

electronic tagging solutions - active mining guide



health & safety - time in attendance - access control - security solutions - asset tagging

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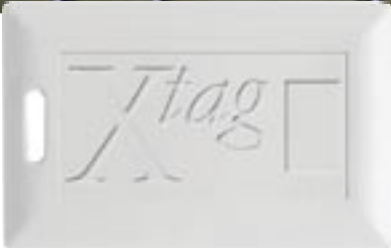
XtagTM



XtagTM

Intelligent Mining Solutions

System Overview



The Xtag Intelligent Mining Solution provides information putting you in control.

The mining is fitted with tiny discrete digital radio receivers which are continuously in contact with Xtag range of miniature active tags, this allows information to be provided about assets, personnel, vehicles or stock. No other system provides this level of control.

Health, Safety and Peace of Mind

Xtag solutions are primarily installed to provide health & safety, security. So much more than tripwire technology.

Health and safety solutions include, emergency evacuation for all personnel with real time information to assist emergency crews immediately after an incident. The Xtag system provides real time lists for personnel, showing clearly who are safe and who are still within the premises, it will also provide "last seen" locations IE "fourth level" which can greatly assist emergency services.



During normal mining operation, the Xtag system further increases the health and safety information available as it can prevent access to hazardous areas and even advise should someone stray into danger, it can give invaluable information i.e. "all personnel within the mine" reports in real time and provide "last seen" locations for each person e.g. "Upper level", "Maintenance area" etc

Security

Additional security comes as standard with the Xtag system.

Illustrations in this brochure show all the components of the Xtag intelligent mining solution and how they work together to provide information which is unique.

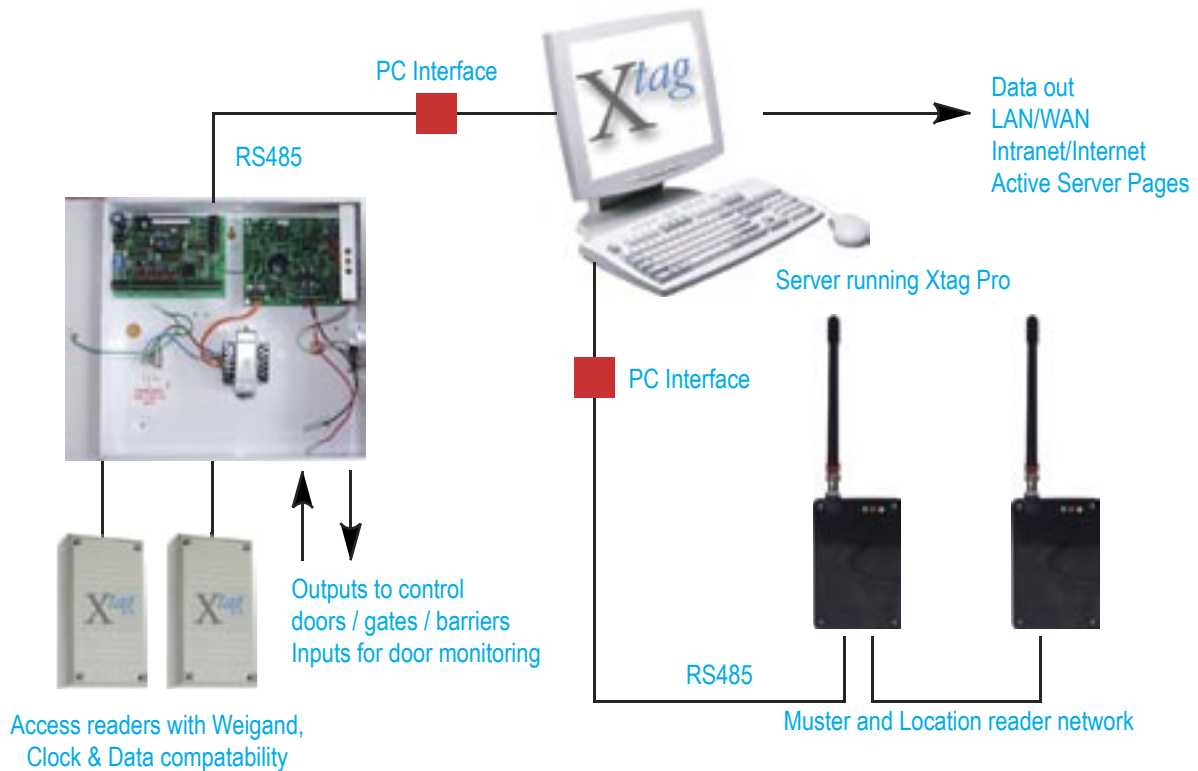
The Xtag System is an advanced electronic system when utilised within a planned security regime will prevent loss of life, assets and stock.



Companies are selecting Xtag for its security, flexibility, and ease of use.

Applications

- ◆ Intelligent mining management solutions
- ◆ Emergency personnel evacuation solutions
- ◆ Time in attendance functions
- ◆ Security applications
- ◆ Stock inventory control
- ◆ Health and safety applications
- ◆ Real time personnel muster/location output
- ◆ Hands free access control
- ◆ Asset Tagging solutions



Long range Active tags

Typical Xtag active mining

The drawing shows a simple view of a mining fitted with an Xtag active solution, all personnel are issued with Xtag active ID cards, these can carry a photo ID if required.

A member of staff arriving at the car park finds the secure barrier opens for them, the front door to reception opens allowing access, the long range reader in reception detects them and changes their status to "IN".

Providing access has been granted the staff member can enter the IT suite, this registers their "LAST LOCATION" into the system.

Should an emergency evacuation be required, all personnel leave the mining and arrive at the outdoor muster point, a long range reader at this location detects their active ID cards and logs them as "OUT", a printer at this location constantly updates the list providing valuable information for emergency service personnel.

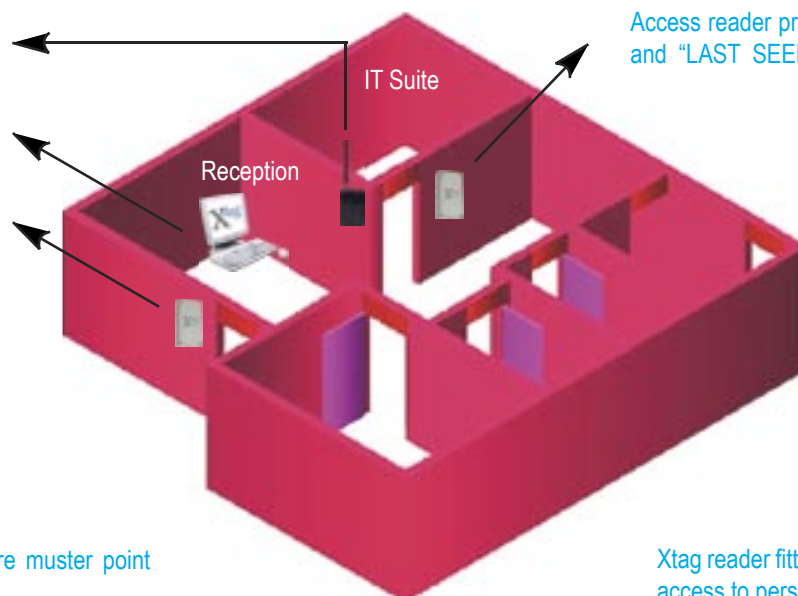
Long range muster reader provides "IN" status for all personnel

Computer running Xtag Pro

Access reader provides hands free access to front door of premises



Long range reader sited at outdoor fire muster point provides "OUT" status for all personnel



Access reader provides access to secure area and "LAST SEEN" location for all personnel

Xtag reader fitted to car park barrier provides access to personnel vehicle





Key System Features

Xtag provides the most advanced personnel / asset solution.



Fully Supervised

Xtag system continually monitors the activity and status of all active tags. Each tag emits a regular “presence” signal every 1.4 seconds to indicate that it is OK.

Personnel with a tag simply by walking into a building will automatically be shown as present and ID information will be displayed at reception desk pc without the person breaking stride or being aware of it.

Vistiors can be controlled or simply tag a book and it cannot leave the room.

Confidence Is Built In

Xtag was designed to minimize maintenance and provide unprecedented reliability. Long range readers ensure full coverage, whilst adjustable short rangereaders provide “last seen” locations. In addition, the system’s design minimizes susceptibility to interference from other electronic and radio frequency equipment. This eliminates problems caused by external radio equipment.

Tamper Proof Asset Solution

A miniature switch is incorporated within all Xtag asset tags which detects any attempt to remove the tag from the asset on the long

range receiver network, any attempt to disable the tag results in a security alert.

Identification by RFID

Each Xtag active tag has a unique RFID number, this enables the system to identify each person or asset, displaying them by name for ease in administration.

Eliminates Tailgate Exits

A “tailgate exit” is the name given to a condition which occurs frequently with conventional access control solutions, it simply means that a person went through a door opened by another persons ID badge therefore the system has no record of the event.

Because xtag monitors all tags constantly it would still know how many personnel or assets were present, updating administrator software or operating security protocols (alarms e.t.c.)

Personnel Friendly

The Xtag active ID cards are designed to be worn by staff using lanyards or conference badge clips, the badge is the same shape and size as a credit card which allows third party printers and consumables to be used to produce unique company logos and photographic ID as required

The Xtag has no moving parts, increasing reliability and cleanliness.

Expandable

Xtag systems were designed to allow a premises to implement the system needed today, while having the ability to seamlessly expand in the future as needs grow.

Key System Features Continued



LAN/WAN Compatible

The Xtag System supports multiple PCs, connected over a Local Area Network or Wide Area Network. Security personnel and administrators can all access the system simultaneously.

Different levels of password access ensure security while allowing staff members to perform their jobs efficiently.

Time and Date Record of Activity

The Xtag Pro software records and logs all activity data with time and date information.

In a properly configured system, the entire history should a problem occur, is recorded in detail.

Authorized movements, like the transport of assets or to personnel, can also be time and date stamped.

For example, administrators could determine that John Smith left the building on 11th August at 16:43 p.m., and that under his password authorization, he took with him asset "Laptop 23" which he returned with at 9:45 a.m on 14th August.

The system automatically records the identity of the staff member who signed out the asset.

The amount of activity data stored is user configurable and largely dependent on the computer's hard drive storage space. Weeks, months and years of activity can be stored.

Data can be backed up to conventional mediums such as tape and disc. Xtag uses an industry standard database with sort and filtering capability. Data can be displayed on-screen and printed or exported into other Microsoft compatible data software for maximum flexibility.

Does not Intefere with Other Electrical Equipment

Compliant with the EMC and R&TTE directives governed by the UK Radio Interface Requirement.



Classified as a Class 2 Security Product

The Xtag active tag and reader is fully approved and does not interfere with the operation of other electrical or personal equipment.

Microsoft® Windows® Based

The Xtag Pro Software uses the Windows operating system, creating a familiar environment for users. This platform also provides the system with exceptional flexibility, allowing it to be configured according to the specific needs of an organisation.

Compatible with Windows 98, Windows 2000, Windows ME and Windows XP

Low-Battery Alert Feature

Xtag continuously monitors the battery level of all active tags. If battery power falls below a certain threshold, the system automatically generates an alert to indicate that the battery is aging.

The system can be configured to generate alarms if:

- ◆ The tag is detected in an unauthorised area.
- ◆ Someone tries to exit through a protected doorway with an asset without authorization.
- ◆ The asset tag is interfered with or removed.
- ◆ An authorized exit has occurred and someone tries to "tail gate" through the protected exit without authorisation.
- ◆ The battery power in the tag has become low.

Xtag Active ID Tag

At the heart of the Xtag System is the active ID tag. This small radio transmitter, combining state of the art microprocessor technology with excellent design, provides a reliable state of the art solution to personnel and asset systems.

The tag has a tamper mechanism built in to the design that is enabled continuously when attached to an asset.



The tag emits a signal and is automatically picked up by the Xtag system. From this time forward, the system constantly monitors the tag.

Tags are reusable and have a warranted life of one year. With a battery life of 3 years. They are waterproof, and can be cleaned as required.

Xtag Readers

Xtag Readers

They receive the Xtag transmissions, time stamp them, and relay them to the Controller PC via a simple network.

The Xtag reader can be configured as “long range” which monitor the tag’s within the permitted areas reporting all presence and low battery signals to the host PC, or “access” which monitor areas close to exits, signalling the approach of a tag with fully adjustable range control. They can control locking solutions fitted to the doors/barriers etc.

Long range readers have a simple external antenna and can detect tags in range of 80 metres open field and in an area of 60 meters radius (120 meters diameter).

Access readers have an internal antenna to best suit the location which is fully adjustable to set the range at which a tag is detected from 1 meter to 15 meters.

Xtag active mining solutions readers have distributed intelligence, they store all tag details in memory and have a local relay fitted which continues to operate even when the host PC is off line or the network is down, this allows the system to continue to function in adverse conditions giving total peace of mind.

Xtag Biometrics



For ultra high security areas of your premises biometric thermal fingerprint readers can be installed requiring both tag and fingerprint ID to open the door, should an individual “tailgate” through the door, a security alert can be raised when their tag is detected in the area.

Host PC

The Windows-based host PC contains the Xtag software that oversees the management of the entire system. The software displays all relevant system data utilising active server pages accessible via the internet anywhere in the world

Typically located at reception or at a facility's IT secure area, the computer monitors and controls all system operation.

Additional computers can be connected at other locations throughout the facility and via LAN/WAN to any facility in the world.



Xtag Software

The software offers intuitive control through a familiar windows based graphical user interface.

Designed for ease-of-use, the software presents only task-critical information to the operator.

The degree and level of operator access can be regulated through passwords. User accounts can be created and authority assigned according to each facility's requirements.

The software records all activity, including alarms, in a database. A variety of reports of system activity can be selected, viewed on-screen and printed.

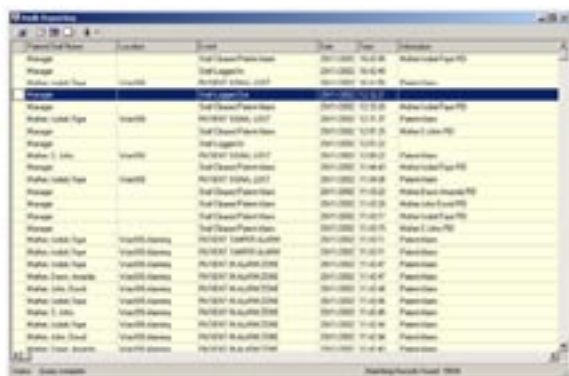
Custom reports can be created, and the database can be exported for use with third-party software programs, including Microsoft Access.

The Network and Power Supply

The system utilises a simple RS485 network allowing easy installation with Belden STP cable throughout.

The readers run from a 12 Volt uninterruptible power supply which allows local alarm events to continue in the event of PC failure/off line and network failure.

This provides total peace of mind for the staff using the system.





About Xtag

Xtag is a leading supplier of products for the security and healthcare markets.

Xtag has established a reputation for providing its customers with practical, reliable products based on proven FM RF technology.

Today, the Xtag Baby System is the leading infant protection system.



The Xtag active mining solution is unique, it sets a standard of health and safety care for personnel as yet not available with any other system, furthermore it allows asset monitoring, access control, stock inventory control and high levels of site security all within one solution.

All manufacturing processes are certified to ISO 9000 international quality standard, from order entry to manufacturing and product shipment.

The company's quality system is certified annually by independent auditors.

Xtag has its own team of designers hence all design, software, firmware, networks and system specifications are "in house", this ensures consistent quality from original idea through to finished products.

It is this commitment to quality that gives Xtag

