ACCESS²

ACCESSIBLE CONTROL

eTigris Three® Wireless Access Control
From a handful of doors to a multi-site hospital complex

Whether you are looking simply for a set of cylinders for a residential development, a complex masterkey system for a multi-site hospital or a wireless electronic access control system, specifying Tigris® carries the reassurance that comes with a brand that has been successfully specified and installed on some of the most prestigious building projects across the UK, Middle East and Far East.

Leisure & Residential Sector

Blythswood Hotel Glasgow
2012 Olympic Handball Stadium
2012 Olympic International Broadcast Centre
2012 Olympic Village
Al Muneera Residential & Commercial Beach Development, Abu Dhabi
Bewleys Hotels
Ritz Carlton Bahrain
Centro Hotel Abu Dhabi
Hyatt Hotel Trinidad
Travel Inn
Meydan Racecourse, Dubai
Radisson Hotels
Gleneagles Hotel
Holiday Inn
Harlequins RFC
Nottingham Forest FC
Preston North End FC
... and electronic access control.

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<tr>
<th>Education Sector</th>
<th>Healthcare Sector</th>
<th>Banking &amp; Retail Sector</th>
<th>Defence &amp; Security Sector</th>
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<tr>
<td>Over 1900 schools including: BSF Gateshead, BSF Hull, BSF Leeds, BSF Liverpool, BSF Manchester, BSF Newcastle, BSF Sheffield, BSF Waltham Forest</td>
<td>Over 1000 hospitals, clinics and healthcare centres including: Queen Elizabeth Hospital Birmingham, Royal Free Hospital London, Belfast City Hospital, Kings College Hospital London, St. Bart’s Hospital London, Sheffield Children's Hospital University Hospital North Staffs, Gloucester Royal Hospital, Cork Maternity Hospital, Nottingham City Hospital, Royal Hospital Chelsea, Royal Alexandra Hospital Brighton, Stoke Mandeville Hospital, Guy’s Hospital London</td>
<td>Royal Bank of Scotland plc, Barclays Bank plc, United Chinese Bank, China, Nationwide Building Society, AHLJ Bank, Qatar, HSBC, Lloyds TSB, House of Fraser, Audi, BMW, Mercedes and Ferrari dealerships, Debenhams stores, Marks &amp; Spencer stores (x 74), Matalan stores (x 32), Sainsbury's supermarkets, Aldi supermarkets (x 56)</td>
<td>British Navy vessels (x 10), British Army barracks (x 21), US military base Middle East, British RAF bases (x 40), Magistrates Courts, Military Hospital Saudi Arabia, Civil Defence HQ, Doha</td>
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Wireless is more ... 

A new era in electronic access control using ‘Intelligent Locks’ has arrived, offering a host of benefits to end users, installers and specifiers.

The e’Tigris Three system is one of a new breed of access control products which can deliver most of the functional benefits of a hard-wired access control system but at a fraction of the cost and complexity associated with installation.

The e’Tigris Three intelligent lock can be considered as a suitable alternative to a mechanical master key system or as an extremely cost effective alternative to a hard-wired electronic access control system.

The basic level system even simplifies the programming process using a ‘Self Programmable’ function which eliminates the need for operating software and allows you to get up and running in no time, straight from the box.
The eTigris Three system provides a number of significant benefits for end users, installers and specifiers.

**End Users**
- As an alternative to a mechanical key system it adds the ability to control ‘time frames’ when users have access
- Lower cost per door compared to a traditional access control solution - more doors can be secured electronically
- Doors are simple and intuitive to use
- The system can cater for any size of application from a single door to multiple integrated sites containing over 100,000 doors
- Lost cards do not have the same implications as lost keys
- Extra control of access rights can be included on the system using ‘on-line validators’ if necessary
- Intelligent locks can be programmed to open automatically
- Mifare technology means the same card can be used for multiple activities such as identity card, library card, cashless vending etc.

**Installers**
- The need for hard wiring is virtually eliminated therefore removing the cost and complexity of wiring and containment
- The simplicity of installation offers benefits not only in reduced construction material and labour but also avoids the scheduling and certification issues of conventional access control
- Equally suited to retrofit or new build applications
- Suitable for fire door applications without having to wire into the fire alarm system

**Specifiers**
- The system requires very few components so specification is virtually the same as for a mechanical lock
- Use of the intelligent lock can include existing or specific lever furniture to match other doors
- Can be used on escape route doors as egress on each door is by mechanical lever
- Visually simple and discreet with no need for exit buttons or break glass units on adjacent walls or power supplies to house

A traditional access control system requires cabling and containment for at least four components including readers and exit buttons etc. Additional wiring is also required for the power circuit, the data network circuit and the fire alarm interface circuit.

The eTigris Three system is the modern approach to access control and requires no system wiring or containment. Rather than a network cable, system information is populated around the system within RFID user cards.

The eTigris Three locks require very little operating power. We use the very latest high powered Lithium battery technology thus removing the need for a local power supply circuit. As the intelligent eTigris Three lock provides a mechanical means of panic egress at all times, there is no need to interface the system to the fire alarm.
Simple hardware selection

Selecting your eTigris Three system is very simple with just 2 lock options as standard.

- **Hospitality/Hotel lock** - comprises the electronic deadlocking auto nightlatch with external proximity reader and internal privacy unit
- **Access Control lock** - comprising the electronic deadlocking auto nightlatch with external proximity reader and blank internal battery unit

Having selected the required hardware options the eTigris Three system can be set up and programmed in a number of ways depending on the complexity of the system. In fact, a simple application of a few doors and a handful of users can be set up without the need for operating software using the ‘Self Programmable Function’ (see overleaf).
Intelligent Locks - Features and functions

Making it work for you

When the door is locked, a card presented to the reader is sensed and the lock 'wakes up' and emits pulses to detect a valid card.

LED’s concealed within the reader show if the ‘DND’ (Do Not Disturb) or ‘MUR’ (Make Up Room) button has been pressed on the Hotel Privacy unit.

The eTigris Three intelligent lock comprises just 4 main components for you to select.

1. The eTigris Three reader using Mifare proximity technology. The reader is connected directly (inside the door) to the electronic mortice lock.

2. The inside of the door is fitted with an internal unit. Fitted back to back with the proximity reader, the internal unit houses the batteries for the system. You can select a simple blank internal unit or a Privacy Unit designed specifically for hotels and other hospitality applications.

3. The heart of the eTigris Three system is an electronic lock which houses the system intelligence and is controlled by the proximity reader and the inside function unit.

4. The lever furniture is deliberately not supplied as part of the lock package. This leaves you free to select from an almost unlimited range of lever furniture available on the market, or even use existing furniture for retrofit applications.

A euro profile cylinder may be used with the lockcase to provide authorised access from outside by key in emergencies.

The standard internal unit houses the batteries. It has no operating functions.

The hotel privacy internal unit has a 'DND' and 'MUR' function with indicating LEDs housed on a membrane pad. When activated they will indicate Red or Green LEDs on the outside reader to alert staff of the room status.

Lever selection is not limited to a handful of designs as with the majority of electronic access control systems.
How does it work?

The system operates using "Network on Card" whereby the intelligence for each lock/door is transmitted throughout the system using the cards/fobs.

The eTigris Three system uses RFID Mifare technology to transfer data from card to the lock and vice versa. A controlling PC with internet based software is used to administer the data, to write and interrogate system cards and to programme each lock. Depending on the application, data can be transmitted through the system via users as they activate each lock/door or by the system administrator using a simple encoder which is connected to a laptop or notebook.

There are fundamentally 3 ways in which the system can be set up depending on the type of application and the amount of control you require.

eTigris Three Self Awareness

The eTigris Three intelligence is so advanced that at installation each lock will detect how you want the system to be set up. Installing an electronic access control solution couldn’t be simpler.

1. Basic Set-Up

2. Stand-Alone Set-Up

Self Programmable Function

‘Power-up’ an eTigris Three lock or wall reader for the first time and it goes into ‘self programmable mode’ where the first card presented to it becomes the mastercard. Show it the mastercard again and the lock/reader goes into ‘learn mode’, allowing you to present up to 4900 user cards which are automatically learnt by the system.

The system requires no encoder or software and ideally suited to situations where there are a small number of doors and users.

The eTigris Three system can be set up with individual wireless locks installed on an unlimited number of individual doors.

Individual cards are written for each user using an encoder connected to a laptop or PC running the system software. It allows the administrator to determine who is allocated access to any combination of doors on the system.

This set up is ideally suited to applications where individual doors are accessed by a single card such as student accommodation or a hotel for example.
Programming and set-up options

The eTigris Three system uses an internet based software programme which can run on any PC or laptop. The software allows you to log each door and each user and allocate what their access rights are. It will provide an audit trail for each lock or each user. When used in connection with an On-line validator (wall reader) it can re-assign all access rights to each user as he or she presents their card to the validator each morning.

The eTigris Three system allows you to determine how each of the locks on the system can be locked and unlocked. Whether your set-up uses On-line validation or comprises just stand alone locks, each lock can be programmed to provide a variety of functional options which include:

- First card activation of each day puts the lock into 'Passage' or 'Office' mode
- Time delay can be instigated so that the outside handle remains operational for a few seconds after the door closes
- Install the reader and battery unit below the lever handle - connected through a blank and unused cylinder aperture
- Locks can be programmed to unlock and relock automatically at pre-set times/days/dates
- Hotel locks with DND indicators showing can be overridden by specified 'managers' card or by cylinder

The choice is yours .... just tell us what you need.

3. On-Line Validation

An On-line validator connected directly to the PC provides an automatic means of monitoring and updating the user cards. By installing the validator at an entrance door for example, it can monitor and update the access rights on each card as they are presented to the validator.

All the individual doors 'beyond' the validator can be set up as stand alone locks.

This set up is ideally suited to situations where there may be multiple doors accessed by a single card or where there are multiple users with access to doors on the system.

In this format a lost or stolen card can be barred immediately from the system at the PC so that it will not gain access at the validator.
Proximity Reader

The proximity reader is housed in a robust stainless steel housing with a satin finish. The reader manufactured in flame retardant Makrolon incorporates red and green LEDs. When the door is not being used the lock is in a 'passive mode' and draws no power from the battery. A tiny infra red sensor inside the reader detects an object (card/fob or even a finger) in close proximity to the reader and wakes the system up to show the status of the lock to the outside (indicates Do Not Disturb, Make Up Room or battery status). The reader immediately begins to emit pulses of RF to detect a system card.

Inside Unit

The inside unit is a robust stainless steel housing which contains the CRP2 Lithium batteries. The cover is removable and enables it be bolted securely though the door into the proximity reader on the outside.

Batteries

The system uses a 6 Volt CRP2 Lithium battery which is located in the inside unit. In normal use the battery can be expected to provide up to 3 years of trouble-free use.

A low battery indicator function identifies at the reader when the battery power falls below 5%. It will also write to the user card so that the system administrator is alerted in a system using on-line validation.

An encoder presented to the lock will indicate its current battery level.

Electronic Lockcase

The heart of the system is the electronic lock which is based on a standard European cylinder lock with 85mm centres. When assembled the lockcase is connected to the external proximity reader and the internal battery unit via hardwired connections made inside the door. The deadlocking automatic nightlatch function is controlled from the outside by the proximity reader and from the inside by the lever handle. A euro profile cylinder may be used to provide key override from outside.

The external handle is protected by a clutch mechanism to prevent forced entry or damage caused by an over enthusiastic user.

A Euro profile cylinder lock is supplied as standard with either 50mm or 60mm backset but DIN standard variants are also available in various backsets.

Lever Furniture

Lever furniture must be ordered separately. The lockcases will accept bolt through furniture fixings at 38mm centres and are suitable for sprung lever furniture prepared for a 8mm or 9mm square spindle. If the requirement is for 9mm this should be specified at the point of order.

Finish

Proximity reader and internal units are finished in a satin stainless steel finish. All locks are supplied with a matching satin stainless steel forend and strike plate.
Security & Safety
Each Euro and DIN variant lockcase provide a deadlocking autobolt nightlatch function as standard. When the door closes, the small anti-thrust latch is depressed and throws the latchbolt an additional 7mm, providing additional protection from forced entry. The inside lever handle will operate the latch at all times making it suitable for use in emergency exit applications to EN 179 and also in panic exit applications to EN 1125 when used in conjunction with a suitable panic exit device.

The electronic mortice lock has been successfully tested to EN 1643.

Functions
Each lock contains the intelligence and a ‘real time’ clock. The ‘Hotel Lock’ incorporates a privacy function which can be activated by pressing the DND indicator on the membrane pad of the privacy unit. This activates the Red LED on the outside reader and prevents the lock from being accessed by card (can be programmed to be overridden by management card).

The privacy function can only be activated with the door closed and the function is reset when the door is opened.

The hotel privacy unit also incorporates a "Make Up Room" indicator which activates the Green LED on the reader to identify the status to hotel staff.

The function is reset when a staff card is used to open the door.

Low battery power is indicated on the proximity reader when the power goes below 5%, showing a flashing green LED momentarily.

Encoder
A simple portable encoder connects via USB cable to the laptop, PC or notebook and can be used to write new cards, delete cards from the system, programme locks, interrogate cards and locks for audit trail purposes or to monitor the battery life of the locks.

Energy Saver
Energy savers can be included in the system using either microswitch activation or with a Mifare reader which can be wired into the ‘On-line’ system.

Handing
Due to the escape function, each lock is handed in accordance with DIN protocol. You must specify the correct hand as it cannot be altered on site.

Electronic Cylinder
The e Tigris Three system is also available in an electronic cylinder format. The cylinder can be used as a replacement for existing mechanical cylinders without any additional hardware required. It is suitable for use with any new or existing Euro profile cylinder mortice lock.

Handing
Use the diagram below to determine the hand of lock required. If there is any doubt please contact us for guidance.
For full details of all Access² Accessible Solutions please contact our sales office for further brochures