospital platform
- Native applications for iOS and Android
- Integration as standard utilising HL7 bi-directionally
- Open API architecture allows the Sensium
- UI to be embedded into EMR's or other systems



## 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.

## HL7

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.

## TECHNICAL CHARACTERISTICS

APPLICATION SERVER	Windows server 2012 R2 or later (x64)	
	8 CPU Cores (Intel Xeon E5 ~2.2GHz or equivalent)	
	16GB RAM	300GB storage (200/100 c/d)
	I/O performance (10krpm SAS eq)	Global SSL certificate installed
	Net 4.6.2 Installed	
	Optional: SQL server management tools	

DATABASE SERVER	Windows server 2012 R2 SP1 or later (x64)	
	8 CPU Cores (Intel Xeon E5 ~2.2GHz or equivalent)	
	SQL Server 2014 or later	SQL server management tools
	400GB Storage (200/200 C/D))	16GB RAM
	SSL certificate	
	I/O Performance: 10Krpm SAS equivalent	

SENSIUM BRIDGE	10baseT Ethernet (Full duplex) or 802.11 b/g Wireless Ethernet (variety of security protocols supported e.g. WPA TKIP, Enterprise)	
	Power supply: Power over Ethernet (POE) – provided either by switch or injector /midspan (hospital) 220-240V Power Supply (home)	
	Fully routed TCP/IP network between Bridges and Application Server	
	UDP port 123(NTP) and TCP port 4443 open between bridges and Application Server	
	For optimal deployment, maintenance and operation efficiency, a segregated VLAN and IP subnet with DHCP are recommended	

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### CONTACT

**The Surgical Company**  
Sensium Healthcare Ltd, 115 Olympic Avenue,  
Milton Park, Abingdon, OX14 4SA, United Kingdom  
Tel. + 44 (0) 1235 438 950  
[tsc-group.com/connectedcare](http://tsc-group.com/connectedcare)