2009

Catalogue Showcase

Smart Solutions @ Work

Access Control
Alarm Monitoring
Attendance Management
Locker Management
Roll Call
Personnel Tracking
Visitor Management

borer

DATA SYSTEMS LIMITED

Cleaner, Leaner and Greener:
Delivering both Data and Power over CAT5e

Borer Clean Design Makes Greener More Energy Efficient Products

"Clean Design" can help companies deal with ever stricter environmental controls and the prospect of meeting producer responsibility legislation and product take back obligations driven by European Directives (WEEE, RoHS & EUP). This legislation requires companies to look closely at the environmental impacts of their products and to take action.

"Clean Design" is about asking smart questions early. Can we make it lighter? What will happen at the end of its life? Can it run on less power? Can we build it with fewer parts? Can we use less packaging? Can we design in ease of maintenance, design without hazardous material and can we upgrade rather than replace?

Good solutions to any of these questions make for greener products and makes them easier and less costly to build. Ultimately, businesses benefit from clean design, responding quickly to real pressure from consumers, suppliers, rising taxes on waste and increased costs of raw materials.

Achieving reductions in the cost of ownership in a product's lifecycle is a major driving force in the design and development of the Borer product line. Our design imperatives are in line with the EU EuP directive 2005/32/EC.

- **By designing our products to be smaller and more compact,** the quantity of raw materials by mass, and consequently the energy required to manufacture them is reduced.
- **Smaller, more compact products use less packaging** therefore the cost of shipping and packaging is reduced.
- **By reducing the complexity of systems** the infrastructure (data and power cables, mains outlets, batteries and enclosures) and amount of time required to deploy/install the product is reduced.
- **By designing energy efficient products,** the amount of energy consumed is reduced.
- **By providing monitoring and control tools which enable remedial tasks to be undertaken remotely,** the number of post installation service calls (fuel miles) are reduced.
- **By using less raw materials to manufacture the product,** more of the product can be recycled and the volume of waste to dispose of at the end of its life cycle is reduced.

To achieve the above objectives we have reduced the power demand of our products and achieved high levels of product integration, thereby reducing the number of devices and the size of the devices deployed.

EASY WAYS TO ORDER

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www.borerdatasystems.co.uk

Contents

Benefits Of A Borer Data System

Energy Savings Of Up To 80%

- Substantial energy savings can be made using Borer's power management and energy delivery systems. For example, alternative door access systems typically consume in excess of 50 Watts to control a single door equipped with a fail safe electrical release. Compare this with less than 2 Watts required by a Borer intelligent reader and electric release combination using Borer's smart power delivery system and energy saving technology.

Less Equipment To Install

- The delivery of both power and data over CAT5 structured cabling means that you don't need a mains power supply at every door saving you from £50 on a new build and from £150 on a refit. With no need for control panels or local power supplies you reduce the cost of installation and have less to recycle at the end of the system's life.

Easier And Faster To Install

- With less to install and all installation work undertaken at door handle height, all health and safety restrictions associated with working at heights can be avoided, resulting in quicker installation and easier maintenance.

Reduced Maintenance Overhead

- Sophisticated power status reporting assists with the remote diagnosis of faults reducing the number of engineer site visits to undertake remedial maintenance. Many equipment faults are power related and can often be resolved by a simple power reset. Technology pioneered by Borer allows for all but actual equipment failures to be resolved by remote control. Users can remotely command the Borer Midspan Bridge to power reset individual ports thereby resetting all devices connected to the port, often resolving local problems.

Reduce The Cost Of Ownership

- Savings on energy costs amounting to £350 for each access door over a system 7 year lifespan are possible (*Refer to Page 7 – Installation Advantages of a Borer System*).

Aesthetically More Pleasing

- The Borer intelligent reader provides a complete door access control solution in one reader head. Minimal wallspace is needed as there is no requirement at the door for unsightly control boxes or mains power spurs. The Borer intelligent readers have a minimalist design with a small footprint which discreetly complements its surroundings.

Biometric/Smart Card Integration

FUSION supports biometrics, including fingerprint and hand template technologies with the storage of the cardholder's biometric template in the **FUSION** database or on the smartcard. Templates can then be downloaded to intelligent reader controllers or saved in an encrypted form onto the cardholder's contact or RFID smart card, eliminating the need for a separate network and biometric template management system.

Multimedia Integration

Multimedia functionality is extensively integrated into and utilised by **FUSION** with support for custom voice alarm annunciation and flashing colour icons for every system alarm. Each alarm or event can have both a set of text instructions and pre-recorded audio instructions. **FUSION** can combine live video verification and alarm monitoring in real-time, enabling guards to visually validate the cardholders before granting access at secure remote sites.

Application Integration

FUSION will control access to your premises; record staff and contractors attendance time onsite; manage visitors and via the Datalog SMS graphical environment integrate with your intruder, CCTV and alarm systems. **FUSION** is powerful and easy to use; it offers flexibility, unparalleled functionality and exceptional value.

FUSION
Smart Solutions @ Work

SMART SOLUTIONS @ WORK

FUSION is a company wide security and facilities information management tool, designed to work over your corporate LAN using TCP/IP. **FUSION** is totally scalable; it can grow from a small, single site application into an enterprise wide multi-location system as your requirements expand All this with the minimum of operator training or complex reconfiguration.

From the very start **FUSION** was designed to be a network based application. Its great strength is its ability to work across the corporate LAN/WAN to manage multiple buildings as well as remote offices and sites.

It provides a central command and control infrastructure which contains costs whilst enhancing security. **FUSION** also supports web-based self-service facilities to enable satellite sites to operate more efficiently by undertaking local control.

Figure 4. FUSION Software Overview

	FUSION SE	FUSION Express	FUSION Professional	FUSION Enterprise
Devices Supported (Max.)	3840	3840	3840	Unlimited
Cardholders Supported (Max.)	Unlimited	Unlimited	Unlimited	Unlimited
Operating System	XP, Vista, W7	XP, Vista, W7	XP, Vista, W7 Server 2003	XP, Vista, W7 Server 2003
Database Engine	MSQL 2005 Express (Included)	MSQL 2005 Express (Included)	MSQL 2005 Express (Included) MSQL 2005 Server (Not Included)	MSQL 2005 Server (Not Included)
No. of Administrator Clients	1	2	4 +1 Server Clients (MSQL 2005 Express) OR 5 Clients if MSQL 2005 Server is pre-installed by customer	10
Additional Desktop Clients	---	---	---	Available in Multiples of 5
APPLICATIONS SUPPORTED:				ONE APPLICATION INCLUDED AS STANDARD
• Access Control	●	●	●	◐
• Attendance Recording	●	●	●	◐
• Visitor Reception	–	○	○	◐
• ID Badge Design & Printing	●	●	●	◐
• Absence Recording	–	–	○	○
• Locker Management	–	–	○	○
• Room Booking	–	–	○	○
WEB CLIENTS				
• Visitor Pre-Registration	–	–	○	○
• Attendance Self Service	–	–	○	○
Building Status Display on Touchscreen PC	–	–	○	○
Email/SMS Alarm Notification	–	○	○	○
Mifare Card Encoding Software	–	–	○	○

● Included – Not Included ○ Optional

Cortech Development provides the latest integrated solutions for the monitoring and control of local and remote building, fire and security systems. Cortech's modular software suite, *The Datalog SMS*, delivers optimum control, ease of use and a high level of operator accountability. It also assists in reducing manpower, supervisory and maintenance costs.

All alarms and events are recorded and can all be clearly and concisely displayed on 3D graphic location plans, with text descriptions, online help instructions which are verified by live pre and post video. Simultaneous alarm events can also be handled without the need for operator intervention.

Access Control

FUSION supports a comprehensive set of access control functions such as: role and location based access rules, hard and soft anti-pass back, time embargo, support for user and system generated PIN, key holder access, roll call and mustering, comprehensive audit trail, etc.

Attendance Management

FUSION Attendance Management supports a full set of attendance recording and reporting arrangements including flexible working, fixed hours, shift working arrangements and job sharing. **FUSION** records and reports on normal attendance, overtime worked, as well as absence and tardy attendance.

FUSION Web for Attendance Management is a web powered self-service option for staff working flexitime which enables each member of staff to view and manage their own time account; this significantly reduces the administrative overhead.

Visitor Management

FUSION Front Desk supports visitor registration either at a manned reception desk or via an optional self registration touch screen terminal. Once registered, a visitor badge can be printed and the visit limitations set. Visit restrictions include: escort nominated, clearance levels, access to areas and visit expiry times.

FUSION Web for Visitor Management is a web powered visitor registration system that allows staff to use a Web Browser to pre-book and review visitors. This speeds up the flow of visitors through a busy reception, providing a roll call of visitors on site and allows management to review past, present and future visitors.

ID Badge Design, Printing & Encoding

FUSION Badge Maker is the complete solution for quick, efficient and low cost ID badge production. BadgeMaker supports ID photo capture, custom ID badge design and badge printing

FUSION Badge Encoder is the only system to enable users to take complete control over every aspect of smart card based ID badge encoding including the issue of encryption keys and card encoding without having to refer to the manufacturer or installer.

Locker & Cabinet Access Control

FUSION can reduce costs by allowing a single card or biometric reader head to control access to a bank of cabinets or lockers. **FUSION** will selectively open one or a combination of lockers following the presentation of a valid card or biometric fingerprint. This can be coupled with dynamic locker allocation whereby a locker is allocated on arrival and unallocated on leaving a site. Lockers are only required for the number of staff members on site at any given time and eliminates the requirement of a locker for every staff member. **FUSION** can be used to control access to changing room lockers, IT and server racks, cash and secure boxes, etc.

Alarm Management

Multimedia functionality is extensively integrated with Alarm Management with support for custom voice alarm annunciation and flashing colour icons for every system alarm. Each alarm or event can be set to trigger email or SMS notification. Alarms can have a set of text as well as pre-recorded audio instructions. **FUSION** can integrate with a control room management system to provide real time video verification and alarm monitoring, enabling security guards to remotely investigate reported incidents on camera.

Student & Hotel Accommodation

FUSION provides economical online solutions for controlling access to college and university accommodation blocks, shared apartments and student rooms. One card reader can control access to a number of rooms by selectively unlocking one or any combination of bedrooms when an access card or token is presented. Security personnel are able to centrally monitor doors and room panic alarms; doors can be unlocked by remote control when an access card is mislaid or lost.

Construction Site Monitoring

The **FUSION** site management system assists in the management of personnel on construction sites, oil platforms etc. It identifies, authenticates and tracks the movement of site workers, logging and reporting all movements on and off site, enabling a site wide roll call or muster report to be produced on demand in the event of a fire or site evacuation. Information can be viewed in real-time and accessed remotely via web browser. Construction Site Manager is flexible and can be tailored to meet specific site requirements.

FUSION SE

- Single Workstation running under XP/Vista/W7.
- MSQL 2005 Express database included.
- Maximum 3840 Devices/Access doors, Unlimited cardholders.
- Standalone system that can be used to control a single complex across a LAN/WAN.
- Includes Access Control, Attendance Recording and ID Badge Design & Production.

FREE WHEN PURCHASED WITH HARDWARE

Part No. 03-813

FUSION Express

- Two Workstations running under XP/Vista/W7.
- MSQL 2005 Express database included.
- Maximum 3840 Devices/Access doors, Unlimited cardholders.
- Standalone system that can be used to control a single site or several sites across a LAN/WAN.
- Includes Access Control, Attendance Recording, and ID Badge Design & Production, with Visitor Reception supported.

Part No. 03-814

FUSION Professional

- 1 Server, Up to 4 Workstations running under XP/Vista/W7.
- MSQL 2005 Express database included.
- Maximum 3840 Devices/Access doors, Unlimited cardholders.
- Includes Access Control, Attendance Recording, and ID Badge Design & Production, with Visitor Reception supported.
- Network system that can be used to control multiple sites across a LAN/WAN.
- Web based interface etc.

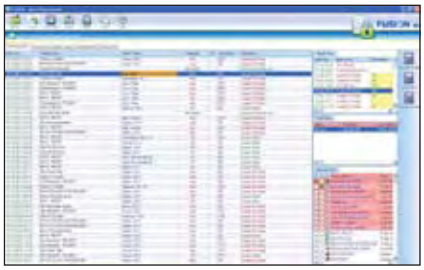
Part No. 03-815

FUSION Enterprise

- 1 Server, Multiple Workstations (subject to licence) running under XP/Vista/W7/Server 2003.
- MSQL 2005 Server required, not supplied.
- Unlimited Devices/Access doors, Unlimited cardholders.
- Supports Access Control, Attendance Recording, Visitor Reception, ID Badge Design & Production and more.
- Network system that can be used to control multiple sites across a LAN/WAN.
- Web based interface etc.

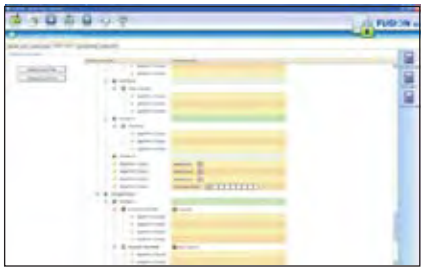
Part No. 03-816

FUSION Example Screenshots



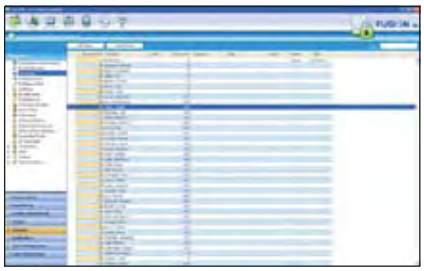
GENERAL LAYOUT SCREEN

Shows the FUSION main status screen after login. Live events scroll upwards on the main panel. Device names and personnel names are hyperlinked to the related records. The far right vertical bar is a quick access list of doors. The door alarms, building controllers and device status views are all located in the right column.



SYSTEM LAYOUT SCREEN

The system layout provides a real time view of digital status and device status connected to FUSION. Useful for engineers as it provides a logical map of readers and controllers onsite.



PERSONNEL VIEW (FILTER BY CONTACT)

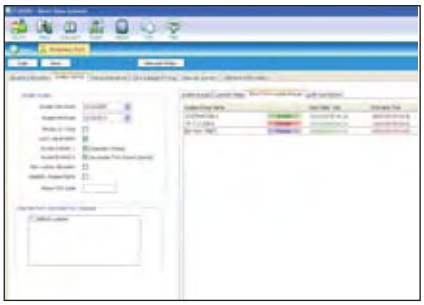
The ORGANISATION section allows access control and personnel data to be managed. Searchable and sortable list views provide several ways to view personnel details. The quick search provides a rapid filter on the database to locate the personnel records required. Many views of personnel are provided in FUSION. Including categorized views of staff members, sub-contractors and visitors.

PERSON BADGE DETAILS

The embedded badge designer can accommodate many formats of printer colour output, designing double sided cards is also possible. This personnel page shows a print preview in the person's record. The badge designer is fully integrated into FUSION and allows an unlimited number of badge templates to be designed.

FUSION VISITOR WEB

Visitor Web is a web browser based application which enables authorised staff members to pre-register visitors using their PC based web browser. The employee simply logs onto the server (which can be located/hosted anywhere), and fills out a simple visitor information form. No knowledge of how to use Visitor Web is required.



ACCESS CONTROL (SHORT TERM ACCESS GROUPS)

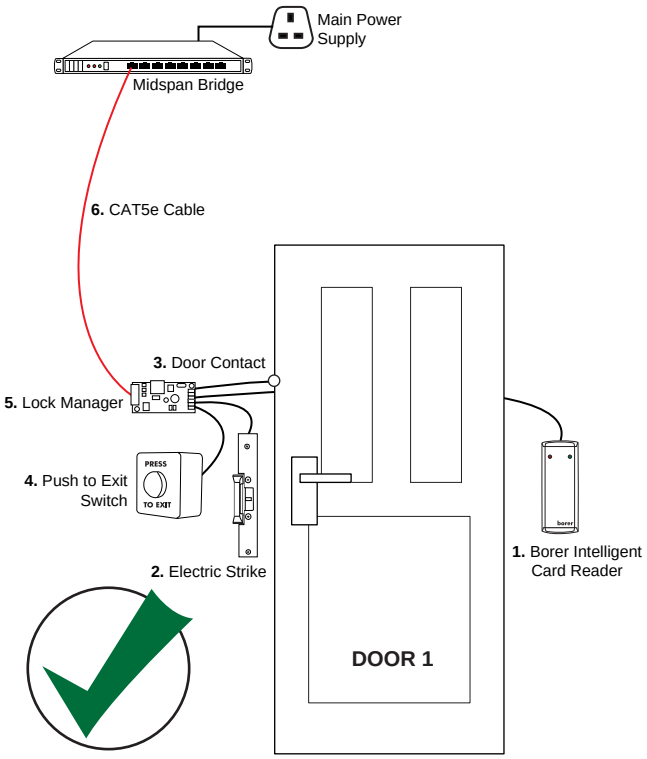
The "Short Term Access Group" editor allows the operator to select access groups that are not currently in use and assign them to the person for a limited date time range. A person can have up to 32 short term access groups active at any one time. The system will auto remove the access rights when it expires. "Visitor Management" makes use of short term access groups to time limits a visits access rights to be the same or shorter then their escort.

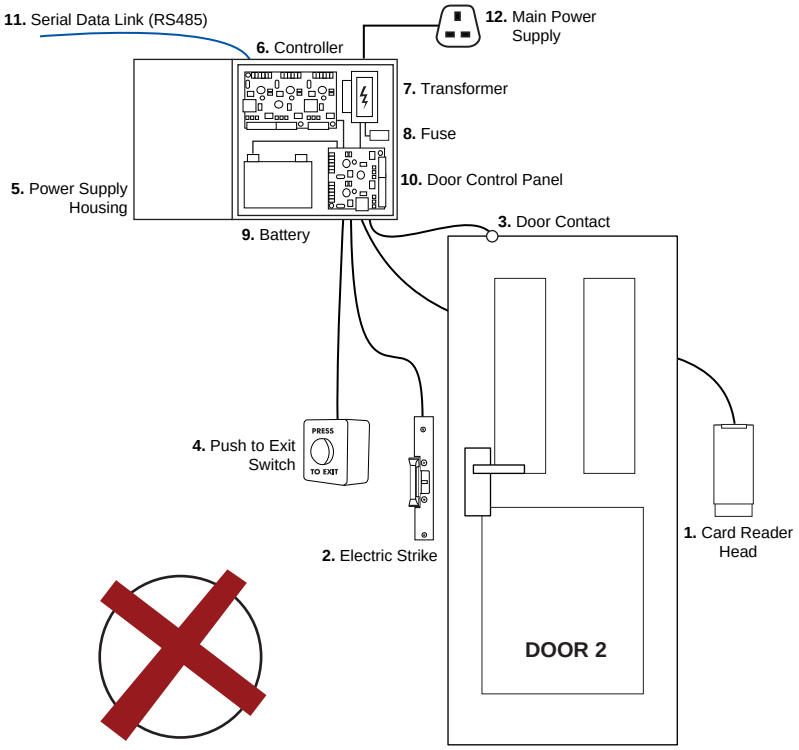
CHECK OUT THE DIFFERENCE!

Installation Advantages of a Borer System

When an organisation looks for a new or replacement access control system, the purchase price is often a principle factor when deciding on which system to purchase. Purchase price alone is not an accurate measure as to the true costs of a system. The correct choice of lock and power supply technology can make a significant impact on energy efficiency, cost of ownership and environmental carbon emissions.

The following information compares the installation of a Borer '**FUSION**' system against a typical system produced by one of our competitors (**Legacy System**).





Borer Model for Access Control

HARDWARE AT THE DOOR:

1. Borer Intelligent Card Reader
2. Electric Strike (Fail Safe)
3. Door Contact
4. Push to Exit Switch
5. Lock Manager/Power Adaptor
6. CAT5e Cable

NUMBER OF CABLE TERMINATIONS:

Borer Intelligent Card Reader	5
Electric Strike	2
Door Contact	2
Push to Exit Switch	2
CAT5e Cable	6
TOTAL:	**17**

TYPICAL POWER CONSUMPTION:
1.6 Watts Quiescent, 1.2 Watts Duty Cycle
INSTALLATION TIME: Approx. 2 Hours

Industry Standard Model for Access Control

HARDWARE AT THE DOOR:

1. Card Reader Head
2. Electric Strike (Fail Safe)
3. Door Contact
4. Push to Exit Switch
5. Power Supply and Equipment Housing
6. Controller
7. Transformer
8. Fuse
9. Battery
10. Door Control Panel
11. Serial Data Link (RS485)
12. Mains Power Spur

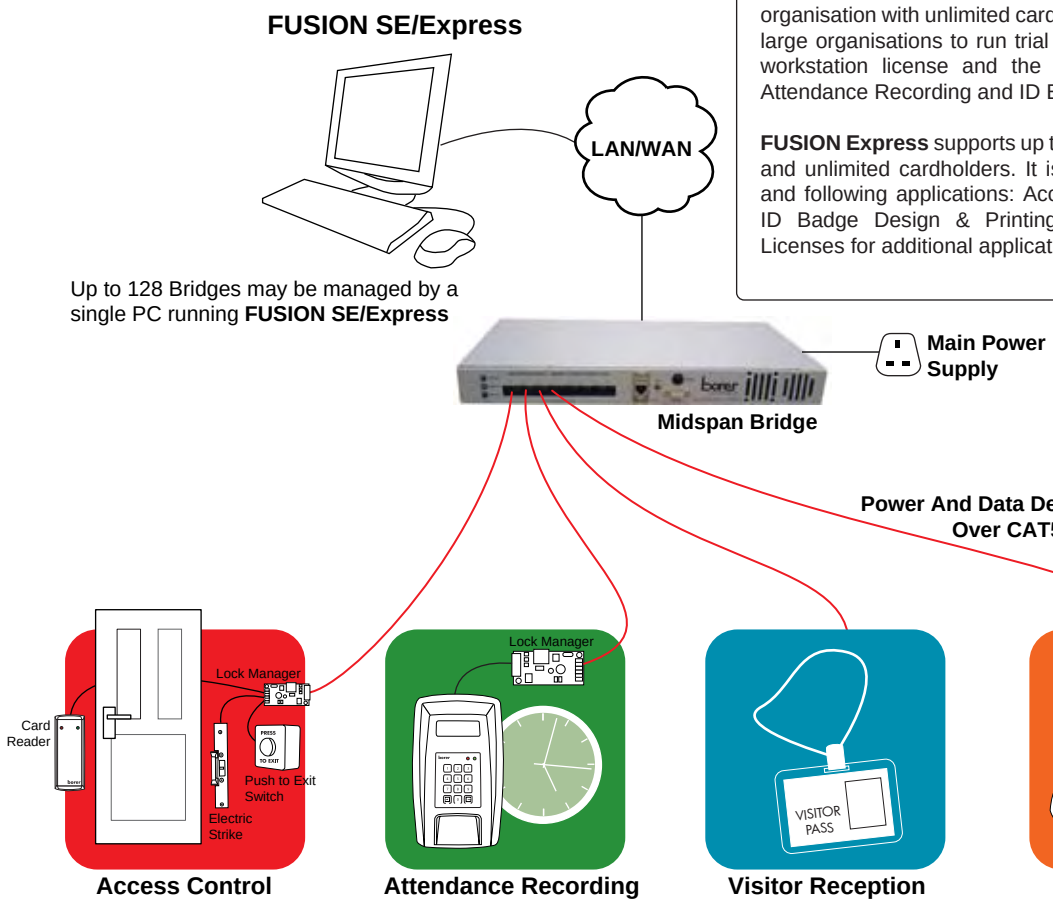
NUMBER OF CABLE TERMINATIONS:

Mains Power	6
Power Supply	2
Battery	4
Card Reader Head	16
Electric Strike	4
Door Contact	4
Push to Exit Switch	4
Tamper	2
Controller Data (RS485)	4
TOTAL	**46**

TYPICAL POWER CONSUMPTION:
60 Watts Quiescent, 48 Watts Duty Cycle
INSTALLATION TIME: Approx. 1 Day

Figure 7.1 Installation Advantages of a Borer System

Figure 8.1 FUSION SE/Express System

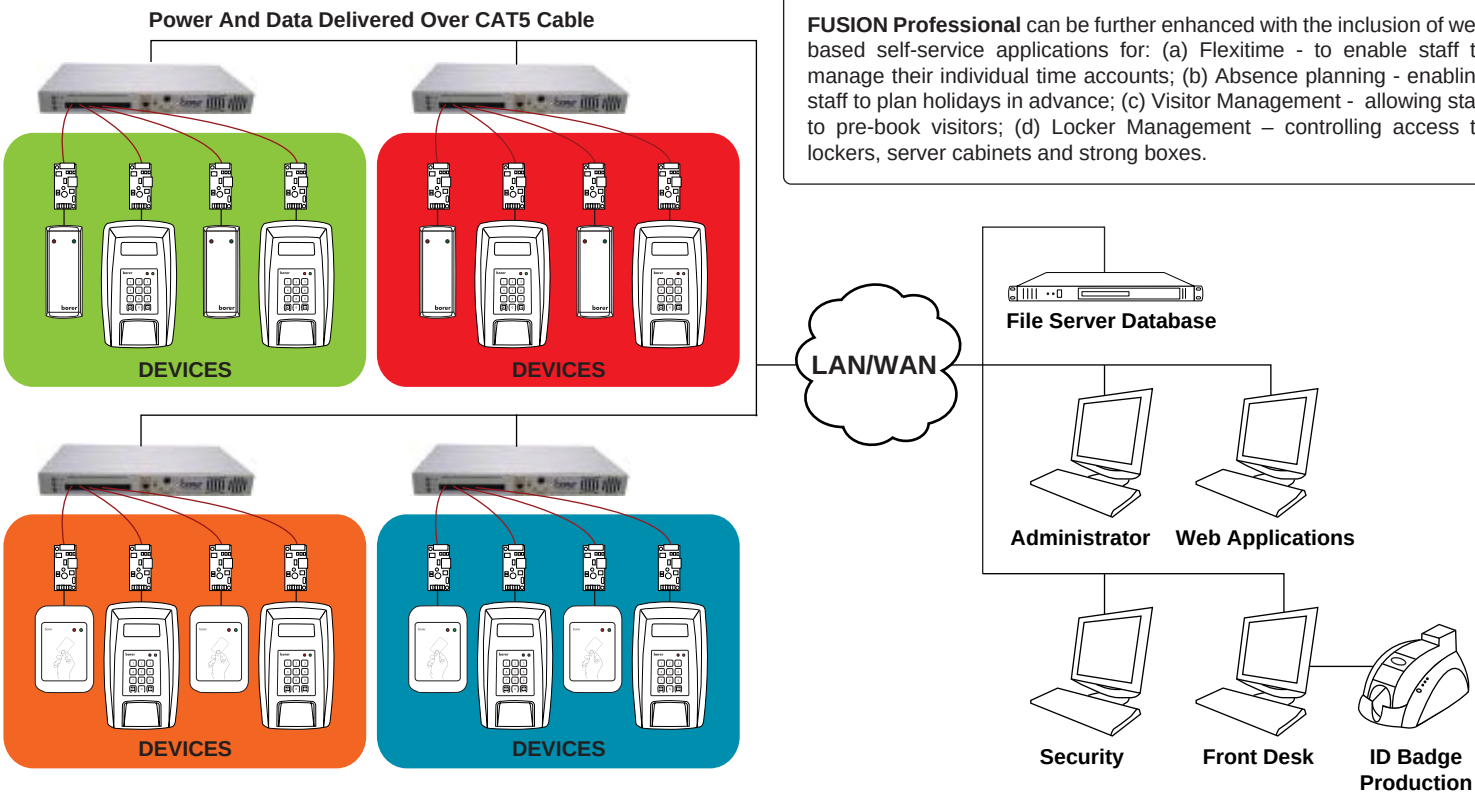


FUSION SE/Express

FUSION SE is a full featured system designed for the smaller organisation with unlimited cardholders supported. It can also be used by large organisations to run trial or pilot schemes. It is supplied with one workstation license and the following applications: Access Control, Attendance Recording and ID Badge Design & Printing.

FUSION Express supports up to a maximum 3840 devices/access doors and unlimited cardholders. It is supplied with two workstation licenses and following applications: Access Control, Attendance Recording and ID Badge Design & Printing with Visitor Management supported. Licenses for additional applications can be added as required.

Figure 8.2 FUSION Professional System

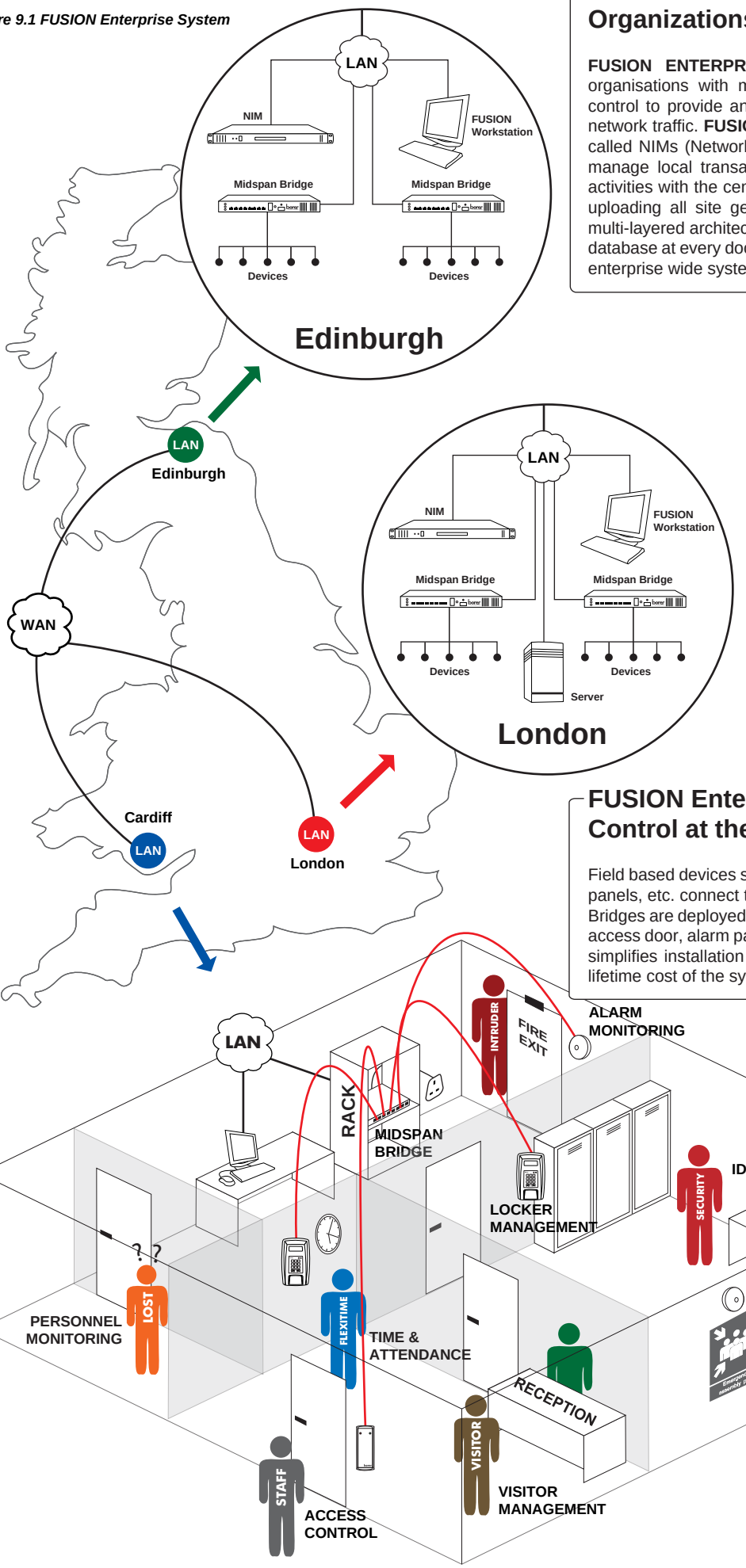


FUSION Professional

FUSION Professional is supplied with 5 client licenses and allows unlimited number of cardholders. It is supplied following applications: Access Control, Attendance Recording and ID Badge Design & Printing with Visitor Management supported. Licenses for additional applications can be added as required.

FUSION Professional can be further enhanced with the inclusion of web based self-service applications for: (a) Flexitime - to enable staff to manage their individual time accounts; (b) Absence planning - enabling staff to plan holidays in advance; (c) Visitor Management - allowing staff to pre-book visitors; (d) Locker Management – controlling access to lockers, server cabinets and strong boxes.

Figure 9.1 FUSION Enterprise System



FUSION Enterprise
Organizations with multiple sites

FUSION ENTERPRISE is an enterprise wide solution aimed at organisations with multiple sites. It uses the principle of distributed control to provide an extra layer of resilience and limit the quantity of network traffic. **FUSION Enterprise** uses rack mounted embedded PCs called NIMs (Network Interface Modules) to host a local database and manage local transactions and events. Each NIM will co-ordinate its activities with the central database, receiving all database changes and uploading all site generated events and alarms over the WAN. This multi-layered architecture with a central database, a site database and a database at every door provides a very resilient, secure, fast and efficient enterprise wide system.

FUSION Enterprise
Control at the point of access

Field based devices such as card access readers, alarm input and output panels, etc. connect to a Bridge via CAT5 structured cabling. If Midspan Bridges are deployed then both power and data can be delivered to every access door, alarm panel and attendance terminal over CAT5 cable. This simplifies installation and maintenance, saves energy and reduces the lifetime cost of the system.

Installation Made Simple

Borer's Intelligent Reader/Controller is designed as a complete access control door entry solution with full online and offline validation and decision making capabilities at the point of entry, eliminating the need for a control panel, wall box and mains power supply at each door.

Both Power and Data is delivered from the same Midspan Bridge directly to each door, locker or other device.

Figure 10.1 Borer Installation Made Simple

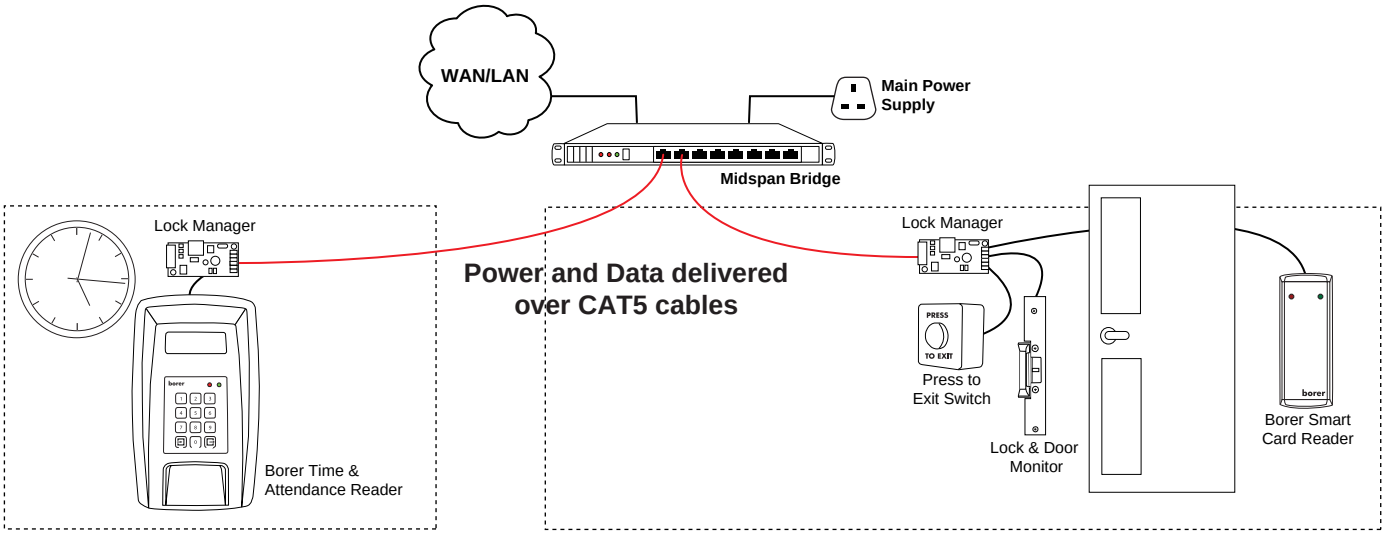
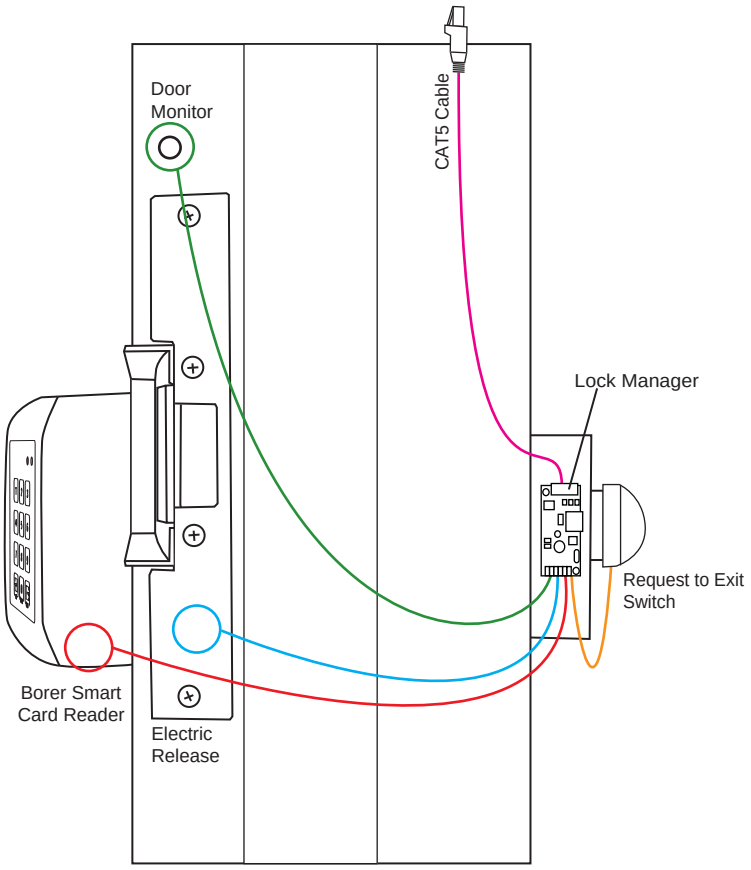


Figure 10.2 Borer Installation At The Door



INTELLIGENT PROXIMITY /PIN READER 13.56mHz - MIFARE

The Borer Intelligent Proximity Smart Card Controller/Reader employs the latest in intelligent card access control reader technology.

The Borer card reader is designed as a complete access control door entry solution with full online and offline validation and decision making capabilities at the point of entry, eliminating the need for a control panel, wall box and mains power supply at the door.

Both Power and Data are delivered from the same Midspan Bridge directly to each door, locker or other device.

Features:

- Complete Single Door Access Control Solution in one reader head
- Card Only or Card and PIN supplied as standard
- Dual Database of Cardholders and Access Rights held at every reader head, allowing fall back to the last known good database in the event of a data corruption or network interruption during database download
- Large Integrated Database with a total capacity of up to 120,000 card holders/transactions
- Supports both current as well as last known good database, enabling it to recover and continue to work uninterrupted in the event of a network failure during database download
- Four State Supervised Inputs for door monitor, request-to-exit, tamper and spare
- Two bicolour LEDs and sounder gives clear indication of card transaction and reader status
- Integrated Door Ajar Alarm Sounder
- Optional 'PoE Lock Manager' Enhances Security, extends lock life and reduces the energy consumed by most solenoid operated locks and strikes by up to 80%
- Works with Borer Midspan Bridge technology which delivers power and data over a single CAT5/6 Cable
- Supports for Mifare ISO 14443 RFID cards and tokens

Dimensions: 120 x 78 x 26mm / 190g
Power Supply: 65mA Quiescent, 90mA Peak @ 12V DC

Part No. 04-126 13.56mHz Mifare 4Mb (Grey)
Part No. 04-127 13.56mHz Mifare 4Mb (Black)

FUSION SMART CARD READER

Borer's Intelligent FUSION SMART CARD Reader is designed as a complete door entry solution for use in online access control applications.

Support for open standard (ISO 14443A/B, ISO 15693, Mifare and Desfire) technologies where a single card can be used for a range of applications including: banking, travel card, cashless vending, access control and attendance recording.

Features:

- **Complete Single Door Access Control Solution** in one reader head
- **Dual Database of Cardholders and Access Rights** held at every reader head, allowing fall back to the last known good database in the event of a data corruption or network interruption during database download
- **Large Dual Databases** with a capacity of up to 120,000 card holders/transactions
- **Secure Database**, all cardholder details are fully encryted to prevent manipulation or misuse of data
- **Two Bicolour LEDs and Polyphonic Sounder** gives clear feedback when a card is presented
- **Works with Borer Midspan Bridge** technology which delivers power and data over a single CAT5e/6 cable
- **'Power over Ethernet' Technology Lock Manager Enhances Security**, extends lock life and reduces the energy consumed by most solenoid operated locks and strikes by up to 90%

MESSAGE DISPLAY TERMINAL

Message display terminal for use in online attendance recording and locker access control which enables a card presented at a reader to selectively open a specified locker from a bank of lockers or accommodation doors.

Both Power and Data are delivered from the same Midspan Bridge directly to each door, locker or other device.

Features:

- Integrated Smart Card Reader ISO 14443 compatible which supports Mifare and Desfire formats
- Two Line 32 Character LCD Display with Backlight
- Numeric Keypad for entry of absence codes and variable data
- Large Memory Storage with a total capacity of up to 120,000 transactions
- Integrated Relay for switching of external circuit
- Four State Supervised Inputs and tamper circuit
- Two Bicolour LEDs and Sounder gives clear indication of card and reader status
- Works with Borer Midspan Bridge technology which delivers power and data over a single CAT5/6 cable

Dimensions: 218 x 126 x 76mm / 539g
Power Supply: 100mA Quiescent, 150mA peak @ 12V DC

Part No. 04-124 Message Display Hitag (Black)
Part No. 04-125 Message Display Mifare (Black)

Benefits:

- **Developed using 'Clean Design' principles** to reduce component count and energy consumption
- **Plug and Play** makes for faster installation & commissioning
- **Distributed Intelligence** allows decisions to be made at the point of access
- **TCP/IP Network Connection** via Borer Bridge facilitates direct connectivity to the access central management system and database
- **Energy Savings of up to 80% -** Save on ongoing operating costs over the lifetime of the system
- **Eliminates the Need** for a separate control panel, wall box and power supply reducing component count, bespoke cabling requirements and installation complexity and associated costs
- **User Programmable open format Mifare cards** which,unlike systems that use proprietary and exclusive formats, eliminates single supplier dependence and benefits the user with lower cost for replacement cards
- **Future Proof -** Firmware updates can be automatically downloaded directly to the reader head over the LAN enabling new smart card standards to be supported when they are introduced.

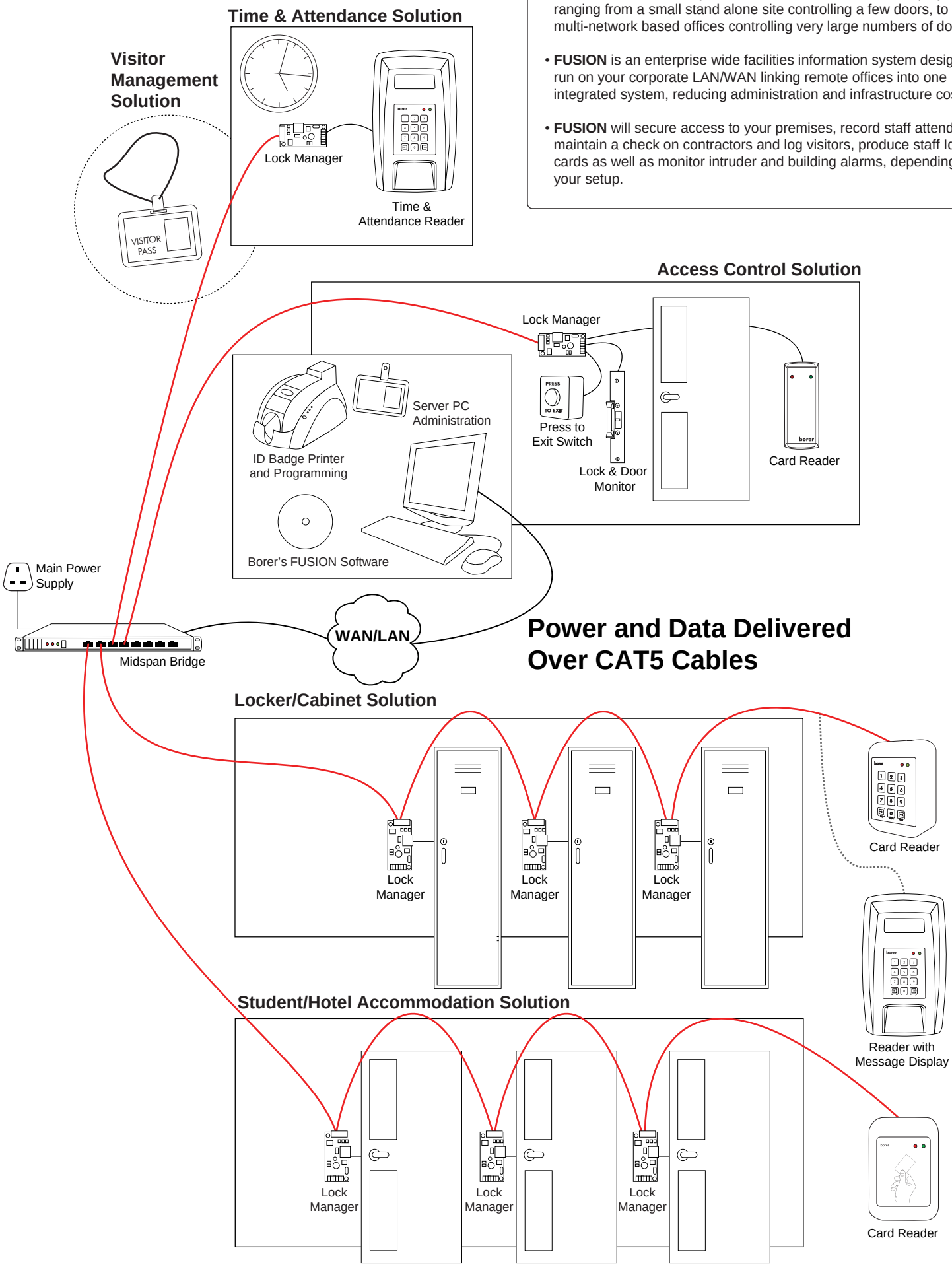
Dimensions: 110 x 42 x 15mm, 55g
Power Supply: 60mA Quiescent, 90mA Peak @ 12v DC

Part No. 04-202 FUSION Smart Card Reader (Black)

Figure 12.1 Borer FUSION Flexible Solutions

FUSION Flexible Solutions

- **FUSION** is a scalable system which can accommodate all project sizes, ranging from a small stand alone site controlling a few doors, to multi-network based offices controlling very large numbers of doors.
- **FUSION** is an enterprise wide facilities information system designed to run on your corporate LAN/WAN linking remote offices into one integrated system, reducing administration and infrastructure costs.
- **FUSION** will secure access to your premises, record staff attendance, maintain a check on contractors and log visitors, produce staff Identity cards as well as monitor intruder and building alarms, depending on your setup.



8 PORT MIDSPAN BRIDGE (DIN RAIL MOUNTING)

The Midspan Bridge provides a secure interface to the site LAN for field devices (card access readers, attendance terminals, etc.).

It supports a TCP/IP ethernet connection to the LAN and can deliver both 48 volts of power and data over up to 300 metres of CAT5 cable on each of the 8 ports.

It provides an efficient and secure communications path to devices positioned at the site perimeter eliminating the opportunity to hack into the site network. The DIN rail makes for ease of installation into raisers or control boxes. It requires a separate 48 Volt, 150 Watt power supply.

Dimensions: 165 x 89 x 64mm / 214g
Power Supply: 48 Volts DC, 150 Watts (Part No. 02-112)

Part No. 04-134 Midspan Bridge (DIN RAIL)

8 PORT MIDSPAN BRIDGE (RACK MOUNTING INC 240V POWER SUPPLY UNIT)

The rack mountable Midspan Bridge is delivered in a 1U deep 19" standard housing complete with its own power supply. It makes for easy and speedy installation directly into IT cabinets.

This is unit is ideal if third party backup power is available to keep the Midspan Bridge operational if there is a power cut.

It provides an efficient and secure communications path to devices positioned at the site perimeter eliminating the opportunity to hack into the site network.

Dimensions: 431 x 45 x 230mm
Power Supply: 120/240 Volts AC

Part No. 04-137 Midspan Bridge (RACK)

8 PORT MIDSPAN BRIDGE (RACK MOUNTING, REQUIRES 48v 150W EXTERNAL PSU)

The rack mountable Midspan Bridge is delivered in a 1U deep 19" standard housing. This unit does not include a internally mounted PSU which is sold separately.

If there is a building power cut and there is no third party backup power to keep the Midspan Bridge running. This product together with **02-317** will provide backup power to the bridge.

It provides an efficient and secure communications path to devices positioned at the site perimeter eliminating the opportunity to hack into the site network.

Dimensions: 431 x 45 x 230mm
Power Supply: 120/240 Volts AC

Part No. 04-138 Midspan Bridge (RACK) requires external PSU

POWER ADAPTOR / LOCK MANAGER

The Power Adapter/Lock Manager circuit board has a small footprint and is designed to be mounted with the electric door lock or strike. Alternatively it can be housed together with the "Press to Exit" switch in a half gang electrical wall box.

Power over CAT5 Cable technology is used to power equipment where it is inconvenient, expensive or not possible to provide a separate mains power outlet at every door.

Dimensions: 66 x 32 x 15mm / 24g
Power Supply: 48 Volts DC, 13.5 Watts

Part No. 04-136 Standard Lock Manager
Part No. 04-139 End of Line Lock Manager

Refer to Page 26 for Mounting Installation

NETWORK INTERFACE MODULE (NIM)

A NIM is a location controller which is employed in enterprise wide systems to provide extra resilience, security and efficiency. It holds a site specific database and manages all data exchanges between field devices and the central enterprise wide dtabase.

A NIM can support up to 3840 field devices such as door access readers, alarm panels, etc. Each NIM requires a static IP address to enable communications with site located Bridges.

Dimensions: 431 x 45 x 230mm
Power Supply: 120/240 Volts AC

Part No. 04-112 NIM (Rack Mounted)
Part No. 04-114 NIM (Wall Mounted)

PSU RACK MOUNTED (2U) 48V 150W POWER SUPPLY/BATTERY CHARGER)

A 2U steel rack mounting housing which includes a 48v 150w Power Supply/Battery. This unit is required to keep the Midspan Bridge running if there is a building power cut and there is no third party backup power available.

Requires Midspan Bridge and Batteries.

Dimensions: 437 x 385 x 130 mm

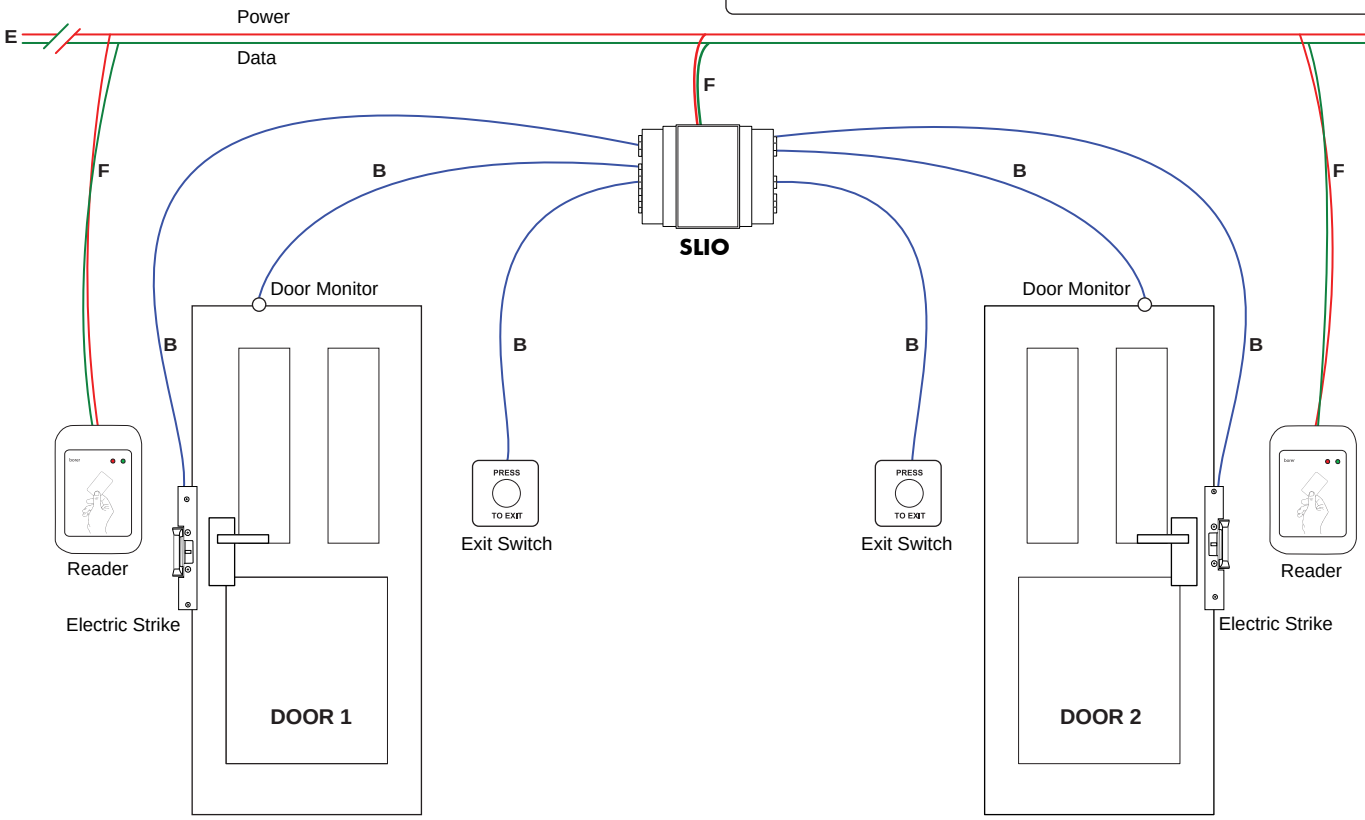
Part No. 02-317 PSU Rack Mounted (2U) 48V 150W Power Supply/Battery Charger

SLIO Solution - 2 Door Interlock

The SLIO is designed to undertake complex alarm monitoring and control functions. It has a powerful scripting engine which allows the user to create and download bespoke programmable logic functions.

ILLUSTRATED - SLIO 42 used for 2 door interlock/airlock application

Figure 14.1 SLIO Solution - 2 Door Interlock

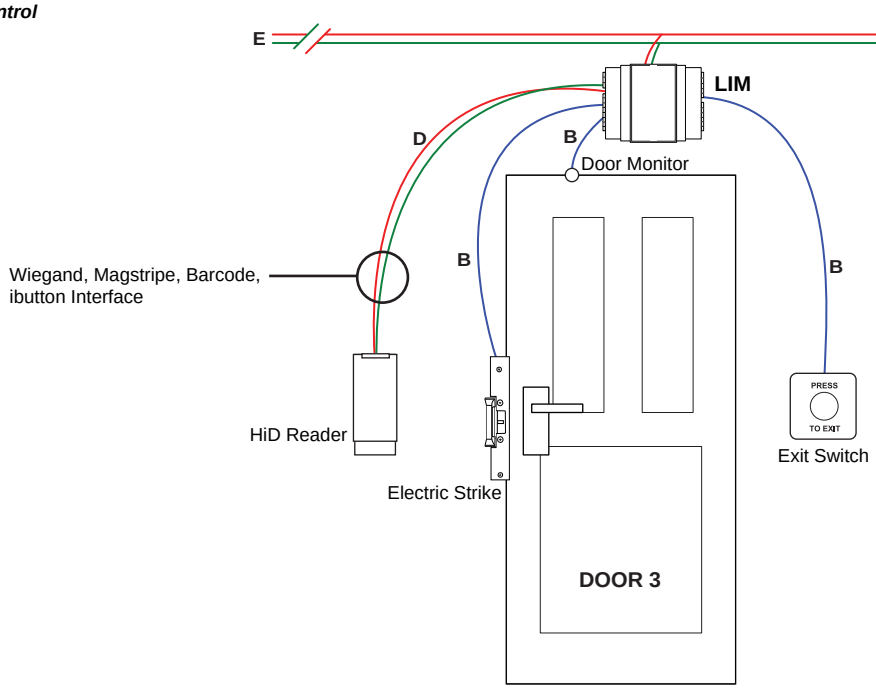


LIM Solution - Single Door Access Control

The LIM is a single door access controller for use in on-line access control applications. It supports most third party card reader interfaces, including: Wiegand, bar code, magnetic stripe, Dallas button, as well as many proximity and biometric formats.

ILLUSTRATED BELOW - Typical installation using HiD reader head, electric strike and exit switch

Figure 14.2 LIM Solution - Single Door Access Control



CABLE TYPES

A - CAT5
B - 7/0.2mm 2 Core
C - 2 Twisted Pair 22 (7/30) AWG TC
D - 7/0.2mm 8 Core Screened
E - Belden 3082A or equivalent
F - Belden 3084A or equivalent

CAN INPUT OUTPUT MODULE SLIO 4x2 (DIN RAIL MOUNTING)

The SLIO 42 is designed to undertake complex alarm monitoring and control functions. It has a powerful scripting engine which allows the user to create and download bespoke programmable logic functions.

It features 2 relay outputs and 4 supervised digital inputs (open contact, closed contact, cut wire and shorten wire). This intelligent supervision ensures that security personnel are notified if an input circuit is tampered with or bypassed (cut or shorten).

Dimensions: 82 x 62 x 15mm / 43g | 85 x 68 x 60mm / 97g (Enclosure)
Power Supply: 10 to 28 Volts DC, 25mA @ 24 Volts DC

Part No. 04-140 SLIO 4x2 (DIN RAIL)

CAN INPUT OUTPUT MODULE SLIO 8x8 (DIN RAIL MOUNTING)

The SLIO 88 is designed to undertake complex alarm monitoring and control functions. It has a powerful scripting engine which allows the user to create and download bespoke programmable logic functions.

The Borer SLIO 88 features 8 relay outputs and 8 supervised digital inputs (open contact, closed contact, cut wire and shorted wire). This intelligent supervision ensures that security personnel are notified if an input circuit is tampered with or bypassed (cut or shorted).

Dimensions: 156 x 85 x 15mm / 150g | 156 x 85 x 60mm / 160g (Enclosure)
Power Supply: 10 to 28 Volts DC, 25mA @ 24 Volts DC

Part No. 04-141 SLIO 8x8 (DIN RAIL)

CAN ETHERNET BRIDGE (DIN RAIL MOUNTING)

The Borer CAN Ethernet Bridge allows companies and organisations to use their existing network infrastructure to connect access controlled doors and monitored alarms within the Borer Management System.

The bridge provides a link from the Local Area Network (LAN) to the Controller Area Network (CAN) on to which access control readers and related devices are connected. Devices are connected to the ethernet bridge via a multidrop architecture using device net cable.

Dimensions: 98 x 81 x 15mm / 58g | 104 x 85 x 29mm / 132g (Enclosure)
Power Supply: 10 to 28 Volts DC, 20mA @ 24 Volts DC

Part No. 04-135 Ethernet Bridge (DIN RAIL)

CAN LEGACY INTERFACE MODULE LIM V2 (DIN RAIL)

Borer's LIM2 is a single door access controller for use in online access control applications. The LIM2 provides full online and offline validation and decision making capabilities at the point of entry.

It supports most third party card reader interfaces, including: Wiegand, bar code, magnetic stripe, Dallas iButton, as well as many proximity and biometric formats.

Dimensions: 82 x 62 x 15mm / 43g | 85 x 68 x 60mm / 97g (Enclosure)
Capacity: 8000 Cardholders/Transactions
Power Supply: 10 to 28 Volts DC, 25mA @ 24 Volts DC

Part No. 04-150 LIM V2 (DIN RAIL)

CAN LEGACY INTERFACE MODULE LIM V4 (DIN RAIL MOUNTING)

Borer's LIM4 is a single door access controller for use in online access control applications. The LIM4 provides full online and offline validation and decision making capabilities at the point of entry. Dual database of cardholders and access rights are held at every reader head with its large integrated database with a total capacity of up to 120,000 cardholders/transactions. It supports most third party card reader interfaces, including Wiegand, magnetic stripe, barcode and Dallas iButton, as well as proximity and biometric formats.

Dimensions: 104 x 69 x 20mm / 96g | 104 x 69 x 57mm / 123g (Enclosure)
Capacity: 2 x 16,000 to 64,000 Cardholders/Transactions
Power Supply: 10 to 28 Volts DC, 35mA @ 12 Volts DC Quiescent

Part No. 04-149 LIM V4 (DIN RAIL)

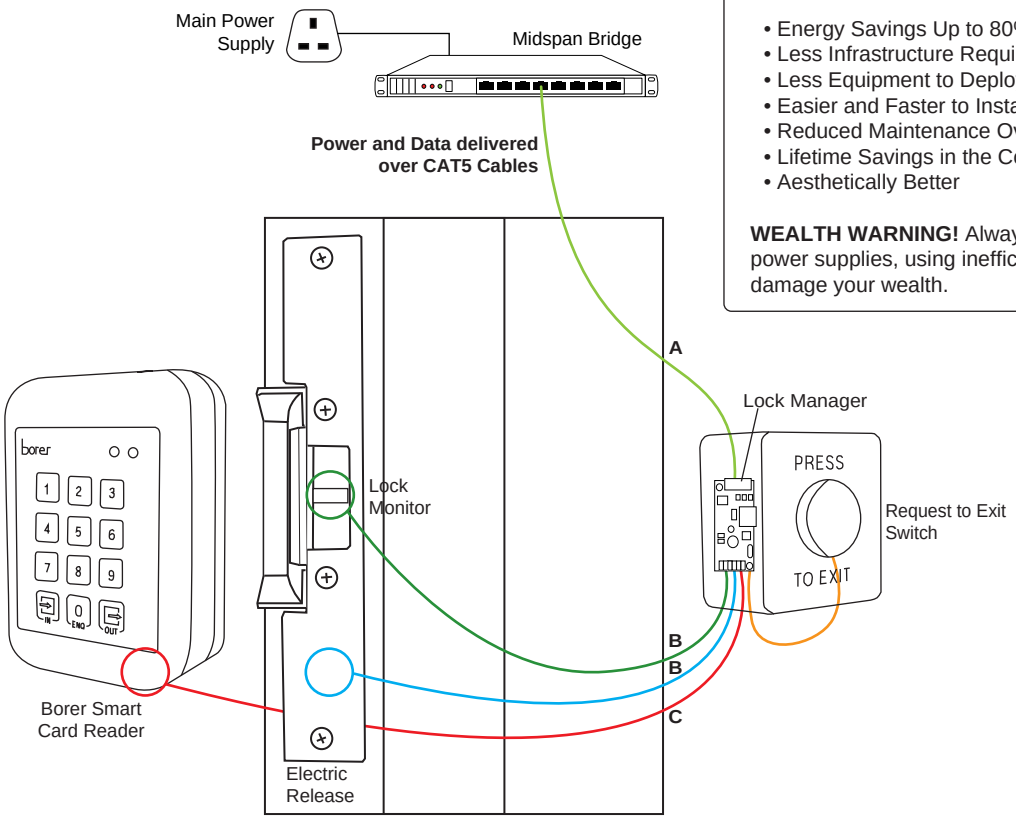
Centralised Power Distribution and Management

Centralised distribution of power using a Midspan Bridge, offers many advantages over the traditional approach of providing each door with a mains outlet, AC/DC power supply and standby battery. Benefits from centralised power distribution include:

- Energy Savings Up to 80%
- Less Infrastructure Required
- Less Equipment to Deploy
- Easier and Faster to Install
- Reduced Maintenance Overheads
- Lifetime Savings in the Cost of Energy and Emissions
- Aesthetically Better

WEALTH WARNING! Always use energy efficient switched mode power supplies, using inefficient linear power supplies can seriously damage your wealth.

Figure 16.1 Borer Centralised Power Distribution and Management



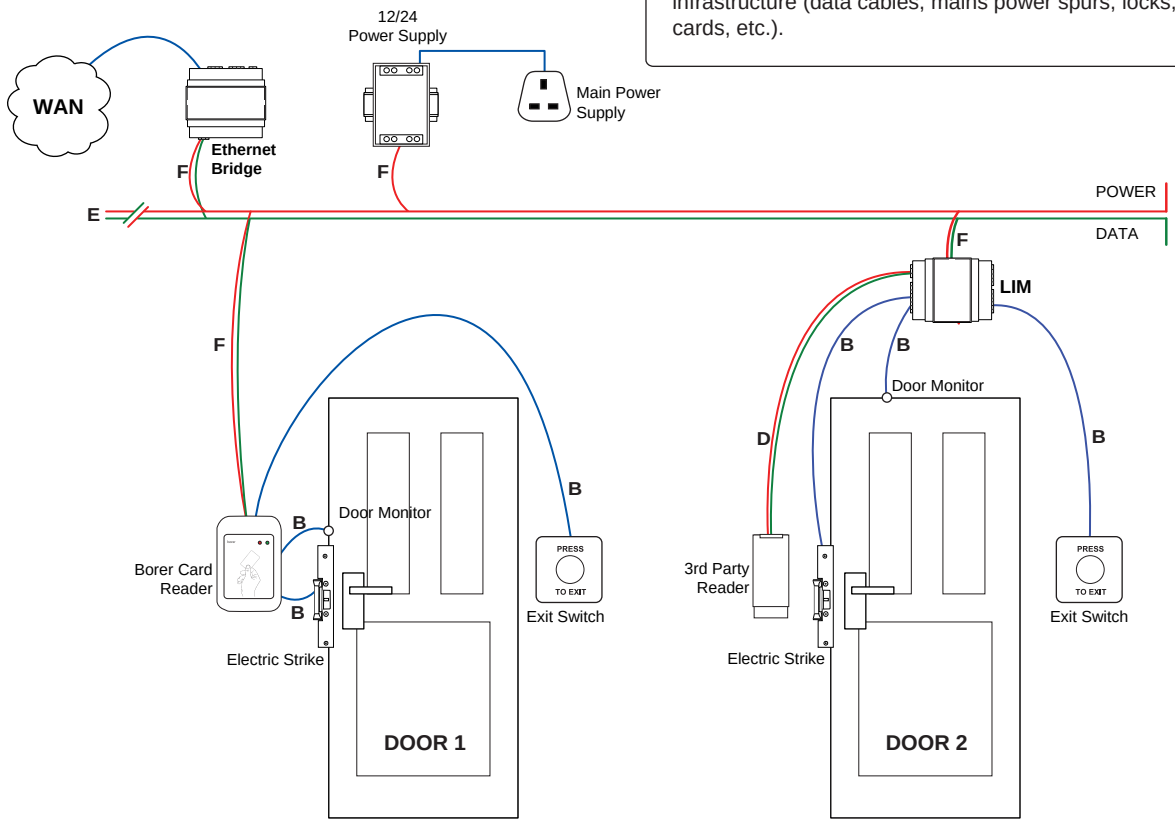
CABLE TYPES

A - CAT5
B - 7/0.2mm 2 Core
C - 2 Twisted Pair 22 (7/30) AWG TC
D - 7/0.2mm 8 Core Screened
E - Belden 3082A or equivalent
F - Belden 3084A or equivalent

Multidrop/Daisy Chain Power Distribution System

FUSION supports legacy wiring and infrastructure for those users wishing to replace legacy systems without the cost of replacing legacy infrastructure (data cables, mains power spurs, locks, reader heads, cards, etc.).

Figure 16.2 Borer Multidrop/Daisy Chain Power Distribution System



FUSION

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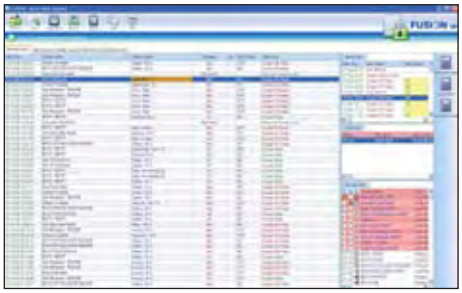
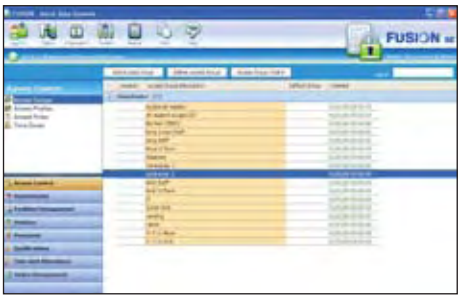
Access Control

FUSION is a totally scalable access control system; it can grow from a small single site application into an enterprise wide multi-location system as your requirements expand, all with the minimum of operator training or complex reconfiguration.

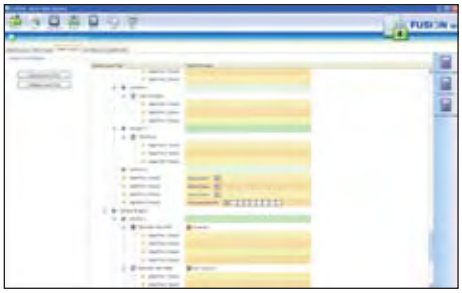
FUSION requires less infrastructure as it works over your corporate LAN using TCP/IP and your existing CAT5 structured cable network. It does not need mains outlets and power supplies at every door as power is delivered down the CAT5 network cable reducing energy bills, infrastructure requirements and installation costs.



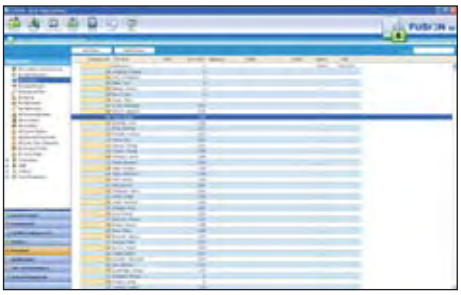
REAL TIME EVENTS DISPLAY



UNLIMITED ACCESS GROUPS CAN BE CREATED



VIEW OF DIGITAL STATUS & DEVICE STATUS



PERSONNEL RECORDS EDITOR

Access Control Solution

Benefits:

- **Retain control over every facet of ID card production** including card printing, the issue of encryption keys and card encoding without reference to the manufacturer or installer.
- **Full integration with visitor management, attendance recording, photo-ID card production** all running on the same database and sharing the same network infrastructure.
- **Security of data from card to database** – data is read directly from the smart card into the reader controller for transmittal via the network without sending data across insecure interfaces such as Wiegand, clock and data, RS485, etc.
- **Managed distribution of power** – controls the energy delivered to every door limiting the power demands of electric releases making the most efficient use of the available energy.
- **Faster install time** - with only 17 cable ends to terminate, an access door can be installed and commissioned in 2 hours.
- **'Plug and play' ensures rapid commissioning** – All field devices are 'plug and play', automatically logging on to the network and signing on to the server database as soon as they are connected allowing a reader to be commissioned in less than 5 minutes.
- **Better diagnostics** - remote diagnostic enables the administrator to remotely reprogram and reset equipment over the LAN reducing the number of site maintenance visits.
- **Fully integration with FUSION** applications - Attendance Recording, ID BadgeMaker and Visitor Management all running on the same database and sharing the same network infrastructure.

Features:

- **Card reader controllers with dual local database** – the current live database and the last known good database downloaded are held at the reader which will revert to the last known good database should the current database get corrupted because of a network failure while a database download is in progress.
- **Managed distribution of power** – controls the energy delivered to every door limiting the power demands of electric releases making the most efficient use of the available energy.
- **The least number of components to install at the door -** no main power outlet, no power supply, no battery, no control panel and no housing.
- **Dual path network communications is standard** – each bridge can support two IP addresses so that in the event of a network fault, data to the server can be automatically re-routed via a different network path.
- **Supports four card technologies** – allowing ease of migration from an old card format to a new card technology or support for different sites using different card coding formats.
- **Native TCP/IP communication** – FUSION does not use third party converters to achieve TCP/IP connectivity for ease of installation and commissioning.
- **Event driven communications** – unlike most systems which use polled communications FUSION field devices are event driven; data is only transmitting in response to a real life event thereby keeping network traffic to a minimum.

FUSION
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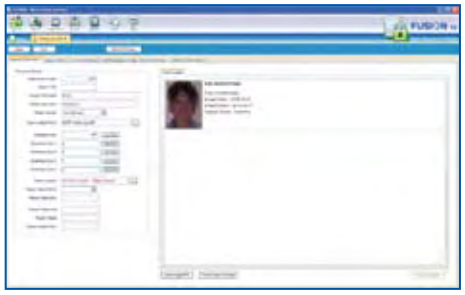
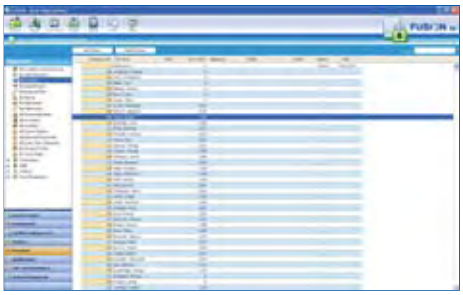
Attendance Recording Solution

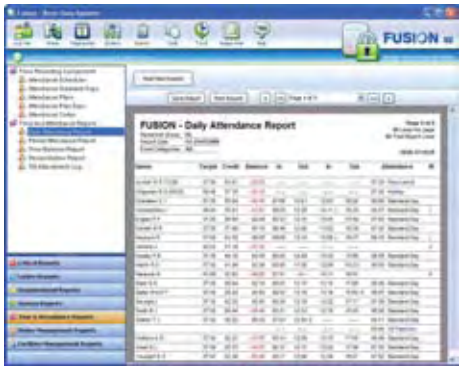
Attendance Management

FUSION is a totally scalable attendance management system which can grow from a small single site application and to an enterprise wide multi-location system.

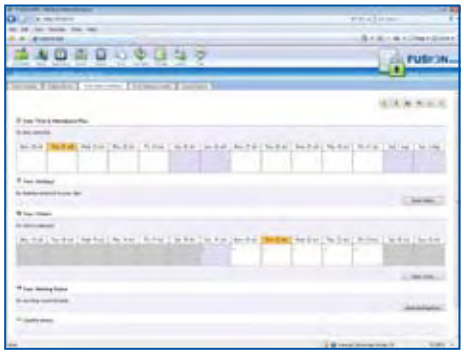
FUSION requires less infrastructure as it works over your corporate LAN using TCP/IP and your existing CAT5 structured cable network. It does not need mains outlets and power supplies at every attendance terminal as power is delivered down the CAT5 network cable reducing energy bills, infrastructure requirements and installation costs.


UPDATE STAFF RECORDS


VIEW PERSONNEL BY MULTIPLE SEARCH FILTERS



DAILY ATTENDANCE REPORT


SELF SERVICE FUSION WEB INTERFACE

Benefits:

- **Up to the minute staffing information** so that managers can, at a click, see who is in attendance, on holiday, on sick leave or absent.
- **Less administration**, managers can review attendance data from their desktop PC.
- **Reduce paperwork,** attendance reports are electronically distributed to managers.
- **Handle staff queries efficiently** - using Attendance Web, staff members can review their own attendance records without referring to managers.
- **Full integration with FUSION** applications - Access Control, ID BadgeMaker and Visitor Management all running on the same database and sharing the same network infrastructure.
- **Attendance web** option enables staff participation, reducing staff queries, administrative effort and management time via a web browser.

Features:

- Accommodates fixed shift, floating shift, rotating shifts, annualised hours etc.
- Support for flexitime working arrangements and job sharing.
- Records times in attendance, reporting on attendance anomalies such as lateness, early departure, long lunches, etc.
- Records all types of absence exceptions such as: sickness, holiday, doctor appointments, etc.
- Deductions for lateness/early departure, short breaks, excessive breaks, no lunch taken as determined by company policy.
- Supports weekly, monthly, bi-monthly and custom pay periods.
- Standard day rate and up to nine overtime rates supported.
- Support for overtime limits and pre-qualification.
- Overtime accumulated by time of day - day of week - shift worked - hours worked in a period, etc.
- Exception reporting on a daily, weekly, periodic basis.
- Management reports including shifts worked, actual arrival/departure times and total hours worked.
- On premises/ off premises recording and reporting.
- Export to payroll and personnel systems.
- Data security, all data is password protected with individual passwords for staff and managers.

FUSION

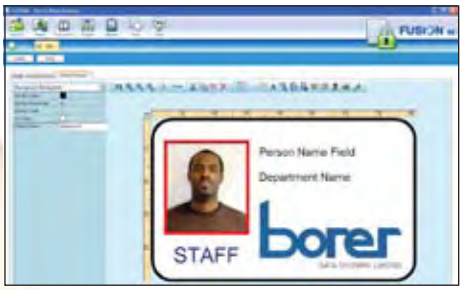
Smart Solutions @ Work

ID BadgeMaker

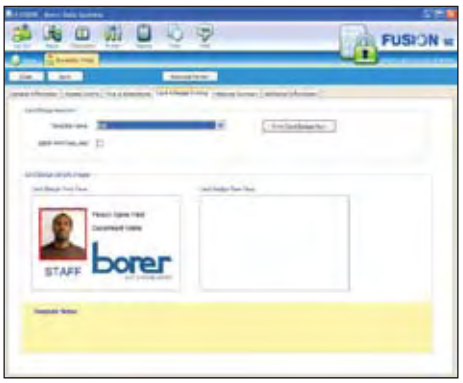
BadgeMaker is the enterprise choice for designing and producing professional looking, low cost ID Badges. BadgeMaker is scalable so it can grow from a small photo ID system for single site systems to an enterprise wide solution covering many sites connected via the user's own IP network.

Multi-site support enables ID photographs to be captured and badges printed from any number of locations, all sharing the one database. Choice of printing on ID cards using PVC dye sublimation card printers or on to labels using low cost colour ink jet printers.

ID BadgeMaker Solution



CUSTOM BADGE DESIGN SCREEN



UNLIMITED BADGE TEMPLATES

BADGE PRINT PREVIEW

Benefits:

- **BadgeMaker gives you the look and feel you're used to.** You don't have to go through classroom training to design profesional looking badges.
- **Custom card design capabilities** lets you create different layout for different groups or departments. A change in company name or logo can be quickly incorporated into the ID card design at no cost.
- **Colour or black and white?** It's your choice! Integrate the appropriate printer and camera to meet your needs.
- **A lost card doesn't mean lost time** as the employee does not have to take time off to get his or her picture retaken. Simply reprint the card with the image already stored in the computer.
- **Support for a vast array of printers**. If your graphics printer has a windows driver, you'll probably be able to use it with BadgeMaker.
- **Support for duplex printing** enabling the front and back of the card to be printed in one pass.
- **Custom badge designs** including company logos and custom graphics.
- **Background Images** captured directly through the video camera.
- **Personalise badges** at a fraction of the cost of custom printing, and you won't have to wait months for them!
- **Client server support** so you can share information throughout the organisation. Its multi-level password security ensures that only authorized personnel can build or modify card designs, or alter database information.
- **Add security to your badge design** by including features such as rounded corners on the border of the photograph, ghosted image on the background design, transparent text box with text overlapping the edge of the photograph, watermark effect, etc.
- **Fully integration with FUSION** applications - Access Control, Attendance Recording and Visitor Management all running on the same database and sharing the same network infrastructure.

Features:

- Choice of printing on ID cards using PVC dye sublimation card printers or on printed labels using low cost colour ink jet printers.
- Choice of image capture tools including live video from a IP network camera, digital camera or webcam.
- Support for all windows fonts as well as most popular barcode formats.
- Multi-user support enables ID photographs to be captured and badges printed from any number of sites.
- Password security stops tampering with existing badge designs.
- Wizard support for unlimited numbers of badge designs.
- Wizard support to automate design and printing of ID badges.

FUSION

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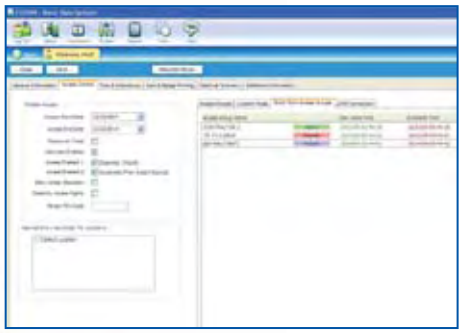
Visitor Management

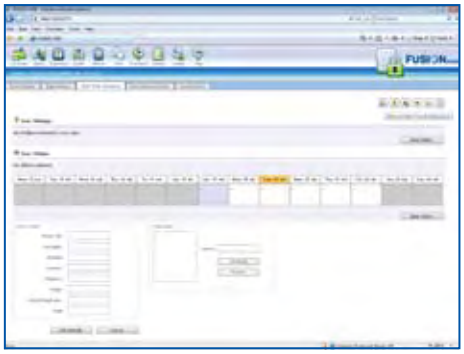
FUSION provides a quick and easy to use visitor administration system which handles both visitor pre-registration and visitor reception. It supports visitors registration either at a manned reception desk or via an optional self registration touch screen terminal.

Once a visitor has registered, a visitor badge can be printed and visitor restrictions, such as: clearance levels, access to areas and visit expiry times, can be set.

Visitor Management Solution

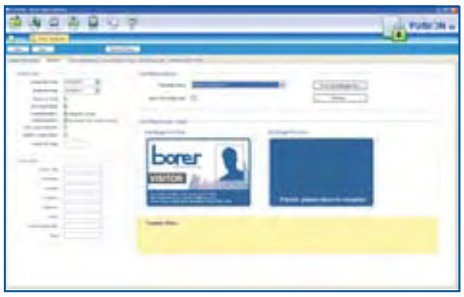


ASSIGN SHORT TERM ACCESS GROUPS



WEB BASED VISITOR PRE-REGISTRATION

VIEW PERSONNEL/VISITORS DISPLAY



ENROL A VISITOR & PRINT ID PASS

Benefits:

- Handles visitors more quickly and efficiently.
- Pre-register visitors allowing security clearance checks to be made prior to the visitor's arrival speeding up the reception process.
- Reduce front desk work load with the self-service terminal.
- Includes visitors on the site 'Fire Roll Call'.
- Speedy and easy registration of frequent and return visitors.
- Provides audit trail and improved accountability.
- Identifies who's on site, invaluable for site fire evacuation exercise.
- Fully Integration with FUSION applications - Access Control, ID BadgeMaker and Attendance Recording all running on the same database and sharing the same network infrastructure.

Features:

- Pre-register expected visitors through a simple web interface.
- Scan arriving visitors Photo ID or business card.
- Identify frequent visitors and return visits.
- Capture visitor's photo and/or signature.
- Track assigned visitor access cards.
- Check for visitors requiring special approval.
- Print professional colour coded visitor passes with expiry date, visit area, host being visited and purpose of visit.
- Automatically notify the host of a visitor's arrival by email, phone or SMS.
- Integrate with access control to manage visitor escorts.
- Logs visitors on and off site for inclusion on the site roll-call.
- Provides audit reports listing visitor traffic by employee, department or facility.
- Integrates with Automatic car Number Plate Recognition (ANPR) to give visitors automatic access to parking on arrival.
- Integrates with Microsoft Outlook Calendar or Lotus Notes to manage appointments.

FUSION

Smart Solutions @ Work

Personnel Monitoring Solution

Benefits:

- Track personnel crafts and contact information.
- Improve security and risk management.
- Find out who is onsite.
- Produce a roll-call or muster report in the event of a fire or site evacuation.
- Quickly scan data from documents and issued IDs to produce temporary or permanent ID for visitors.
- Accurately track onsite personnel history for customer audits and reports as needed.
- Share site information with corporate headquarters via a web connection.

Features:

- Both systems provides a stand-alone or enterprise web-enabled solution that can quickly capture documents, driver's license, training records, qualifications, etc. to populate a database.
- Produce a secure ID badge on a durable plastic card.
- Credentials are presented quickly and securely validated on arrival on site.
- Both systems will read the worker's ID card and immediately log the worker on or off site and update the site roll call.
- Monitors, logs and account for time on site by individual contractor, sub-contractor and trade discipline.
- Maintains records and reports on site inductions, training, qualifications and skills.
- Holds an audit trail enabling the site manager to identify who was on site on a given day between specified times – invaluable when investigating site incidents.

Construction Site Monitoring System

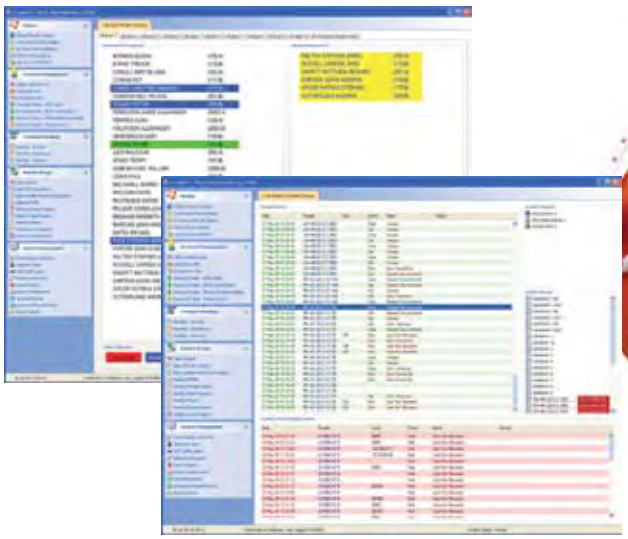
Construction Site Management System assists in the management of personnel on construction sites, oil platforms etc. It identifies, authenticates and tracks the movement of site workers.

It logs and reports on all movements on and off site enabling a site wide roll-call or muster report to be produced on demand in the event of a fire or site evacuation. Information can be viewed in real-time and accessed remotely via web browser. Construction Site Manager is flexible and can be tailored to meet specific site requirements.

Crusafe Personnel on Board System

- **PERSONNEL MANAGEMENT** - Providing control and tracking of personnel as they arrive and move around the site and hazardous locations,using identity cards and card readers.
- **TRANSPORT MANAGEMENT** - Logging incoming and outgoing transport and producing flight manifests.
- **INCIDENT MANAGEMENT** - Speedy verification of personnel at muster points during incidents (Genuine or Trial).
- **ACCOMMODATION MANAGEMENT** - Cabin and bunk allocation and management and lifeboat allocation in advance of the arrival of crew onboard.

LIFEBOATS MUSTER DISPLAY



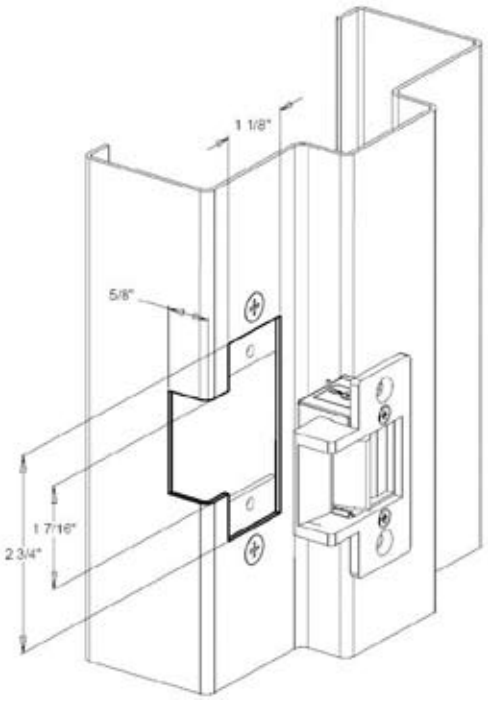
REAL TIME EVENTS DISPLAY

Electric Strike Installation

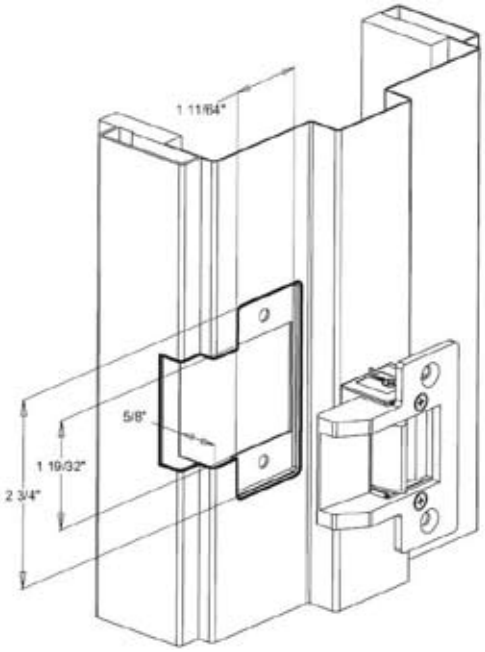
Electric strikes are suited for free exit doors, where a handle is used to open the door from the secure side, and for standard wooden or steel doors.

Electric strikes require a degree of skill and precision to fit but make for a neater installation as there is less equipment to install at the door – card access reader and electric strike with integral or separate door sensor.

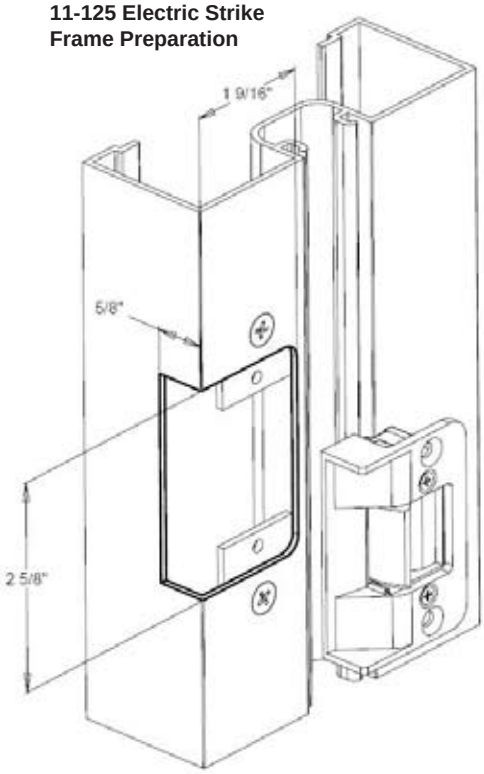
11-123 Electric Strike
Metal Frame Preparation



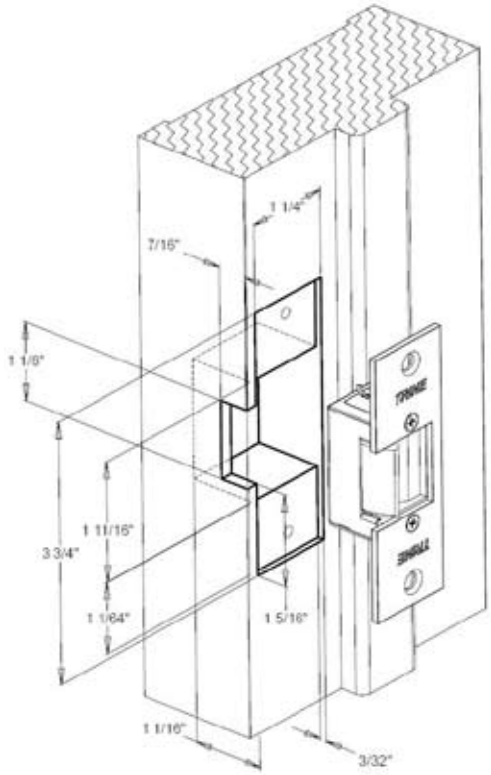
11-124 Electric Strike
Wood or Timeley Frame Preparation



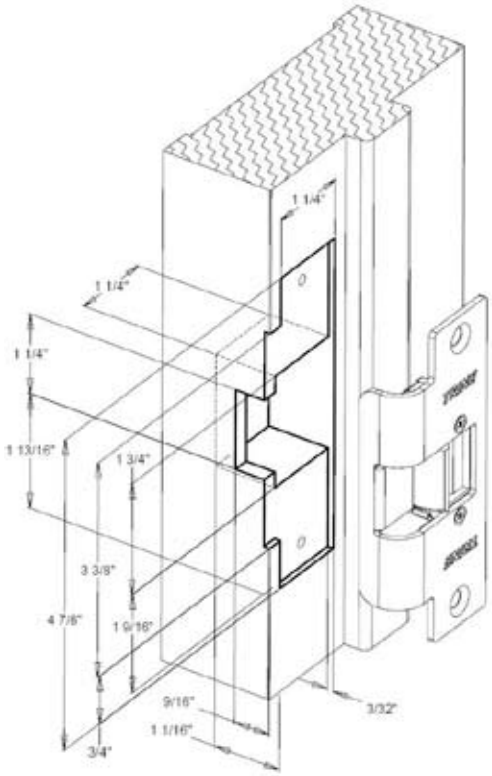
11-125 Electric Strike
Frame Preparation



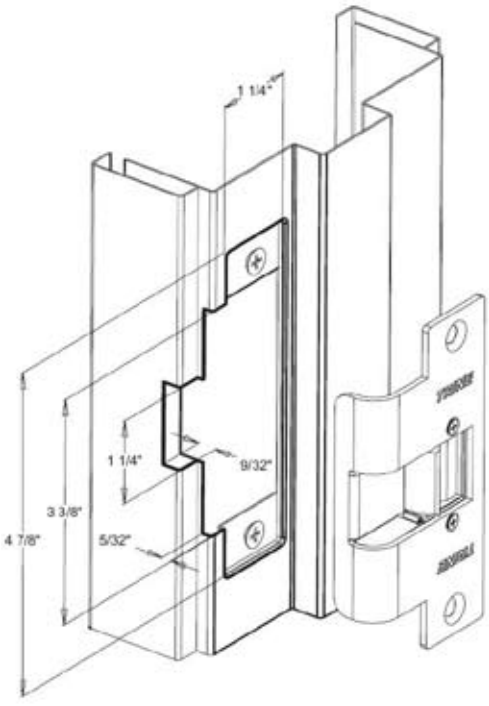
11-126 Electric Strike
Wood Frame Preparation



11-127 Electric Strike
Wood Frame Preparation



11-128 Electric Strike
Wood or Timeley Frame Preparation



COMBINE: **THE WORLD'S SMALLEST ELECTRIC STRIKE**

WITH: **THE MOST ENERGY EFFICIENT SMART CARD READER/CONTROLLER**

ACHIEVE: **THE FASTEST INSTALL TIME** - Typically 2 hours with only 17 cable ends to terminate.
THE QUICKEST COMMISSIONING – Taking less than 5 minutes to register a door to the central database.
LESS TO INSTALL AT THE DOOR - No main power spur, power supply, battery, control panel or housing.
EASIER MAINTENANCE - Equipment is installed at door handle height, making it readily accessible and easy to maintain.
BETTER DIAGNOSTICS - Using remote control, you can reprogram and reset equipment over the LAN without having to visit the site.
ENERGY SAVINGS - Typically less than 2 Watts needed to power an access reader and electric release.

FUSION, unlike all other access control systems, does not use relays to simply switch power to the lock solenoid.

Instead the **FUSION** lock manager uses solid state circuitry to measure and manage the distribution of power to the lock.

Consequently, electrically operated strike and lock solenoids do not get hot, are not stressed, use less energy and last longer.

Trine - World's Smallest Electric Strike

An electric strike that requires up to 70% less cutting of the frame face.
An electric strike with a 1" total backset including face plate.
An electric strike with a trim plate for every application.

- Dimensions: L26mm (1") x H44mm (1 3/4") x D26mm (1")
- Holding Force 1200lbs
- Life Cycles 500,000
- Fail Secure
- Intermittent Duty Rated
- All Stainless Steel Locking Mechanism
- Current: 430 mA @ 12Volt DC

Part No 11-122 Trine Electric Strike Mechanism

A Different Face Plate For Every Occasion

TRINE Face Plate 11-123

For new or replacement installation in metal frames. Use with cylindrical locksets with up to 5/8" throw, based on 1/8" door gap.

Dimensions: 28.6mm (1 1/8) x 70mm (2 3/4)

For use with metal frames

Part No. 11-123 Trine Face Plate

TRINE Face Plate 11-124

Ramp is extended 3/8". For new or replacement installations. Use with cylindrical locksets and deadlatches having up to 5/8" throw, based on door gap.

Popular with wood frames as the extended ramp matches up with most molding trim that surrounds the jamb.

Dimensions: 28.6mm (1 1/8) x 70mm (2 3/4)

For use with metal and wood frames
Long wood screws recommended for installation

Part No. 11-124 Trine Face Plate

TRINE Face Plate 11-125

80% less frame cutting. Fills the frame preparation of Adams Rite MS Locks without relocating tabs for 6 5/8" or 6 7/8" electric strikes.

For new or replacement installation in aluminium frames. Use with 4510, 4710 & 4750 Adams Rite dead latches. Replaces 4502 strike plate with slight frame modification.

Dimensions: 39.9mm (1 9/16) x 73.6mm (2 5/8)

For use with aluminium frames

Part No. 11-125 Trine Face Plate

TRINE Face Plate 11-126

For new or replacement installation in wood frames. Use with cylindrical locksets with up to 5/8" throw, based on 1/8" door gap.

Dimensions: 32mm (1 1/4) x 95.3mm (3 3/4)

For use with wood frames

Part No. 11-126 Trine Face Plate

TRINE Face Plate 11-127

60% less frame cutting of frame face for ANSI 4 7/8" pre-prep frames. For new or replacement installation in wood, metal or aluminium frames. Use with cyclindrical lockets having up to 5/8" throw, based on 1/8" door gap.

Dimensions: 32mm (1 1/4) x 123.83mm (4 7/8)

For use with hollow metal frame, wood and aluminium frame

Part No. 11-127 Trine Face Plate

TRINE Face Plate 11-128

Ramp is extended 3/8". For new or replacement installations. Use with cyclindrical locksets and deadlatches having up to 5/8" throw, based on 1/8" door gap.

Dimensions: 32mm (1 1/4) x 123.8mm (4 7/8)

For use with aluminium, wood frame

Part No. 11-128 Trine Face Plate

IMPORTANT! Do not use magnetic locks as door stops as this will damage the lock or may cause it to break loose from its mounting plate.

IMPORTANT! Always use Loctite to secure fixing screws, also check installation bi-annually, to avoid magnetic locks working loose and falling causing damage or personal injury.

Magnetic Lock Installation

Magnetic lock installations are generally more visible and are less aesthetically pleasing with more wiring and equipment to fit at the door – card access reader, magnetic lock, Z and L bracket, door ajar sensor, link to fire panel, push-to-exit button and break-to-exit glass.

CAUTION! Magnetic locks fitted to perimeter doors only function while the building has power. In the event of a power interruption your building security may be compromised, even when a battery backed supply is fitted as magnetic locks are power hungry and will quickly drain a battery. Fit magnetic locks with “Hall Effect” sensors which monitor both lock power and magnet holding force to avoid door security being compromised by the placing of paper or cling-film across the face of the magnet.

SUGGESTED INSTALLATION POSITION

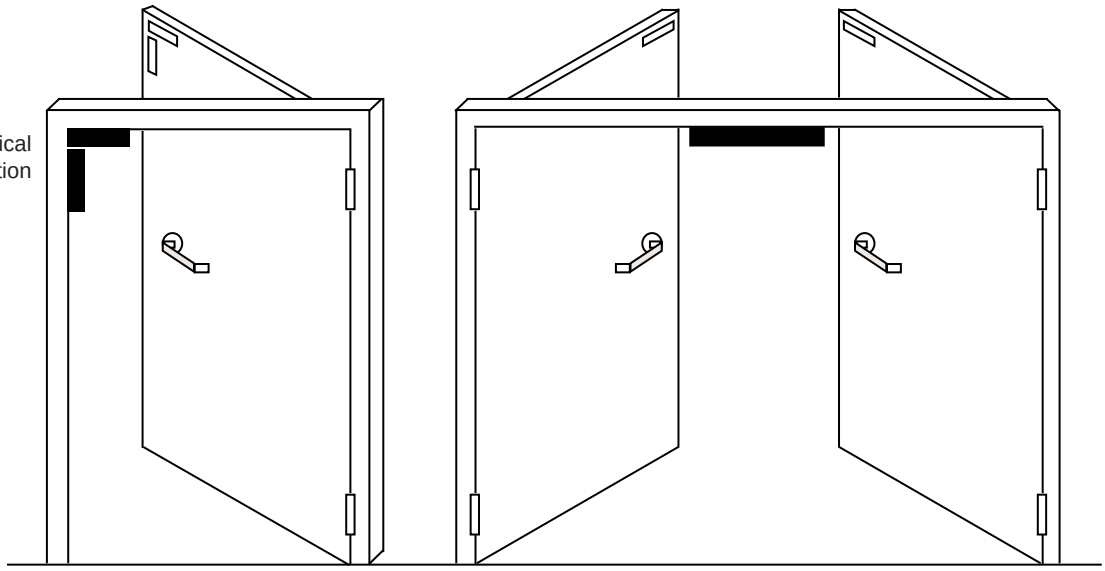
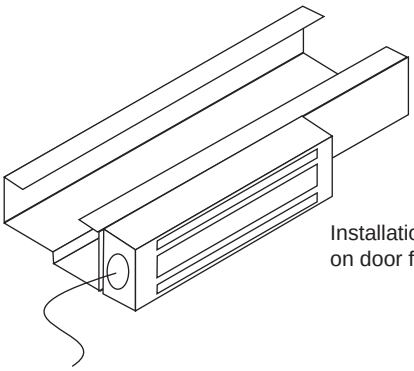


Figure 24.1 Suggest Maglock Installation

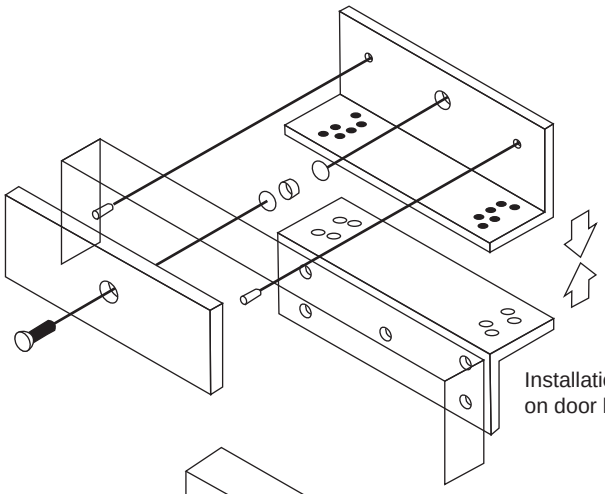
TYPICAL INSTALLATION

Figure 24.2 Typical Maglock Installation

Installation of Maglock on Inswinging Door

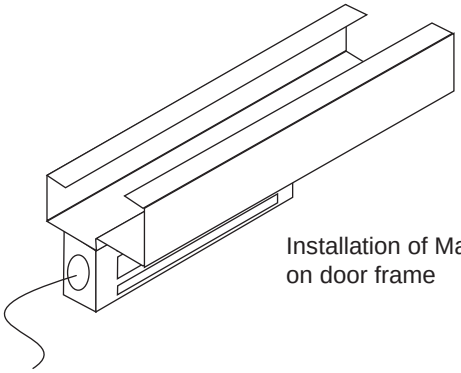


Installation of Maglock Body on door frame

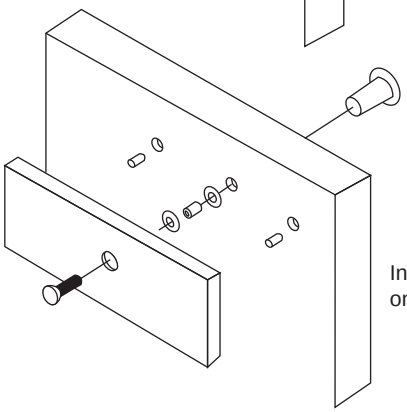


Installation of Armature Plate on door leafe

Installation of Maglock on Outswinging Door



Installation of Maglock Body on door frame



Installation of Armature Plate on door leafe

Z&L BRACKETS FOR MINI MAGNETIC LOCKS

Z Bracket Dimensions: L 185 x W 49 x H 49mm
L Bracket Dimensions: L 250 x W 48 x H 30mm

Part No. 11-173 Z Bracket Mini-Magnet
Part No. 11-174 L Bracket Mini-Magnet

Z&L BRACKETS FOR STANDARD MAGNETIC LOCKS

Z Bracket Dimensions: L 184 x W 63 x H 63mm
L Bracket Dimensions: L 265 x W 76 x H 38mm

Part No. 11-163 Z Bracket Standard
Part No. 11-164 L Bracket Standard

CABINET AND LOCKER RELEASE

- Cabinet and Locker Release
- Dimensions: 41mm x 20mm x 52mm
- Voltage: 12VDC
- Modes: Fail Secure/Fail Safe
- Current: 400mA/12VDC | (F) 200mA/12VDC

Part No. 11-187 Monitored - Fail Safe
Part No. 11-188 Monitored - Fail Secure
Part No. 11-189 Unmonitored - Fail Safe
Part No. 11-189 Unmonitored - Fail Secure

ECONOMY ELECTRIC STRIKE

- An economy strike for everyday applications
- Dimensions: 124mm L x 42.5mm W x 41mm D
- Voltage: 12VDC
- Modes: Can be changed to either Fail-Safe or Fail-Secure
- Current: 230mA/12VDC
- Options: With door status sensor

Part No. 11-136 Unmonitored - Fail Safe
Part No. 11-137 Unmonitored - Fail Secure
Part No. 11-138 Monitored - Fail Secure

MINI MAGNETIC LOCKS

Current: 500mA @ 12V DC; 250mA @ 24V DC
Operating Temperature: 10 ~ 55° C
Humidity: 0 ~ 95% non-condensing
Holding Force (Approx.):
Single 280Kg (600lbs)
Double 2 x 280Kg (600lbs)
Dimensions:
Single Magnet: L 250 x W 42 x H 26mm
Double Magnet: L 500 x W 42 x H 26mm
Armature Plate: L 220 x W 55 x H 15mm
Weight (Approx): 2 Kg / 4 Kg

Part No. 11-170 Single Mini-Magnet
Part No. 11-171 Double Mini-Magnet
Part No. 11-175 Single Mini-Magnet with Lock Monitor Sensor
Part No. 11-176 Double Mini-Magnet with Lock Monitor Sensor

HEAVY DUTY GATE MAGNET

Current: 500mA @ 12V DC; 250mA @ 24V DC
Holding Force (Approx.): 550 Kg (1200 lbs)
Dimensions:
Single Magnet: L 220 x W 63.5 x H 41 mm
Armature Plate: L 185 x W 61 x H 16 mm
Weight (Approx.): 4 Kg

Part No. 11-169 Gate Magnetic Lock

Emergency Break Glass Installation

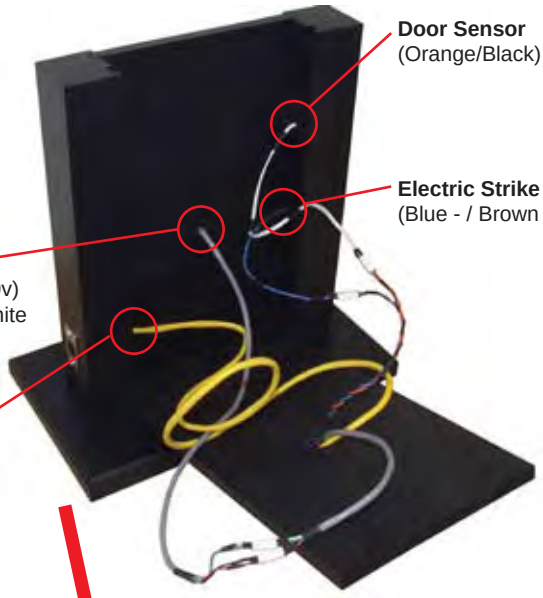
Always fit “Emergency Door Release” break glass units wherever magnetic locks are installed. These should be fitted in a conspicuous location, about 1.4 meters above floor level, adjacent to the exit handle.

If the magnetic lock does not have a “Hall Effect” sensor then fit a break glass with dual contacts, one to interrupt power to the lock and another for the access control system to monitor the break glass because a broken break glass often goes unnoticed and will disable the lock.

CAUTION! Fit magnetic locks with “Hall Effect” sensors which monitor both lock power and magnet holding force to avoid door security being compromised by a broken emergency break glass door release going unnoticed.

IMPORTANT! Many authorities require single action egress in the event of a fire evacuation and a magnetic lock/break glass combination does not fit this criterion.

CABLE TERMINATIONS



Borer's Demonstration Kit

Using Borer's Access Control demonstration kit which clearly shows how minimum equipment is required to install and power Borer's unique Access Control Solution.

Our demonstration kit is connected by a single CAT5e cable to a Midspan Bridge from which data from a PC and power from mains power supply is delivered. Up to 8 demonstration units can be plugged into a single Midspan Bridge.

Using Power over Ethernet technology and "Plug and Play" devices ensures rapid commissioning and energy efficient distribution of power.

The **Lock Manager (LM)** monitors digital inputs for Door Open, REX, Tamper/Lock and controls the delivery of power to an electric lock or strike. The LM can be mounted inside a Push-to-Exit housing or flush housing behind the reader on the secure side of the wall.

Quick Installation Guide

1. Thread cable from the lock manager through the surface housing and wall to the other side.
2. Connect LM wires (**Blue - / Brown +**) to **Electric Strike**
3. Connect LM wires (**Orange / Black**) to **Door Monitor**
4. Connect LM wires (**Red +12V / Black 0v**) and (**Green CAN Hi / White CAN Low**) to **Borer Door Reader**
5. Thread the CAT5e to the LM, use the punch out tool to terminate the wires - make sure the cables are positioned on the inside pointing out otherwise the LM will not fit into the surface housing.
6. Screw tamper switch onto surface housing, making sure the position of the tamper is in proximity to the front panel.
7. Connect PA wires (**Violet / Black**) + to **Tamper Switch**
8. Screw surface housing to wall
9. Screw lock manager onto surface housing
10. Insert outer surface housing
11. Screw push-to-exit plate or plush plate onto housing.