

Asset tracking for healthcare



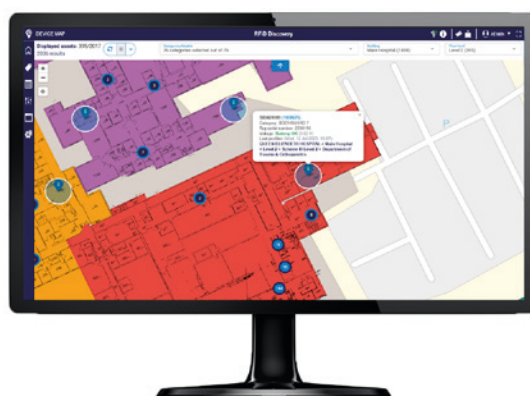
The loss and underutilisation of mobile assets costs the healthcare sector millions of pounds each year. Particularly for acute hospitals, it's a challenging task to keep track of equipment with staff clocking up many hours and miles searching for available devices or out-of-service equipment.

Used in over 200 hospitals and other healthcare organisations throughout the UK, Europe and beyond, RFID Discovery provides affordable and scalable Asset Tracking solutions that enable users to improve the management of healthcare assets.

Key Benefits

- Accurate record of asset locations
- Time saved looking for equipment
- Improved asset utilization reduces need to purchase new devices
- Updates inventory records in minutes
- Safer patient environment
- Improved maintenance efficiency to support compliance

The system is ideal for tracking any asset including medical devices, beds, mattresses, wheelchairs, gas cylinders, laptops, communication devices and more.



“ Using RFID technology has improved our care and provided a return on investment by saving us hundreds of thousands of pounds and thousands of hours of nurses' time. ”

Prof. Paul White,
Head of Clinical Engineering, Cambridge
University Hospitals NHS Foundation Trust

Bluetooth Low Energy (BLE) tracking

Why use BLE tracking?

Our Bluetooth Low Energy tracking solutions help healthcare providers to locate key assets and even people in real-time with very little requirement for new infrastructure. Thanks to battery-powered tags and readers (anchors), the solution is simple to implement as there is no need for power connections. Long battery life means minimal maintenance.

Real-time location visibility helps improve utilization levels, drives down capital costs and saves valuable time normally spent by clinical staff searching for equipment. In addition, hospitals can monitor how many critical devices are available at any given time to highlight shortages or overstocking.

The system can detect movements between sites, and highlight incidents of unauthorized removal. It is also ideal for tracking hired or loaned equipment, to minimize hire charges and late return fees.

BLE technology can also detect the locations of patients and staff can improve patient flow and streamline working processes.



How does it work?

Tags

For **accurate real-time location tracking** each key medical device is fitted with an active BLE tag, which transmits its unique ID at pre-set intervals. Tags are shock and waterproof, and can withstand standard hospital cleaning processes. Batteries are changed easily, and last between one and five years.



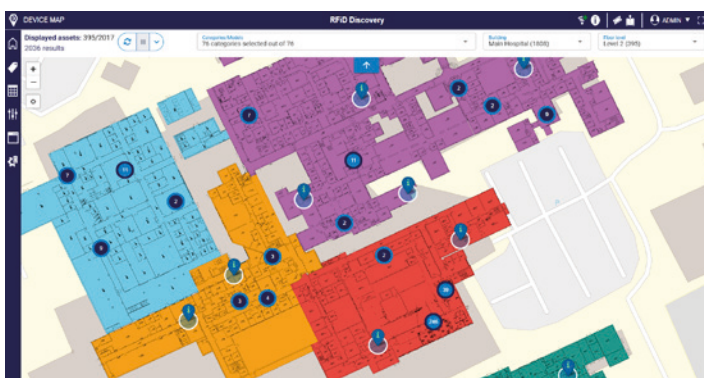
Examples of BLE tags

Infrastructure

Tagged assets are detected by strategically placed anchors or existing Wi-Fi access points. Locations are calculated using advanced algorithms to an accuracy of around 3 metres depending on infrastructure density.

Location information

Live location data is then sent to a central database and is accessible by hospital staff via an intuitive interface which includes a map view. This means required items can be located quickly by clinical and engineering teams. In addition, the ability to identify individual devices makes incident reporting easy, and can help contain the spread of infection by tracing historic equipment locations.



RFiD Discovery software - Map view



RFiD Discovery software - Alarm dashboard

Passive RFID tracking

Why use passive RFID tracking?

Due to their lower cost, passive UHF tags can be attached to all assets and often replace existing asset labels. Using passive RFID to track the tens of thousands of medical devices typically used in acute hospitals eliminates the need for time consuming manual audits.

At the same time, it provides valuable data for compliance reporting and future planning. Using GSI compliant RFID labels enables hospitals to link the use of specific devices, as well as location, staff ID and medication to a patient to improve patient safety.



GSI compliant passive RFID labels

How does it work?

Tags

Each item to be tracked is fitted with a passive RFID label. Without their own power source, they rely on energy from an RFID reader to transmit information.

Readers

Tags are detected from a distance of up to 11 metres by a specially designed **RFID trolley** which is pushed around the hospital by a clinical technician. This enables fast and accurate auditing for improved inventory management.



RFID trolley reader

Installing fixed readers can automate the detection process, and provide **real-time location information** for areas with a high number of equipment moves such as ER or the clinical engineering work area.

In addition, mobile **handheld** readers are used to audit small areas. With a clever 'go find' function they can also locate specific devices, for example those due for servicing.



Location information

Location information is sent to the central RFID Discovery database, which can be used for reporting, analysis and future planning. It also helps to locate devices by their last known location.

The solution can use tracking information from many different technologies and is easily integrated with existing asset management systems or other hospital software.



RFID Discovery software - Medical device overview

“ It used to take us three months to complete a **full inventory**. Now we can carry out an audit of our 10,000 tagged medical devices **in just three days!** ”

Bryan Hynd
Head of Medical Physics
NHS Forth Valley and Lanarkshire

GPS tracking of devices in the community

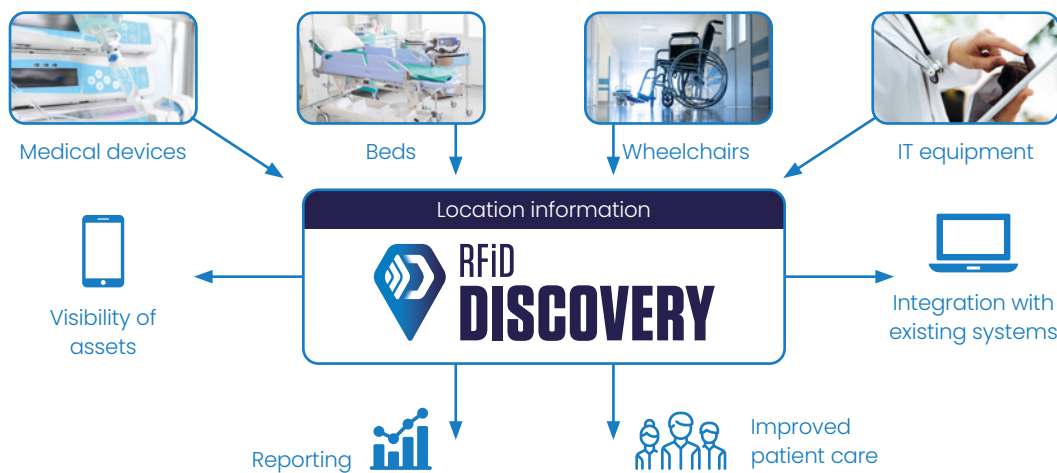
Using specialist tracking tags with GPS and cell tower locating functions, our new community medical device tracking solution enables healthcare providers to accurately locate equipment not only in hospital but also in the community.



Integrated solutions for maximum ROI

Our proven tracking solutions are totally flexible to suit your requirements. We use our expertise of different hardware and software technologies to create a solution that works for you.

Our highly skilled team of experts supports you all the way from initial consultation and site survey through to implementation and ongoing management to ensure maximum benefits are achieved and possible pitfalls avoided.



Complete Hospital Solutions

We specialise in providing integrated tracking solutions, enabling healthcare providers to access location and other key data through a single system. Solutions include:

- Patient flow & discharge management
- Inventory management including RFID enabled resus carts and smart cabinets
- Automatic temperature monitoring
- Staff and wandering patient safety
- Baby tagging

Why choose RFID Discovery?

RFID Discovery is a leader in integrated identification and location tracking solutions. Used in over 200 hospitals across the UK, Europe and beyond for over 15 years, RFID Discovery is the number one choice for medical device tracking and other healthcare location solutions using RFID, BLE, GPS and other technologies.

We are part of the Paragon ID group, hold the Cyber Essential certification and our system is GSI UK approved. Paragon ID is a RAIN Alliance member and certified to ISO9001, ISO14001, ISO27001 and ISO45001 standards.

