integrated
security solutions

TDSi
ACCESS EVERYWHERE

Because everyone deserves peace of mind

TDSi protect people, assets and information by providing high quality, cost effective and well supported integrated access control and security systems.

As a British manufacturer with over thirty years experience in access control technologies, our passion and dedication is reflected in every aspect of our business. At the heart of this lies a commitment to quality and we have built a reputation for the reliability and durability of our products, ensuring that we deliver excellent value on your investment. Our development programme also ensures the continued protection of that investment; new software systems are backwards compatible with our existing hardware, providing future proof technology that reduces the cost of ownership and maximises your return on investment.

Our systems are of the highest quality, but they are also highly cost effective. At a price that delivers outstanding value for money, each system provides the perfect combination of great functionality and high reliability together with ease of use and ease of installation. As specialists focused on the design, manufacture and support of integrated security systems, you can also be confident in our unrivalled technical knowledge and outstanding support services.

Our security solutions are not only competitive with regard to functionality and price, but also reflect the growing technological convergence between organisations' IT and security systems. Designed to integrate with a wide range of complementary technologies including wireless locking, CCTV, fire and intruder alarms as well as building management systems, our systems enhance the effectiveness of your security as well as energy efficiency and sustainability programmes.

The comprehensive, scalable range has been developed to meet all your requirements. From stand alone networked solutions to fully integrated, advanced access control systems, you can seamlessly expand your system to meet the changing needs of your organisation.

Working with partners across the globe, we forge long term relationships with customers who require not only assured products and solutions, but also support services that enhance value – such as commissioning, remote and onsite technical support and software upgrades.

Our products and systems are supplied through a global network of authorised partners, each of whom has been carefully selected to ensure they have the necessary skills to design, install and maintain your access control system to the standards that are rightly demanded of such a business critical investment.

John Davies
MANAGING DIRECTOR

Number of Doors   Number of Users   Number of Inputs   Number of Outputs

Communications   Power Supply   Expansion Options

TDSi has installed access control and integrated security systems of all shapes and sizes.

Developed with the needs of users and building managers to the fore, our range delivers secure, robust and cost-effective access control, as well as powerful integration capabilities with a range of building management systems - including CCTV, intruder and fire alarms, lift control and energy management systems.

EDUCATION

With the protection of students at the forefront of security decisions in the education sector, TDSi work closely with M&E contractors, facilities management and installers to ensure the safety of learning environments and establishments worldwide. Risk reduction is key, access control can prevent premises intrusion, attacks on staff or pupils and equipment theft. Efficiency can be increased through database integration with Capita SIMS, SDK, cashless vending and library cards.

FINANCIAL

One of the key considerations for the financial sector continues to be physical security and access control, something which can be a challenge when the organisation has numerous branches and facilities spread across a large geographical area. Using TDSi's EXgarde PRO software all branches can be centrally administered, integrating intruder alarms, fire systems and CCTV. For highly secure solutions, TDSi biometric readers allow a three step authentication process for maximum security.

COMMERCIAL

TDSi systems provide a wide range of secure, reliable and robust office access control systems. With a range of flexible, future-proof and scalable solutions used in commercial premises across the world, TDSi offers solutions from small office applications to multi-site projects for some of the world's largest employers. Our systems deliver benefits for designers, installers, system integrators and users. Additional modules such as EXtour, EXvisitor and EXgarde can provide a wider range of additional security functionality.

GOVERNMENT

With a range of scalable and flexible products, our readers, controllers and software systems provide solutions for all government applications including the option of providing the added security of biometric systems, the flexibility of smartcard technology or the integration capabilities of an access management software suite. Recognising the need to provide high security access control systems for a diverse range of applications, we have developed solutions both for stand alone departments or buildings, and for multi-site organisations.

HEALTH

Our integrated solutions have been used in both new-build and refurbishment projects, providing robust and reliable access control for hospitals and surgeries. Through our EXgarde PRO software suite, our proven systems provide seamless integration with other building management systems, including CCTV, intruder and fire alarms as well as lighting, heating and air-conditioning systems. Access control in the health sector can help to reduce attacks on staff, monitor patient movement, restrict access for authorised people to enter hazardous areas. Where high standards of hygiene is required, TDSi also offers contactless technologies including facial recognition to reduce the spread of infections.

LEISURE

Given the specific needs of the leisure sector, we have a range of integrated systems to provide solutions for access control for hotels and leisure centres. Our flexible, scalable systems may be used in stand-alone applications or across multi-site operations. TDSi also offers smart card technology which can be used with complimentary applications such as membership identification with badge printing, cashless payments and even locker access.

TRANSPORT

We have successfully delivered access control systems for transport networks across the world. Our products are proven in some of the world's largest ports, railway networks, terminals, freight and distribution centres and are at the heart of many prestigious infrastructure projects. With high levels of protection demanded throughout the transportation sector, our systems provide benefits both to passengers and operators. Balancing the needs of passengers who require fast access and minimum disruption to their journey, with operators who need to provide safe and secure transport services.

UTILITIES

From energy suppliers to water and waste management companies, we have supplied a range of access control systems for utilities companies. Securing individual buildings as well as multi-site, often remote locations, we have a suite of products to meet the needs of the vast majority of applications. TDSi's proven experience in this sector is demonstrated across the globe in a wide variety of sites, including many high security applications.

INDUSTRIAL

Industrial facilities have very specific security needs from excluding trespassers, to limiting access to dangerous or sensitive areas, protecting valuable assets and equipment or ensuring the safety of lone workers. These functions rely upon many different systems including CCTV, security alarms and controlled doorways. As part of a full range of integrated security solutions, TDSi's access control management software helps industrial producers and manufacturers to guard against intruders, protect and track assets, maintain a comprehensive security audit trail, protect lone workers and can even help to save energy by intelligently controlling heating and ventilation systems.

endusers

TDSi's Access Control Management Software delivers integrated security solutions that add value to your business.

A solution for all applications

EXgarde® PRO is a fully featured Access Management PC software application that combines the latest in TDSi innovation in a single package with a user friendly interface. It can be used to control 1 door at 1 site with a few users to thousands of doors at multiple sites with thousands of users.

EXgarde® PRO can be used to seamlessly integrate the many aspects of a security and building management system using a single database and a single user interface. All EXgarde® application modules can be set up, administered and managed from a single or multiple workstations.

Ease of integration and ease of expansion are key attributes of EXgarde® PRO providing numerous possibilities to integrate to the latest CCTV, Fire, Intrusion, Building Automation and Management, Active Directory and Biometric technologies.

User friendly
- Intuitive windows based software
- SQL Express database for up to 5 workstations & 10GB database size or Corporate SQL
- Customisable Site Plan & Dynamic Graphics
- Multi language support
- Online context sensitive help
- Visual verification feature

Centralised Administration of your system
- Custom reports and integration to Crystal Reports
- Central Control – all doors can be controlled from 1 place (if required)
- Event reporting – card and alarm events and basic Time and Attendance reports
- Manual override of doors etc
- Full audit trail of events, alarms and operator use
- Real-time event monitoring and logging

Flexible set up
- Programmable holidays
- Group cardholder access rights
- Time scheduling for Areas, Card holder, Groups, Readers, Relays etc.
- Client/Server architecture
- Landlord/Tenant structure
- Automated database backup facility
- Cardholder data import and export via a dedicated tool
- OPC integration facility

Scalable solution
- Server for larger systems
- Multiple workstation capability (subject to license)
- Distributed network capability
- Multisite capable with PSTN, GSM, GPRS modem support

Safe and Secure
- Automated and event triggered fire reporting
- Alarm management – advanced prioritised alarm handling with alarm response instructions

EXgarde

Key Features
- Single or multi-site
- Intuitive user interface
- Inbuilt wizards
- Three levels of license - only buy what you need
- Can adapt to your current system with flexible connection methods
- Co-ordinate your sites internationally
- Customisable with your own branding
- Add on additional modules as required, saving you money

TDSi Part No.	Express 4420-2110	PRO 4420-2080	Enterprise 4420-2111
Doors	32	32*	Unlimited
Workstations	1	1**	4**
Tenant	1	1***	2***
Event Log	Fixed 45 days	User def	User def
Keyholders	10,000	Unlimited	Unlimited
Site Plans	3	Unlimited	Unlimited
Badge Designs	2	Unlimited	Unlimited
Alarm Zones	Master Zone Only	Unlimited	Unlimited
VUgarde Integration	✗	✓	✓
Third Party Integration	✗	Option	Option

additional door options can be purchased in multiples of 32.
*** up to 25 maximum optional.*
*** unlimited optional.*

User Friendly Interface

Homepage

A fully configurable Homepage allowing the user to place any commonly used items on it. This may include shortcuts to specific parts of the software, wizards or tutorials.

Photo ID

Design single or double-sided cards and print directly from the software. Include graphics, database objects such as cardholder name and photo.
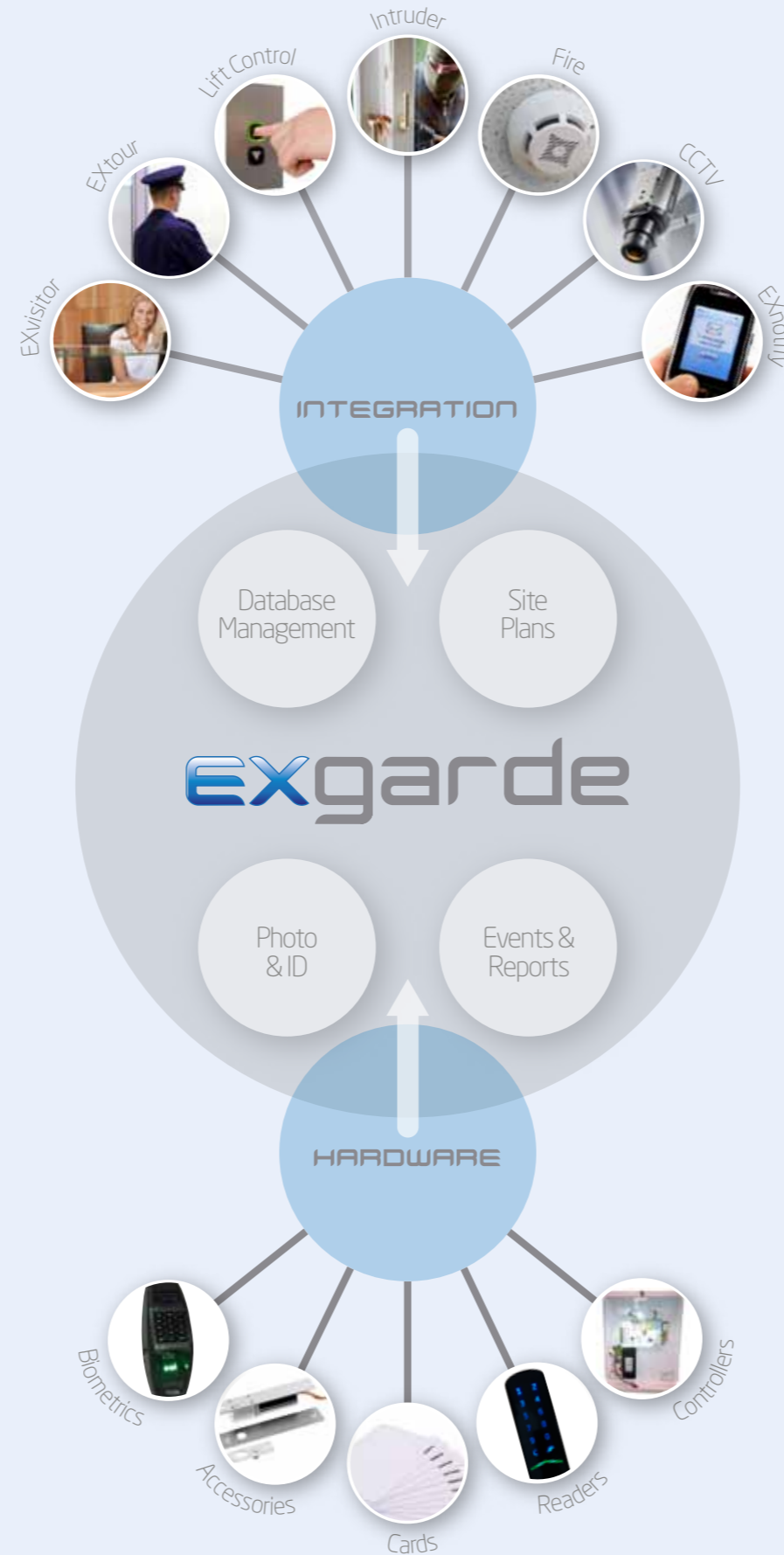
Site Plans

Fully interactive site plans offer a visual of the site, add to it any items of equipment (for example doors, cameras, inputs and relays) and operate them directly from the site plan.

Camera View

Display live camera feeds from a network camera and operate any PTZ features through the interface. Ideal for comparing the live video to the image stored in the database.

INTEGRATION

EXvisitor
EXtour
Lift Control
Intruder
Fire
CCTV
EXnotify

EXgarde

Database Management
Site Plans
Photo & ID
Events & Reports

HARDWARE

Biometrics
Accessories
Cards
Readers
Controllers

Experience the benefits of Integration

We are continuously improving the ability of our access control systems to integrate with complementary technologies such as biometrics, CCTV, intruder alarms, database and building management systems.

EXgarde® PRO provides building and facilities managers with a wide range of hardware control functions, helping to improve the performance, and the environmental and cost efficiency of a building. This enhances the overall effectiveness of your security system and adds value to your energy efficiency and sustainability programmes.

Hugely versatile, EXgarde® PRO's IO functionality is capable of full integration with most third party applications and delivering tailored solutions for ndividual building areas, entire buildings or across multiple-sites.

A solution for all applications

Operating on pre-set inputs, the software can control a wide range of user defined operations, for example:

Lighting
Could be activated when the first person enters, or last person leaves the building, within defined time windows, saving energy and money.

Air conditioning
Such that the system becomes operational when a given number of people are in the building or a particular part of it - again reducing wasted energy.

CCTV
All cameras, or those in specified areas, could be initiated when certain cardholders enter defined areas, or when intruder alarms are activated.

Car park
Once a given number of vehicles are in a car park, direction signs may be initiated to divert vehicles to alternative areas.

Fire alarm
All fire doors could be automatically opened in the event of a fire alarm being triggered.

Biometrics
Enrol and distribute users' fingerprint templates to our DIGIgarde readers. Integration with other biometric readers is possible through additional modules.

Many proprietary building management systems require a high initial cost outlay for a complete systems package, the majority of which may never be required. However, EXgarde® PRO gives complete flexibility, allowing IO functionality to be added only as and when needed.

TDSi is committed to delivering high quality integrated solutions in partnership with best of breed manufacturers across the security industry.

That's why we carefully select our integration partners in order to provide our customers with a holistic system incorporating complimentary technologies that seamless integrate via EXgarde, TDSi's own software platform.

EXtour®

EXgarde PRO's Guard Tour Module provides you with the ability to pre-define specific security tours utilising the existing access control readers. Each tour defines the order the readers should be visited, along with a set time that they should be checked. Real time alarms indicate if a specific tour point has not been reached in case of an emergency.

EXnotify®

The remote notification module for EXgarde provides a simple and effective method of communicating events to your security and management personnel using wireless PDA's, SMS or email alerts. This provides an effective method of informing the relevant people of critical information when it occurs, such as door forced alarms.

EXvisitor®

An optional module addition to the EXgarde platform, visits can be scheduled in advance or on the day with this intuitive module. EXvisitor enables an organisation to manage and track visitors and their hosts across a site. Visitors can be matched with hosts and the whereabouts of both are monitored and reported in real-time.

Microsoft® Active Directory

Integration between the physical and logical access world can enhance your security and reduce time in managing both systems. By providing a seamless link between EXgarde and Active Directory, the access control system can be automatically updated when changes are made within Active Directory.

Furthermore, your logical system can be further secured by restricting login if people aren't in the building. This has the added benefit of preventing tailgating thereby increasing security further and ensuring you have a true record of staff in the building. The AD module runs as a service on the system, which, coupled with a configuration tool allows you to select which domain and tree within AD you want to use. This allows those people that work remotely via secure links to not be affected by the physical access system.

DVR Integration

Support for leading DVR systems from Dedicated Micros, Panasonic and Vista (subject to version) provide the ability to display Live Views on EXgarde® PRO Site Plans or the tagging of access, alarm and other events.

Configurable event conditions drive this capability. Override preset, PTZ on event, auto display of image on event, record on event, allows easier monitoring and playback of events. Search for access video events by card holder name for example. All the DVR integration modules are Event and Live view driven.

Milestone

This module provides integration with Milestone's Enterprise and Corporate video management software. From a single IP-enabled access portal, security operators are able to use EXgarde Explorer to directly monitor CCTV feeds via Milestone's XProtect Corporate or Enterprise software range, tagging events and using Video Verification whilst also controlling the physical access control of automated doors.

Texecom Intruder

Continuing TDSi's view of making integration seamless, integration of Intruder Alarm Panels is now capable using true TCP/IP integration between the alarm panel and EXgarde to provide a comprehensive view of the alarm system and zone states from with the EXgarde Management Software.

Additional features of selected Texecom IP intruder panels include:

- View intruder events in EXgarde® PRO
- Set/unset intruder panel from Access Events
- Set/unset by operator from EXgarde® PRO
- Enhance event action functionality (e.g. live CCTV views)

Assa Abloy - Aperio™

EXgarde's integration with Aperio™ offers a new level of remote lock functionality with a global leader in door opening solutions. Using Aperio™ alongside TDSi's core systems allows greater flexibility in remote areas where access control may be more difficult to implement.

Working together, the two solutions offer highly precise site activity reporting, centralised alarm management, real-time event and alarm updates, and evacuation reporting which is vital in the event of an emergency. The system also offers an attendance reporting solution and door monitoring (forced door and time open) facility that gives a highly accurate view of the overall access situation of any facility.

Simons Voss

EXgarde's integration with Simon Voss SmartIntego offers a new level of remote lock functionality with a global leader in door opening solutions. Using SmartIntego alongside TDSi's core systems allows greater flexibility in remote areas where access control may be more difficult to implement.

Working together, the two solutions offer highly precise site activity reporting, centralised alarm management, real-time event and alarm updates, and evacuation reporting which is vital in the event of an emergency. The system also offers an attendance reporting solution that gives a highly accurate view of the overall access situation of any facility.

VUgarde is TDSi's versatile CCTV Platform, which enables complete IP surveillance from entry level systems through to fully integrated high end solutions.

Functional

VUgarde2 is our latest intelligent VMS platform which offers our clients a digital recording and remote surveillance software package for Windows based PC`s. As a Video Management Surveillance solution it is primarily used to view live and recorded video from multiple sources both locally and remotely and to export previously recorded video to preserve and to present it as evidence.

Scalable

Our VMS platform is fully scalable from a simple single camera system through to a complex integrated solution consisting of multiple servers and an unlimited number of cameras. The simplified hardware and licensing scheme means that you only pay for what you need.

Comprehensive Range

The VMS platform is complemented by our wide range of IP cameras offering both static and fully functional, indoor and outdoor & vandal resistant domes and traditional box housings. Specialist HD & megapixel cameras complete our range. The majority of our IP cameras and encoders have the option of built in edge Video Content Analysis (VCA) available in three levels of intelligence.

Flexible

VUgarde2 follows the usual TDSi approach of delivering common platform solutions, with flexibility built in as standard for clients looking for a portfolio of products that grow with their needs. VUgarde2 currently supports more than 3000 devices from all major manufacturers.

With an emphasis on building cost effective solutions VUgarde2 offers unrivalled flexibility to meet project requirements and is a powerful VMS platform with a host of inbuilt user friendly wizards together with an intuitive video clip export tool to archive important evidence.

VUgarde2 VMS

Vugarde2 is an open architecture Video Management System (VMS) which accepts MJPEG, MPEG4 and H.264 as well as HD & megapixel video streams from IP cameras, encoders and video capture boards.

This along with the Vugarde2 client-server architecture allows our clients to build hybrid scalable solutions from a single NVR/DVR to a multiple server system handling thousands of cameras and is available on a range of hardware platforms to match your project needs.

This platform has a number of built in wizards to reduce installation and commissioning times. Available in two editions Express and Pro to suit your project requirements and with a built-in simplified user management system that provides user authentication, multi level auditing and group based permissions to limit access to permitted personnel.

VUgarde2 Full Client

The full Vugarde2 client provides a comprehensive user interface to the VMS platform. Utilising drag and drop functionality and file tree architecture operator interaction is simplified and intuitive.

Users can view live and recorded images, export archives in a variety of formats, control fully functional cameras and define their own video layout preferences.

With multiscreen user workstations available the Vugarde2 VMS client offers unrivalled functionality and ease of use. The mutli level mapping application allows operators to quickly select the most relevant cameras and the intuitive search function quickly locates events by a variety of search criteria.

VUgarde2 Anywhere

VUgarde2 Anywhere Is an integral module of Vugarde2 VMS and it enables users to access both live and recorded images from a variety of devices including smart phones, tablets and laptops.

VUgarde2 Anywhere automatically adapts the user interface to suit the device being used and has built in smart bandwidth control for optimal performance on mobile devices.

VUgarde2 Anywhere enables the remote control of fully functional devices from web or mobile clients and it also provides a thin client to eliminate client installations so it works within IT policies and reduces bandwidth usage. VUgarde2 Anywhere is platform agnostic so it also provides support for all popular web browsers.

VUgarde2 ANPR

VUgarde2 ANPR is an automatic number plate recognition application and is an optional module that works with the Vugarde2 VMS server.

This application meets the needs of our clients who have the specific need to detect, recognise and register vehicle number plates. Vugarde2 ANPR Recognises number plates from over 50 countries.

VUgarde2 ANPR is ideally suited for vehicle access control applications and has a high performance recognition engine with a low error rate and has a powerful search tool for quick and convenient registered number plate search and browsing.

VUgarde

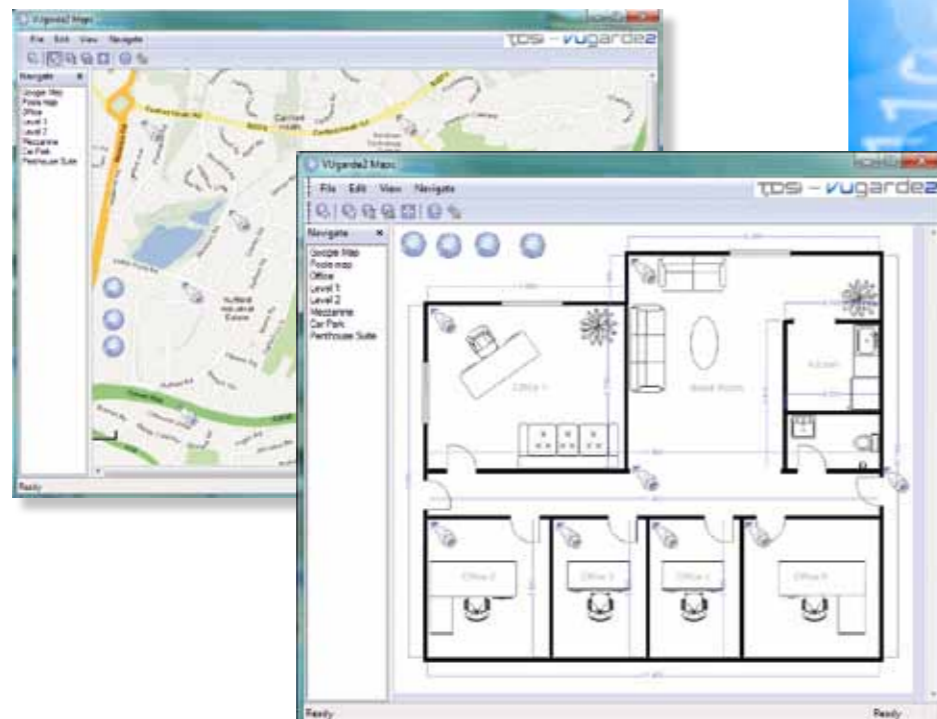VUgarde2 VMS has a powerful yet straightforward approach to digital video management.

Available in two editions - Express and PRO - to suit your project requirements, VUgarde2 features a built-in simplified user management system that provides user authentication, multi-level auditing and group based permissions to limit access to permitted personnel.

With the capability to be fully integrated with TDSi's EXgarde access control platform, VUgarde VMS offers a single platform solution to simplify the security management of any site. Operators can quickly select their preferred camera layout and sequences whilst being alerted both visually and audibly on an alarm incident.

The inbuilt dynamic multi-layered mapping application assists the operator in quickly selecting the most relevant camera.

Key Features

- Simple Licensing System: Buy only what you need.
- Modular and flexible platform: VUgarde2 can be tailored to suit any sized project and is flexible enough to expand as desired.
- Multiple setup wizards: Reduce installation and commissioning time.
- Drag & Drop functionality: Minimal operator training required.
- Intuitive Graphical User Interface: Simple to use with a focus on common user needs yet powerful enough to be flexible for the largest installations.
- EXgarde access control integration: Allows complete integration with powerful access control software.
- Multi-level mapping: Provides full map management and drill down ensuring operators can quickly select the most relevant camera.
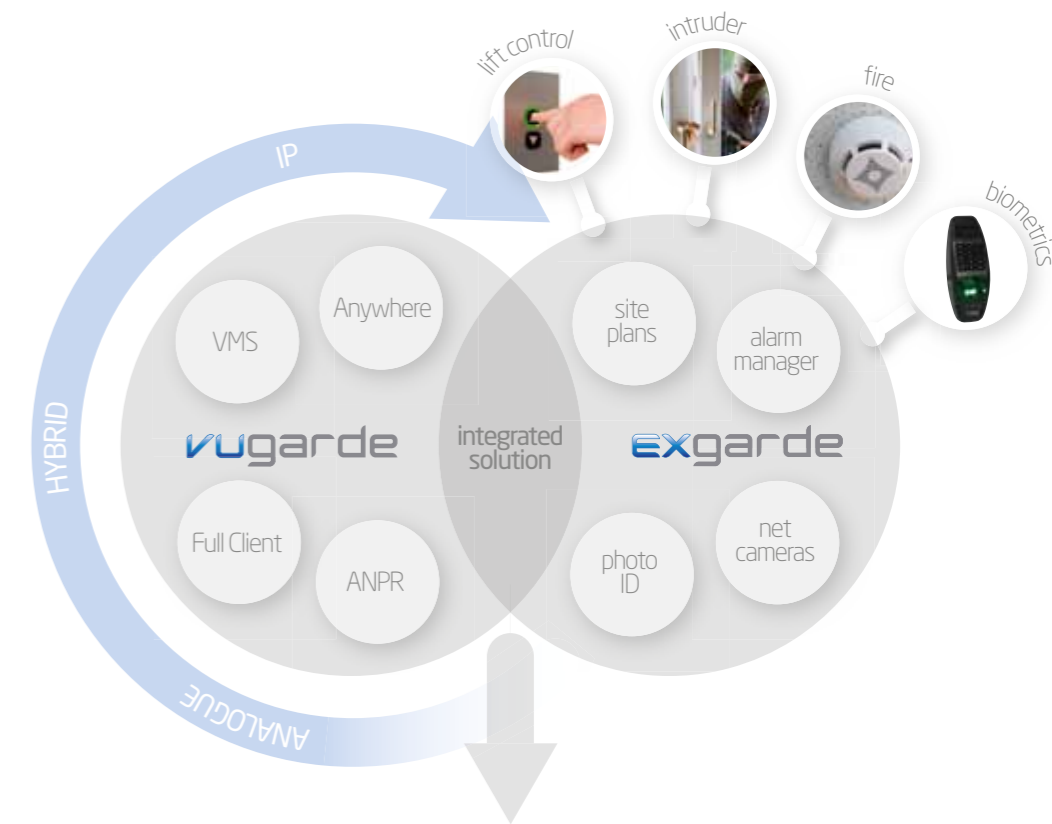- Powerful event search: Quickly identifies relevant footage from the archive.

Integration with EXgarde Access Control

For clients who want an additional level of site control and monitoring Vugarde2 can be integrated with TDSI's Exgarde access control solution.

Primary benefits of integration include:

- Displays live feeds from cameras within Exgarde software.
- Include cameras from the Vugarde system on the site plan within the access control software.
- Retrieve video footage with specific access control information – allows you to relate footage to access control events for faster retrieval of relevant information.
- Track nominated personnel through specific doors and instantly reply the recording associated with the individual.
- Trigger and display live feeds on the occurrence of any nominated access control event – providing you with instant visual verification of an incident.

	vugarde EXPRESS	vugarde PRO
TDSi Part No.	4420-2800	4420-2801
Maximum number of cameras:	16	Unlimited
Maximum number of remote connections:	5	Unlimited
ANPR:	�’	✔
VUgarde2 Anywhere:	✔	✔
Integration with EXgarde:	✔	✔

A fully featured networkable access control unit, the EXpert2 boasts a high specification with supervised inputs and relays making it suitable for monitoring and signalling alarm conditions.

With a capacity for up to 48,000 cards, this product is suitable for those applications that need to control large numbers of people through access points such as educational and large corporate establishments.

Flexible Configuration

The expansion capability of this versatile controller enables the access control system to be expanded upon at a later date. EXpert is the ideal platform for those who demand the most from an access control system.

EXpert controllers can be connected in a master/slave configuration. Up to 7 slave units can be connected to each master controller allowing complete autonomous control of up to 16 doors in one sub-system, this being programmable either through use of EXgarde® PRO access management PC software or the optional EXkeypad which allows the controller to be operated in a true standalone mode.

Using EXpert for lift control

The EXpert controller when used to control a lift can provide you with many features and enhances your access control system significantly.

The system works on the principle that each of the floor selection buttons in the lift cab are controlled using the relays on the EXpert fitted with the EXin/out or EXout expansion modules. When a user presents their card to the reader within the lift car the EXpert controller makes the decision as to which floor selection buttons to enable. This means that the lift user can only access those floors to which they are allowed. The advantages of this are very clear. If the user cannot request the lift to stop at floors to which they do not have access then security is maintained.

Expert controllers together with the EX in/out or EXout32 provide the capability to control lifts in buildings with up to 128 floors. Additionally floor selection buttons with 'common' access restrictions can be served by the same relay in effect increasing the number of floors controlled yet further.

Use of the inputs on the EXpert and EX in/out expansion module can also be used to monitor the actuation of the floor selection buttons, thereby providing realtime feedback and monitoring of which buttons are pressed and when. This information is also logged to the EXgarde PRO database providing you with an event trail for auditing purposes.

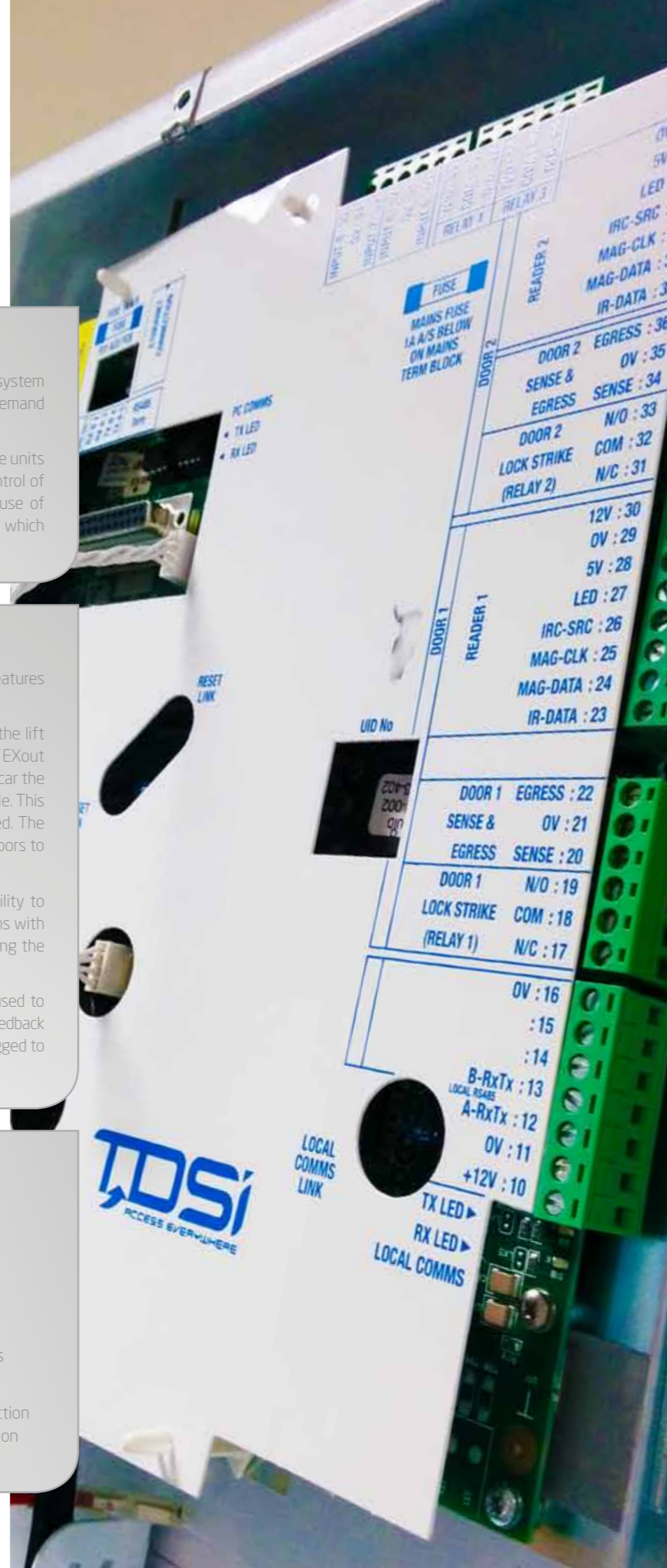## Each EXpert2 is expandable in 2 ways

It can be fitted with 1 of 2 types of expansion card: -

• EXpander2 which adds 2 doors, readers, inputs and relays
• EXin/out which adds 16 relays and 32 inputs

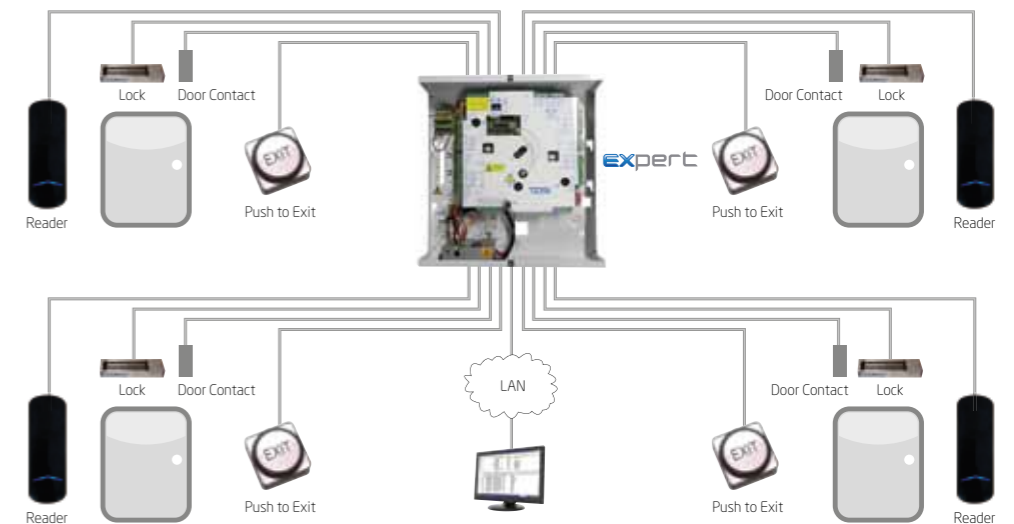*It can also be linked via RS-485 to EXpert2 Slave controllers: -*

• Creating a sub-system of up to 16 doors and readers.
• Reducing the cost per door in large systems and providing antipassback across 16 reader clusters.

EXpert master controllers are available with a TCP/IP port allowing direct connection to the IT network infrastructure offering maximum convenience during installation and commissioning.

Benefits

• Up to 48,000 card capacity
• Up to 4 doors per controller
• Numerous expansion options
• Enable lift access and validate floors
• Flexible communication options
• Keep your system operational during power or communications disruption without losing events using distributed intelligence
• Connect directly to your network via TCP/IP - saving time and cabling costs
• Operates with either TDSi or 3rd party readers
• Spare inputs and outputs to maximise investment and allow flexible configuration

EXpert at a glance...

2 or 4 as standard	Up to 48,000	4 (EXpert2) 8 (EXpert4)
2 (EXpert2) 4 (EXpert4)	RS485 or TCP/IP (optional)	4A
Additional boards available to enable expansion via master/ slave configuration		

For more information please scan the code with your smartphone

EXCEL

EXcel provides the building blocks for mid- to large-size, single or multi-site networked access control system networks.

These versatile access controllers serve two or four readers and provide a highly cost-effective solution for access control and integrated security system requirements.

Avoid Disruption

TDSi EXcel controllers operate on a distributed intelligence principle in that all of the system parameters are retained within the controller. So even if the network connection is lost, the controller will continue to operate and make access decisions providing maximum security and giving you piece of mind. EXcel4 also has an in-built TCP/IP port as standard to allow connection directly to the IT network, simplifying installation and commissioning.

Prevent your system being cheated

The prevention of tailgating and piggybacking (in other words, cheating or outsmarting the system) is a problem many existing access control solutions do not sufficiently address. TDSi's controllers offer a mantrap feature, which prevents one door from opening before another door has been closed across a single controller. This is sometimes referred to as an 'air lock'. This feature ensures that every individual has properly presented a valid ID or successfully cleared biometric identification and can be applied in a number of different applications, particularly to help control and manage authorised access in highly secure areas or where capacity is limited.

Integrate to your other systems direct from your controllers

The EXcel controllers also have the possibility for on-board supervised inputs and output relays making them suitable for monitoring and signalling alarm conditions or for integration with intruder alarm, fire, lighting, heating and building management systems.
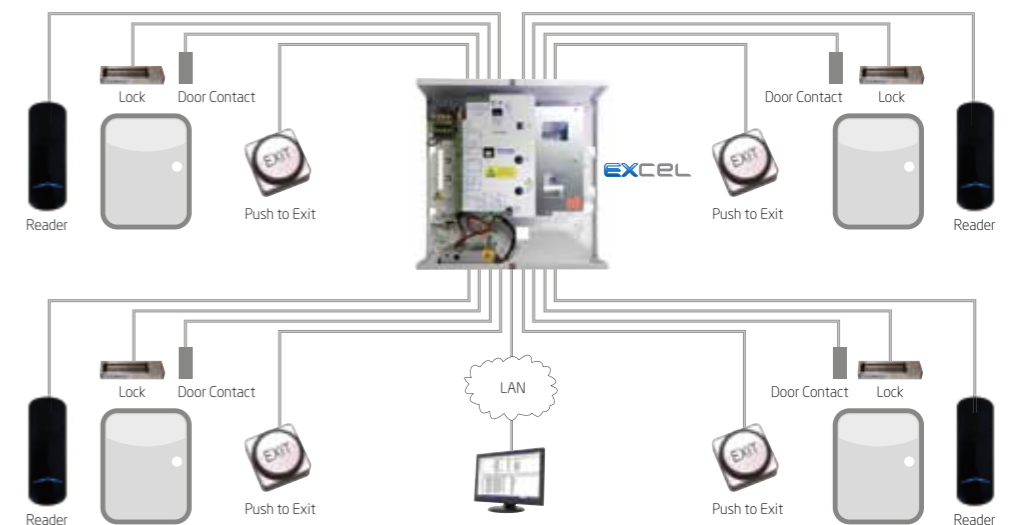
Manage your traffic effectively

Like all our door controllers, the EXcel range features anti-passback facility across the doors within each controller, preventing sharing of cards:

- Timed anti-passback – where the same key may not be used to gain access more than once within a specified period. That key may however be used to gain access via another door within that specified period.
- True anti-passback – used where there is both an in and an out reader. Once the key is used to gain access it cannot be used to gain access again until it is presented at the out reader.
- Zonal anti-passback – in conjunction with EXgarde PRO, the same key may not be used to gain access to an inner area within a perimeter zone until it has been validated at the perimeter zone reader(s). This functionality can be spread across a maximum of 100 readers communicating with a single communications host.
- Software global anti-passback – in conjunction with EXgarde PRO, this is supported across a maximum of 100 readers communicating with a single communications host.

Benefits

- Up to 24,000 card capacity
- Numerous expansion options
- Enable lift access and validate floors
- Keep your system operational during power or communications disruption without losing events using distributed intelligence
- Connect directly to your network via TCP/IP - saving time and cabling costs
- Spare inputs and outputs to maximise investment and allow flexible configuration
- Operates with either TDSi or 3rd party readers
- Range of anti-passback options to monitor correct use of cards and credentials
- Airlock functionality to manage movement of individuals in a specific space

EXcel at a glance...

2 or 4	Up to 24,000	4 (EXcel 2 only)
2 (EXcel 2 only)	RS485 or TCP/IP (EXcel 4 IP only)	4A
Network with MICROgarde or EX-Series		

For more information please scan the code with your smartphone

MICROgarde®, TDSi's entry level range of networkable products allows you to enjoy many of the benefits of much bigger systems, without the need for a big budget.

For those exploring the world of access control for the first time, MICROgarde's ease of installation, reduced cost of ownership and competitive pricing make it simply the best value and most practical access control solution available.

Choose the options that suit you

Available in one or two door versions, with our without TCP/IP or power supply unit, MICROgarde offers unrivalled flexibility. The MICROgarde provides support for in and out readers on a single reader channel, when used in conjunction with TDSi readers – enabling a single MICROgarde controller to support up to four readers.

If you need more inputs and outputs for interfacing to, for example intruder panels or building management systems, than an optional I/O module is available which is fitted within the case.

Using MICROgarde as part as your integrated system

If you are implementing a small system, TDSi's free EXgarde Express PC software provides support for a network of up to 32 doors. It features some very handy tools, such as: automatic detection of connected controllers, unlimited user definable holidays, full context-sensitive help system, automatic fire door release, time sheet reports. What's more you can even customise your own reports, and because it's intuitive it means that there's no need for special training.

If you want to discover the benefits of more advanced integration, such as CCTV, biometrics, photo ID badge design and the like then you can migrate to TDSi's EXgarde PRO or EXgarde Enterprise access control management software, which supports the MICROgarde controllers.

More than just a controller...

All controllers feature distributed intelligence (which is battery packed), meaning the controller operates and makes decisions even when communications to the host PC is lost. In this situation, events are stored within the controller until such time as communication is restored. Stored events will be uploaded to the host PC with no loss of transaction data.
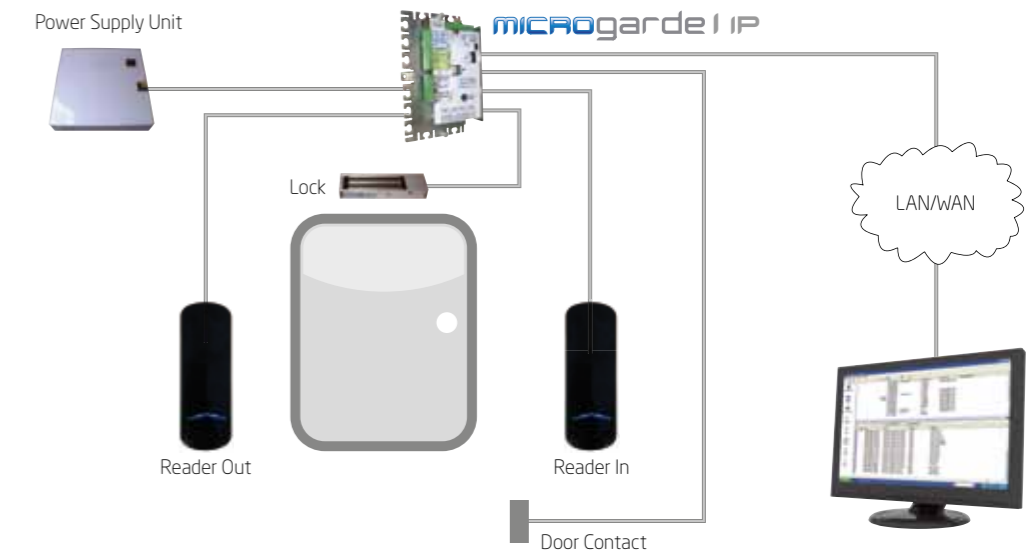
Working with your existing networks

MICROgarde IP is able to be connected directly to any local area network (LAN) or wide area network (WAN). Based on the proven and successful range of MICROgarde door controllers, MICROgarde IP offers all of the benefits that you find with MICROgarde plus the convenience of IT network connectivity. A built in ES-485 converter means that you no longer have to stock or fit a separate device. MICROgarde is also clever enough to resolve issues with the cables of the RS-485 network being incorrectly wired.

Put quite simply, even if your application is a single door with a handful of cards users, there will be a MICROgarde based solution that is suited to you – one that delivers security, protection, low cost of ownership and a high return on your investment.

MICROgarde

Benefits

- Flexible system design with 1 or 2-door controllers
- Use with either TDSi or other third-party readers
- Read-in/read-out on all doors (TDSi readers only)
- Link to the fire system for automatic release of selected doors
- Keep your system operational during power or communications disruption without losing events using distributed intelligence
- Airlock functionality to manage movement of individuals in a specific space
- Simple installation
- IP version allows direct connection to an IT network
- Monitor users' movements through configurable reports
- Minimal training to operate
- Clear upgrade path using EXgarde PRO software

Power Supply Unit

MICROgarde I IP

Lock

Reader Out   Reader In

Door Contact

LAN/WAN

MICROgarde at a glance...

1 or 2	up to 20,000	4*
2*	RS485 or TCP/IP (optional)	Optional (3A)
Network with TDSi EXseries		

*with purchase of option I/O board

For more information please scan the code with your smartphone

SOLOgarde, TDSi's innovative stand-alone access control solution combines convenience and ease for both installer and user. Controlling a single door and up to 1,000 users, SOLOgarde is ideally suited for small to medium-sized installations.

Managing your users

One of the benefits of electronic access control over traditional methods ensuring access can be granted only when specified. By connecting a timer, SOLOgarde offers a simple time grouping feature that can allow groups of users through the door during certain times, so a higher level of security can be implemented outside of normal working hours for example.

Should you choose the MIFARE contactless smart card platform as part of your solution, the versatility of your access control system can be advanced even further. MIFARE is a highly secure technology for use in a wide range of applications, and is suitable for use in other applications such as libraries, cashless vending and POS – offering a truly one card solution.

Operating your system

Unlike offerings from other access control manufacturers the SOLOgarde system features a simple hand-held programming tool. This eliminates the need for shadow cards to be retained, making administration and management of the system even simpler. After successfully logging into the controller via a USB connection, an intuitive menu system complete with shortcuts allows you to add cards, set user groups and much more.

The hand-held programmer also features some useful fault-finding aids that can be used to quickly pin-point problems associated with the inputs, outputs, supply voltage, and internal faults. This minimises down-time should a problem develop.

The flash upgradeable processor allows you to keep the product up-to-date with all of the latest improvements that we make to the product.
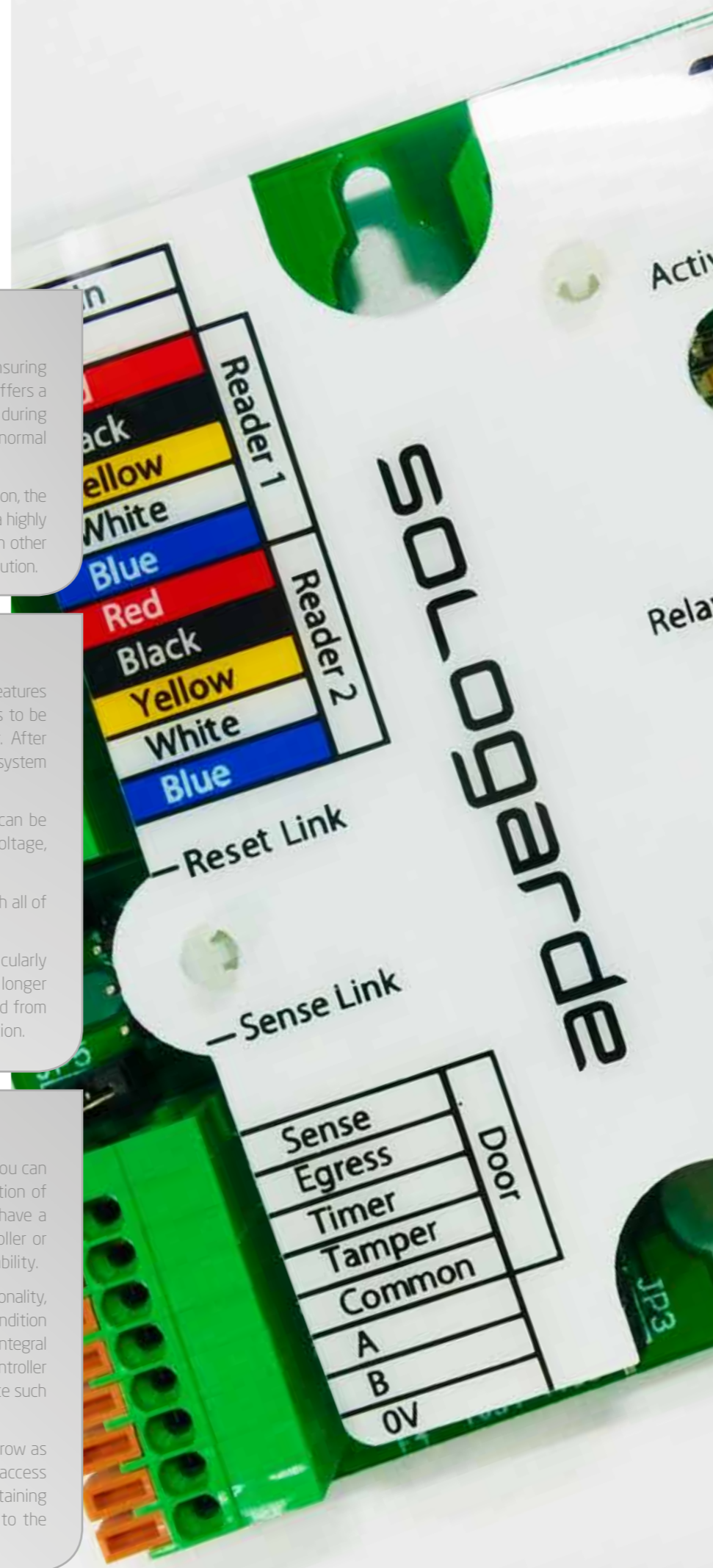
TDSi understands that a networked solution is not always the best choice, particularly if cost is of particular consideration. Where traditional locks and keys are no longer suitable, SOLOgarde offers the key features and advantages that can be gained from an electronic access control system presented within a simple stand-alone solution.

Choose the options that suit you

SOLOgarde is designed to operate with TDSi's proximity or MIFARE readers so you can chose the most suitable technology for your application. There is also the option of card, or PIN or both, providing increased security options if required. You also have a choice of how to exit the door. Either connect an egress button to the controller or connect a second reader to the controller to give you true read-in/read-out capability.
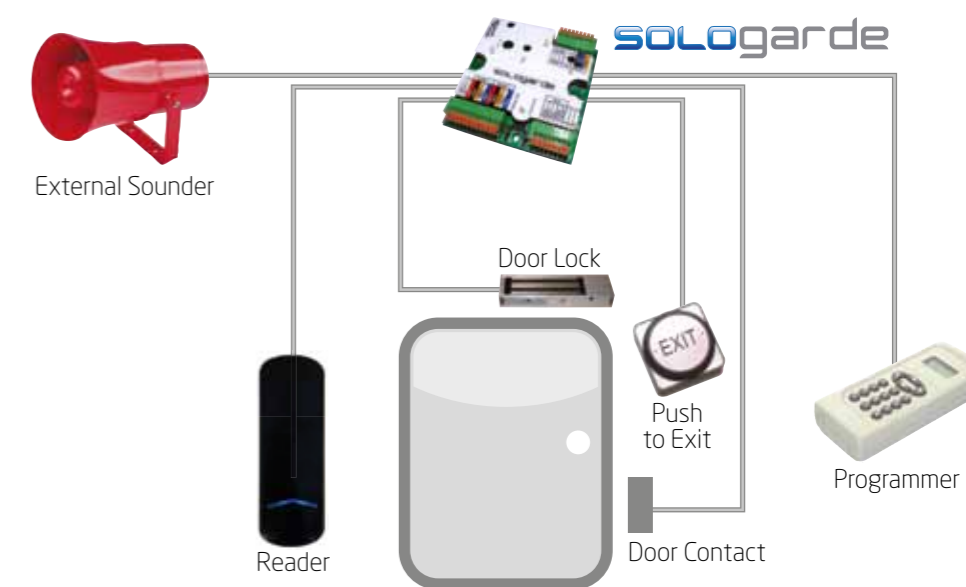
We believe that a stand-alone access control system shouldn't compromise on functionality, so we include many useful features as standard. For example, should an alarm condition occur - such as the door being forced open or the tamper input being activated - an integral sounder will activate instantly so that action can be taken. In addition to this, the controller has a solid-state alarm output that can be connected to an external warning device such as a siren or flash unit if further visual or audible notification is needed.

TDSi also recognise that you will probably want your access control system to grow as your business does. SOLOgarde has a very clear upgrade path to our network access control units without having to replace the readers or card population. By retaining existing readers and cabling, cost of upgrade is reduced as well as disruption to the working environment for your existing user.
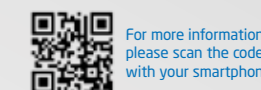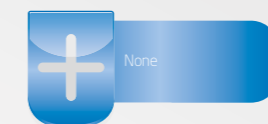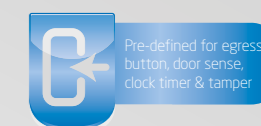
Benefits

- Flexible system design with 1 or 2 readers
- Use with either TDSi or other third-party readers
- Read-in/read-out on all doors (TDSi readers only)
- Link to the fire system for automatic release of selected doors
- Simple installation
- IP version allows direct connection to an IT network
- Monitor users' movements through configurable reports
- Minimal training to operate
- Clear upgrade path using EXgarde PRO software

External Sounder, Door Lock, Push to Exit, Programmer, Reader, Door Contact

SOLOgarde at a glance...

Pre-defined for egress button, door sense, clock timer & tamper. 1,000. USB for programmer connection. None.

For more information please scan the code with your smartphone

readers

Readers are an essential part of most secure access control systems so we have been extensively talking to our customers, end-users and partners to ascertain what would best suit the needs of the real world.

As well as using the latest technology the feedback we received revealed that often more basic elements, such as the shape/size of the reader are of high importance. Also highlighted was the need for a straightforward installation procedure and the ability to be easily operated by a wide variety of users, whilst being impervious to heavy use, weather and climate conditions.

Look and Feel

In developing our new readers TDSi has looked to the people who use and install its systems. Even the aesthetics of the reader units were put under close scrutiny. Readers become a fully integrated part of the buildings and facilities they protect, so the way they look shouldn't be ignored. Whilst the units need to be visible and highly intuitive to use, they also need to fit in with modern architecture and surroundings to present an attractive addition which doesn't overly impose on the setting in which they are installed.

Compatibility and Practicality

Usability and suitability for broad integration are other key design prompts which TDSi has focused on in the new range. As with the entire TDSi product range, the emphasis is on integration with a comprehensive level of compatibility not only with its own products but also with a large percentage of those from other manufacturers and suppliers, to ensure security budgets can be stretched and wastage of assets is minimised.

Features

- MIFARE - ISO14443-A: MIFARE Classic , MIFARE Plus, MIFARE DESFire
- Proximity - EM4100, EM4102, EM4200 compatible
- Robust, fully encapsulated polycarbonate enclosure
- Industry standard output formats allow direct connection to all current TDSi access control units as well as access control panels from other manufacturers

Benefits

- Stylish, elegant case design fits with any surrounding without looking out of place.
- Can mounted both indoors and out
- Integral LEDs and sounder gives clear audible and visual indication of card reads and access status
- Read range of up to 150mm (proximity) facilitating smooth entry
- With MIFARE, use one card for all of your applications including cashless vending, library, POS and car park

Variants

Readers are available in any combination of the following:

- Mullion or square
- Proximity, MIFARE, MIFARE PLUS, DESFire, NFC
- Keypad and non-keypad

Extended Reader Portfolio

DIGIgarde PLUS

DIGIgarde PLUS combines all authentication modes – something you know (PIN), something you have (card) and something you are (finger) in one attractive and cost effective unit.

Featuring a high-resolution optical sensor, DIGIgarde PLUS gives maximum usability and is suitable for control of access points that require the control of a large number of users and are subject to high a throughput of traffic. The backlit tactile keypad, white-on-black display and dual colour LED give user of the product excellent feedback and an easy to operate local programming interface.

The reader can be installed either in standalone mode or fully integrated into our EXgarde PRO software when connected to any of our access control units, providing seamless enrolment and distribution of templates.

Long Range Readers

TDSi offers a cost-effective RF long-range reader solution that delivers exceptional read-ranges using 2-button key fobs which transmit a unique and highly secure encrypted code to a receiving unit. This solution is ideally suited to vehicle control to remotely open a barrier or hands-free operation of doors.

The fob can be used at a distance of up to 100 m from the receiving unit allowing the receiving unit to be mounted neatly in a roof space or other area.

The fob can be ordered either with or without an in-built proximity tag allowing the fob to be not only used for long-range control of access points but also for regular access control around a building using TDSi Proximity readers or keypad readers providing a complete solution.

Panel Reader

PANELgarde from TDSi is a versatile panel mount reader offering a wide range of output formats. PANELgarde is fully encapsulated which is suited to harsh environments such as condensation and fluctuations in temperature which can be experienced inside a door audio/video entry panel.

Audible and visible indication is provided by an integral sounder and a bi-coloured LED which is controllable. PANELgarde can also be mounted inside a standard MK-style UK electrical back box making it ideal for concealed installations.
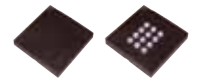
Energy Saving Switch

Our new Energy Saving Switches give commercial and public building operators the ability to make significant energy and cost savings. Drawing on proven technology, the intelligent Energy Saving Switches incorporate either a proximity or MIFARE® reader.

Only when a specific card has been recognised, does the unit allow the electrical circuit to be completed, thereby allowing lights and other equipment to operate. The product also features a 30 second time delay, so that once the card is removed, lights remain on for a period, allowing occupants to comfortably vacate the room.

Description	Part Number
EXGARDE PC BASED ACCESS CONTROL SOFTWARE	
EXgarde Software	
EXgarde Express	4420-2110
EXgarde PRO Platform license	4420-2080
EXgarde Enterprise	4420-2111
EXgarde Version Upgrade	4420-2092
EXgarde PRO Options	
Additional 32 doors for EXgarde PRO	4420-2081
Add 1 PC Workstations to EXgarde PRO Software	4420-2104
Add 2 PC Workstations to EXgarde PRO Software	4420-2100
Add 4 PC Workstations to EXgarde PRO Software	4420-2101
Additional Tenant - Adds an Extra Tenant to EXgarde PRO	4420-2103
3rd Party Modules	
Milestone Integration Module	4420-2210
Texecom Integration Module	4420-2407
Assa Abloy Aperio Integration Module	4420-2106
Assa Abloy Aperio per lock license	4420-2107
Simons Voss SmartIntego Integration Module	4420-2108
Simons Voss SmartIntego per lock license	4420-2109
Biometric Integration	
Panasonic BM ET 200/300/330 Reader Integration	4420-2300
Bioscrypt V-Series Reader Integration	4420-2301
Additional Applications	
EXgarde Web Interface	4420-2112
EXtour® - Scheduled Guard Tour Module Using TDSi Readers	4420-2400
EXvisitor Visitor Management Module	4420-2401
Software Integration Module - Fusion / OPC / API	4420-2402
EXnotify® - Alarm and Event Forwarding to PDA, SMS and E-mail	4420-2403
External Control	
Lift Control - Advanced Lift Control Module	4420-2500
Intruder Control Module	4420-2501
CONTROLLERS	
SOLOgarde Controller	5002-4000
SOLOgarde Controller with back box (recommended for proximity variant)	5002-4007
SOLOgarde Programmer	5002-4001
MICROgarde® I Controller, 1 Door Controller	5002-1900
MICROgarde® II Controller, 2 Door Controller	5002-1800
MICROgarde® I IP, 1 Door Controller with TCP/IP	5002-1901
MICROgarde® II IP, 2 Door Controller with TCP/IP	5002-1801
MICROgarde® I Controller with 3A PSU	5002-1906
MICROgarde® II Controller with 3A PSU	5002-1806
MICROgarde I IP, 1 Door Controller with 3A PSU with TCP/IP	5002-1907
MICROgarde II IP, 2 Door Controller with 3A PSU with TCP/IP	5002-1807
MICROgarde® Input/Output Module	5002-1811
MICROgarde® TCP/IP Module	5002-1812
MICROgarde® RS-232 Comms Lead	5002-1813
EX SERIES - MID/HIGH END SYSTEM	
EXcel² - 2 Reader, 1 or 2 Door Controller with 4A PSU	5002-3082
EXcel⁴ - 4 Reader, 1 to 4 Door Controller with 4A PSU & TCP/IP	5002-3092
EXpert² - 2 Reader, 1 or 2 Door Master Controller with 4A PSU	5002-3002
EXpert² IP - 2 Reader, 1 or 2 Door Master Controller with 4A PSU and TCP/IP	5002-3012
EXpert⁴ - 4 Reader, 1 to 4 Door Master Controller with 4A PSU	5002-3022
EXpert⁴ IP - 4 Reader, 1 to 4 Door Master Controller with 4A PSU and TCP/IP	5002-3032
EXpert Additions	
EXpert² Slave - 2 Reader, 1 or 2 Door Slave Controller with 4A PSU	5002-3042
EXpander² - 2 Reader, 1 or 2 Door Expansion Module for EXpert Controllers	5002-3063
EX in/out - 32 Input / 16 Output Expansion Module for EXpert Controllers	5002-3060
EXout - 32 Kit	5002-3062
EXkeypad - Stand Alone Programmer for EXpert Master Controllers	5002-2070

Description	Part Number
READERS	
For information on TDSi's new reader range, please contact a member of our team – sales@tdsi.co.uk or +44(0)1202 723 535	
Proximity	
EXprox Proximity Mullion Reader Ivory and Graphite Covers Included	5002-0354
EXprox VR Proximity Mullion Reader in Stainless Steel Housing	5002-0355
EXprox²	5002-0395
EXprox² K	5002-0396
Panel Mount Proximity Reader for Entry Panel or Electrical Box Mounting	5002-0430
MIFARE®	
TDSi MIFARE® Serial Number Reader	5002-0440
TDSi MIFARE® Sector 4 Reader	5002-0441
EXsmart² MIFARE® Serial Number Reader Pattress Box Mounting	5002-0435
EXsmart² MIFARE® Sector 4 Reader Pattress Box Mounting	5002-0437
EXsmart² MIFARE® Sector 9 Reader Pattress Box Mounting	5002-0433
EXsmart² K MIFARE® Serial Number Reader with Keypad Pattress Box Mounting	5002-0436
EXsmart²K MIFARE® Sector 4 Reader with keypad Pattress Box Mounting	5002-0438
EXsmart² K MIFARE® Sector 9 Reader Keypad with Keypad Pattress Box Mounting	5002-0434
Dual Technology Desktop Enrolment Reader with USB Connection	5002-0449
Energy Saving Switch - MIFARE	5002-0421
Energy Saving Switch - Proximity	5002-0420
MIFARE® Card Programming Station	5002-5010
MIFARE® Card and Reader Programming Station (use with 5002-0441 readers)	5002-5011
Desktop reader/writer unit	2920-0232
Long Range	
Long Range RF Fob	5012-0210
Long Range RF Fob with Proximity Tag	5012-0211
Long Range RF Receiver - Compatible with RF Fobs	5012-0200
Biometric	
DIGIgarde PLUS Fingerprint Reader (Fingerprint, MIFARE Card and PIN)	5002-0455
Desktop USB Fingerprint Enrolment Reader - compatible with EXgarde	2920-4030
CARDS/TOKENS	
Proximity	
TDSi Proximity Card	4262-0245
TDSi Proximity Card with HICO Magnetic Stripe (Not Encoded)	4262-0247
TDSi Proximity Keyfob	4262-0246
MIFARE® Cards	
Plain White MIFARE® Card (1k)	2920-3000
Plain White MIFARE® Card (4k)	2920-3001
White MIFARE® Card (1k) with Serial Number Printed	2920-3002
White MIFARE® Card (4k) with Serial Number Printed	2920-3003
White TDSi MIFARE® Sector 4 Card (1k) with Serial Number Printed	2920-3004
White TDSi MIFARE® Sector 4 Card (4k) with Serial Number Printed	2920-3005
Plain White TDSi MIFARE® Sector 9 Card - Clock & Data Format	2920-0182
SOLOgarde 10 Card Pack	2920-3020
SOLOgarde 25 Card Pack	2920-3021
SOLOgarde 50 Card Pack	2920-3022
SOLOgarde 25 Fob Pack	2920-3023
TDSi MIFARE® Reader Custom Configuration Pack	2920-3010
Accessories	
Protocol Converter - USB to RS-232/RS-485.	5012-0017
Protocol Converter - Ethernet to RS-485	5002-1462

Because everyone deserves peace of mind