



Progeny

Access Control

Products & Solutions

About Progeny

With over 30 years experience in the industry, you can trust Progeny to provide innovative, reliable and affordable Access Control solutions. We design and manufacture the Progeny range to rigorous standards at our plant in Lancashire, backed by a Lifetime Warranty to give you complete peace of mind.

We are constantly innovating to ensure we provide the latest products and solutions - including fully integrated Biometric access control without the need for network duplication, using our new Fingerprint Reader (see pages 18 & 19).

Our access control systems are scalable, so can grow with your business. From a project with one door and few users to a site with unlimited doors and up to 128,000 users, we have a system to suit you.

Contents

Designing a System	3	Long Range RFID	22
Doors Enterprise Software	5	Interlock Systems	23
The P4 System	8	Compact Keypad	24
Keypads	12	Integration	25
Dark Crystal Readers	13	Training	26
Biometric Reader	16	Compliance	26
Barcode & Magstripe Readers	20	How to Find Us	27



DESIGNED &
MANUFACTURED
IN UK



LIFETIME SUPPORT



HID COMPATIBLE



LIFETIME WARRANTY

To find out more, contact us on: **01254 883348** or **sales@progeny.co.uk**.

Visit our website: **www.progeny.co.uk** for product datasheets, manuals, software downloads and more.

www.progeny.co.uk

Designing Your Access Control System

VERIFICATION



loading...

Electronic Physical Access Control provides 24/7 security. This can be to protect people, valuables or information. When you are designing your access control system, there are several important choices:

- Identification method
- Reader Technology & Credentials (Crystal, iCLASS, MIFARE etc.)
- Online or Stand Alone/Compact
- Communication Method
- Which doors will be controlled?
- Selecting a computer system
- Integration with other systems (Fire, Membership Software etc.)

Identity Authentication

You'll need to identify the people you wish to allow access to. There are three main methods for electronic identification:

- Secret Knowledge (Access Code or PIN)
- Token (Card, Key fob)
- Biometric (Fingerprint)



Each method has its pros and cons. They can be used individually as 'Single-Factor' authentication or together to get 'Two' or 'Three Factor' Identification which is more secure. Using a Card and Code, for instance, would be two-factor identification and improves security by eliminating some of the drawbacks of each factor.

Photo ID

With online access control software, you can design and manage the printing of cards which can be personalised with company name, employee details/photo etc.

Stand Alone or Online?

Stand Alone systems do not require computers of any kind, so are ideally suited for small numbers of doors and users. Compact access controllers have the reader (usually a keypad) and controller built into the same unit. All programming is done locally for each door via a keypad provided with the controller. These systems offer the lowest cost.

With an Online networked system, you can control an unlimited number of doors and sites from a single server. Our software allows simple programming and monitoring of the system. If the connection is lost or the PC switched off, the controllers carry on as normal.

Communication Method

There are several choices for communicating with your controller. IP addressable Ethernet can make use of an existing LAN, or one can be created for very little cost. The main advantages are hardwired infrastructure and freedom of choice for locating server and workstation PCs. This is also the best choice if you wish to use any server based features such as Roll Call or Anti-Passback.

PoE (Power over Ethernet) allows power and data to be passed along the same cable (usually Cat 5e) as an alternative to 'Mains Power'.

USB and Serial methods are more suited to smaller systems with a single PC.

GPRS is ideal for those locations where you have power but it is difficult to get a data cable to the controllers.

Emergency Egress

Care needs to be taken if an access control door forms part of an emergency egress route. Commonly used methods with fail open locking devices include:

- Fire Relay (Part of the fire alarm system)
- Green Call Point
- Fire Space Zone... (Server based feature - only to be used in conjunction with 'Fire Relay' or 'Green Call Point')



Cables

It is important to use the correct cables, All wiring should be installed in accordance to relevant wiring regulations.

- RS 485 Network: Screened twisted pair (Belden 8132 or equivalent)
- Reader: Screened 8 Core
- Keypads: Screened 8 Core
- Lock: Rated > Lock Current

Reporting

Event reporting is one of the main benefits of having an 'Online' system. All events (Card Transactions, Egress, Opening, Closing, Denied Access, etc.) are time stamped and recorded. This information can then be filtered and presented to show the management/monitoring information you need. Reports can be exported to TSV, XLS or CSV format. Reports include:

- History
- Attendance
- Roll Call
- Time Sheet

New events recorded by Crystal systems include: Power Up & Power Down times and Two Factor Identification events. Last known location (Door and APB zone) is recorded in the card holder record.

Read In/Read Out

You need to decide whether to have a card reader on one or both sides of the door. If mounted on the outside only, then a Request To Exit button/mechanical egress will be required on the inside. This usually depends on whether you need to track the movements of users in and out of that area, eg. for roll call.

Integration

Integration can happen at three levels:

- Credential: Shared use with other systems. (Examples: Cashless Vending, T&A, 'Follow Me' Printing)
- Controller Hardware: Wired connections between systems (Examples: Fire Alarm, CCTV)
- Software: Data sharing/exchange between systems (Examples: Membership Management, E-Booking systems)



Selecting a PC

Selecting the correct PC for an Access Control system is very important and can be a challenge. Some of the considerations include:

- Single PC or Client/Server PC configuration
- Dedicated or shared use of the Server PC and/ or Workstation PC
- Availability of the server & client PC ie. 24/7 or only during working hours etc.
- System features being used

Dedicated: refers to a PC that is used entirely for the Access Control system. The only other applications loaded are those needed to maintain the PC (antivirus, backup software etc). You will need a dedicated server if using any of the server based features such as 'Roll Call' or 'Zoned APB'.

Shared: refers to a PC that is used for Access Control, but also for one or more applications such as Accounts, Contact management, Building Management, DVR, etc. This is generally OK for workstations that are not required for critical tasks such as 'Alarm Handling' and 'Roll Call Printing'.



Operating System

The install set for Doors Enterprise now includes SQL Server Express 2014 (64 bit). So the Machine and OS will need to be 64bit.

Doors Enterprise is compatible with:

Workstation: Windows 7, 8.1 and 10.

Server: Server 2008, 2012 or 2016.

Doors Enterprise Software



Features & Benefits:

- Comprehensive reporting suite, including: Roll Call, Attendance & Absence & simple Timesheet
- Free of charge: Download the latest version from our website: www.progeny.co.uk
- Flexible: works across multiple sites and supports multiple users
- Additional Features: Design and print photo ID badges.
- Customise to suit you: up to 25 custom database fields
- User-friendly: wizards ensure simple data import and report creation
- Email notifications.
- Integrated biometric functions including template management.

Doors Enterprise

Doors Enterprise is our innovative software for use with Progeny Access Control systems. The latest release: V8 continues a lineage that stretches back 20 years. With a user-friendly interface and new features based on customer feedback, it is simple to use. The software is multiuser and takes advantage of the power and scalability of Microsoft SQL Server.

Operating System

Supported operating systems include:

- Windows 7, 8.0, 8.1 & 10.
- Windows Server 2008, 2012 & Server 2016

SQL Server Database

Microsoft SQL Server Database delivers increased security, scalability and availability to the access control data.

Doors Enterprise Server

Doors Enterprise Server provides a single point of communication between clients, the database and the access controllers.

Doors Enterprise Client

Doors Enterprise allows for an unlimited number of workstations and software users across single or multiple sites.

Custom Database Fields

Up to 25 Custom Fields can be created to contain additional information about cardholders.



Each custom field can be one of 5 types, for example, you might need a dropdown box for the department or a 'date pick' calendar for an employee start date.

Multi-Lingual

Each client workstation can easily select its own language setting. The translation dictionary includes English and French with other languages available on request.

Dormant Card Policy

Doors Enterprise allows you regain control over those credentials that get lost or never returned. We are all busy these days and it can be difficult to keep track of those employees who leave or visitors who do not return credentials. 'Dormant Card Policy' sets maximum time that a credential might be expected to be not used due to say annual leave or working away from the site. Once this time has lapsed the card will be marked as dormant and automatically disabled from all doors.



V8.0

A new card holder database field allows users to be elevated to 'Bio Administrator' which if enabled, allows them to add or update users' templates locally. Visitor control is a good 'Use Case' for this.

- Server based Email Alerts
- Email Rollcall option
- Biometric enrolment management
- New install set for latest operating systems
- Includes SQL Server 2014 Express
- Sequential multi-factor identification separately controlled for both in and out
- Integrated support for Biometric Identification and Verification
- Biometric template distribution and backup
- Nominate Bio Administrators to allow local Administration of Templates
- Access code
- Reader Brightness
- Reader volume for Feedback & Alarms
- Control over the keypad star key
- Advanced electronic lock drive modes
- Random search prompt

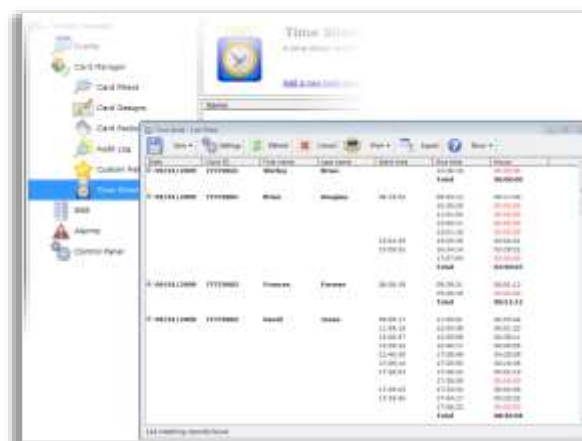
Wizards make the setup and importing of data a very simple and intuitive process. Importing data with the Card Data Import wizard provides feedback at every stage.

Time Sheet Report

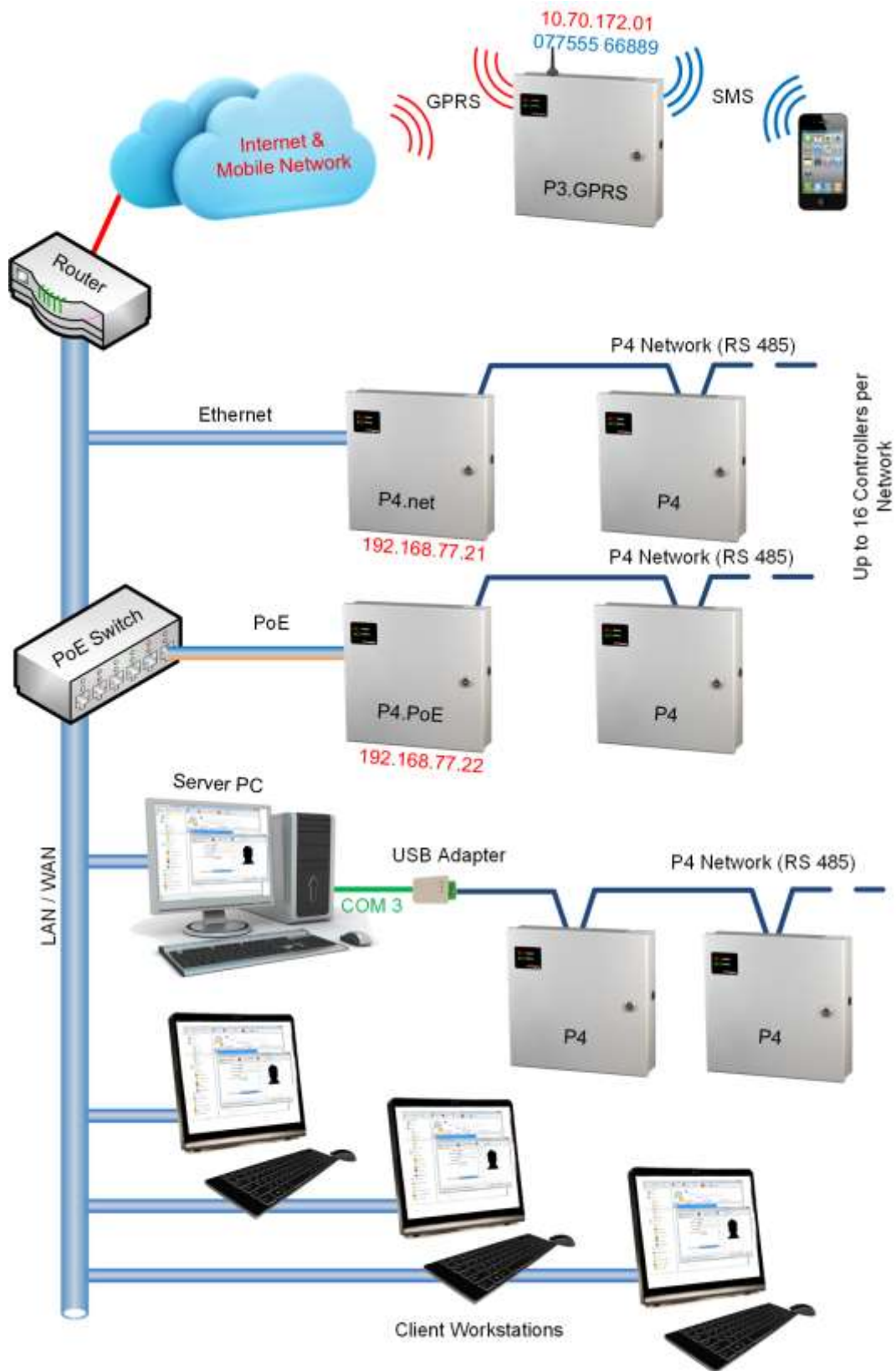
Any missed clocks are left blank so that when exported to a spreadsheet they can be filled in later. Because the formulae are exported with the report data, the totals are updated as the missed clocks are added in the spreadsheet.

Attendance and Absence are combined into a single report. You also have free choice of fields to be included. This feature is common to all reports, as is the ability to export to CSV, TSV or Excel spreadsheet format.

This USB powered reader allows for speedy enrolment of new cards or fobs into a P4/Doors Enterprise system. Supplied with a 1.8m USB cable (can be extended to a maximum of 5m). To use, simply click 'add new card' and present the card/fob to the reader. The credential's card ID is then accurately entered for you.



Online System Overview



P4 System



P4 Controller

The P4 range is our most fully featured to date - giving you ultimate flexibility. With a larger power supply, the capacity to expand to more users and doors, the option to install Standalone then switch to Online when ready and compatibility with a wide range of reader technologies, P4 is the only Controller you will need.

Integrated Biometrics

A new feature of the P4 is the automatic storage and distribution of Bio templates throughout the local and wide area network, regardless of site location, with no network duplication. This allows for Biometrics to be added cost effectively using a '4850' or '4851' Fingerprint Reader.

Scalable

The P4 system architecture allows for expansion without any additional equipment costs - up to 128,000 users and an unlimited number of doors can be added.

Charger Power Supply

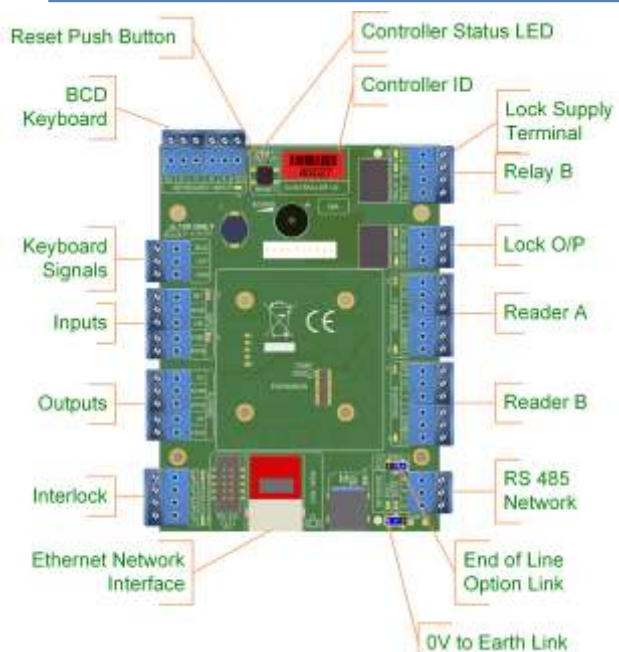
The P4 includes a 12V 5A Charger power supply, so budgeting power usage is a thing of the past. The charger also features uninterrupted changeover from mains to battery, deep discharge protection for the battery and 3 individually fused auxiliary outputs.

Distributed Intelligence

The on-board memory stores all the access control information for a given door, including card details and Bio templates. This means that, in the event of lost communication with the server, the controller will continue to function normally.

Features & Benefits:

- 5A Power Supply with battery back-up
- Online or Standalone Operation
- Scalable to any number of doors
- 32,000 users expandable to 128,000
- Automatic Storage & Distribution of Bio Templates throughout network
- Distributed Intelligence
- 200 Year Data Retention
- Connectivity:
 - - Ethernet (IP)
 - - USB (Com)
 - - GPRS (IP)
 - - PoE (Power over Ethernet, IP)
- Free Management Software
- Integration:
 - - Software Data Exchange
 - - Hardware Interfaces
 - - Shared Credential
- Wide range of Readers & Keypads
- One, Two or Three Factor Identification
- Supports any Locking Technology
- Card In/Card Out
- Interlocking Facility as standard
- Fail Open and Fail Locked
- Lifetime Warranty
- Designed & Manufactured in the UK





Engineer Control

On-board keypad enables the Engineer to set the IP address at the Controller, no need to visit a PC

All local door functions can be programmed via the on-board keypad eg. adding cards to test if the system is functioning correctly or run standalone. Engineer and User passwords can also be reset from here

The standalone 'discovery mode' feature makes adding cards very straightforward. Simply put the controller into discovery mode and present one or as many cards as you wish to add to that door.

Choice of reader Technology

Choose from Proximity, Biometric, Mag Stripe or Keypad, to suit your requirements. P4 will interface with 35 standard reader technologies and you can define custom formats through the Advanced Engineers menu.

Random Search

If you require a system that enables you to search employees on a random basis for security reasons, this feature is ideal as it allows for randomised impartial searches to be carried out. The search rate is adjustable from '1 in 1' to '1 in 99' and randomly flags users to be security searched as they pass through the door or turnstile.

Access Levels

P4 raises the bar on access levels with 250 per site.

Event Logging

All transactions are time and date stamped before being recorded into the P4 event-log. While online these logs would be continuously collected by the Doors Enterprise software. However, when operating standalone each P4 door controller will keep up to 8000 such logs..

Each controller has its own real time clock and the event log memory also has a 200-year data retention. So even when offline transactions and events are accurately and reliably recorded.

Lock Drive

The P4 Controllers have the traditional relay to switch the positive wire of the lock supply, as well as an electronic switch in the negative wire. This allows for some "lock" driving modes that will significantly reduce if not eliminate relay contact wear and extend the life of the controller. The modes are:

- Standard (Relay only)
- Protected (Relay and Electronic Switch)
- Electronic (Electronic Switch only) Fail Secure
- Electronic (Electronic Switch only) Fail Open

Controller Data Connections

Ethernet

The P4.net is an online door controller that makes use of standard Ethernet local area network connections to communicate with the central management software. Each P4.net controller has an RJ45 socket and uses the UDP/IP protocol with very little data bandwidth required.

The RS 485 P4 network can then be used to connect further standard P4 controllers. These share the IP address of the P4.net controller.



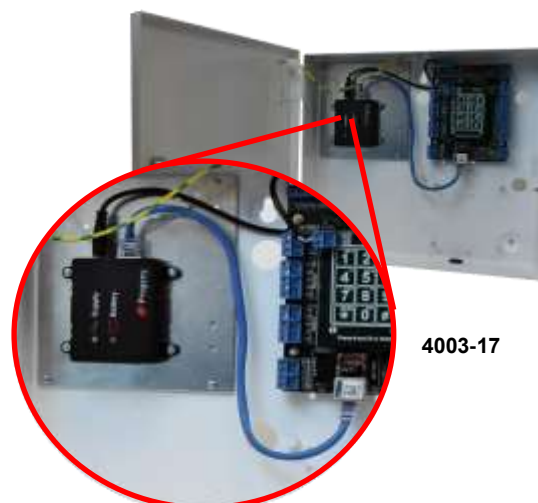
4002 & 4002D

Power over Ethernet (PoE)

This innovative technology allows power and data to be passed along the same cable (usually Cat 5e). Progeny offers a matching injector option. PoE is an alternative to 'Mains Power'.

The P4 PoE controllers allow for a simple, fast and cost-effective installation, saving time on the need to provide electrical power spurs to controllers; instead, existing Ethernet structured cabling (Cat 5) can be used in conjunction with a PoE Ethernet switch. Note: P4 PoE controllers will continue to function even if Ethernet communications are lost.

Progeny also offers a 30W PoE injector matched to our 4003-17 controllers. These injectors convert standard Ethernet switches to PoE.



4003-17

GPRS

The P4.GPRS controller (also IP addressable) is ideal for mobile and difficult to reach applications. This controller makes use of the mobile telephone data infrastructure to allow communication with the Doors Enterprise software.



4006

USB

Using the 3107 USB to 485 adapter, the server PC can be connected to the Progeny network of P4 controllers with a 1000m reach.



3107

P4 Controllers	
4001	P4 1 Door Controller with 5 A charger PSU
4001D	P4 2 Door Controller with 5 A charger PSU
4002	P4.net 1 Door Controller with 5 A charger PSU and Ethernet
4002D	P4.net 2 Door Controller with 5 A charger PSU and Ethernet
4003-17	P4 PoE 1 Door Controller (1.7 A supply) - Matching injector available
4003-INJ-17	30W PoE injector for use with 4003-17
4006	P4.GPRS 1 Door Controller with 5 A charger PSU and GPRS Modem

Identification

Introduction

Identifying a prospective user of a door is one of the most important tasks of an electronic access control system. There are 3 main ways to identify users:

- **Keypad:** will allow the entry of 'secret knowledge'. This can be a unique code per user; 'Personal Identification Number' (PIN) or a common code used by groups or all users, referred to as an 'Access Code'.
- **Credential Reader:** extracts an Identification Number (ID) from a Card or Fob carried by the users.
- **Biometric Reader:** compare a physical feature of the person with a recorded template. If the result of the comparison is 'authentic' then an identification number (ID) associated with that person is sent to the access control system.

Multifactor Authentication

For higher security, two or more of these identification methods can be used in combination. For example, if Card and Code are used then a lost or stolen card is of no use to a potential intruder without knowledge of the access code. This type of sequential multifactor authentication can be setup for almost any combination.

Keypads

Keypads can be used in isolation for an access code or PIN-based identification or in conjunction with a reader to provide 2-factor identification.

Biometric Readers

Biometric Readers compare a physical feature of the person themselves with a template. If the comparison is successful, an ID number associated with that person is sent to the access control system.

RFID Readers

'Radio Frequency Identification' (RFID) comes in many shapes and sizes. All of these can be interfaced with the P4 controllers.

Magstripe Readers

Still a popular and low-cost token-based means of identification. These readers extract the magnetically encoded numbers from the magnetic strip on the back of a card.

Keypads

Keypads cater for the 'Secret Knowledge' method of identification. They can be used by themselves or in conjunction with token-based credentials for additional security. Keypads can be used to enter a common code used by more than one user or a true Personal Identification Number (PIN). P4 systems also allow for the entry of a 'virtual card' via the keypad.

The main advantage of using code or PIN alone is that the user does not need to carry anything around. There is no credential to get lost or stolen. Keeping the 'secret knowledge' secret is very important, however.

Keypad

This keypad is suitable for indoor or outdoor applications. The backlit keys make access code entry in the dark easy. An integral sounder gives a key beep and 'Prolonged Door Open' alarm function.

- Suitable for indoor or outdoor use
- Simple 4 wire interface
- Independent sound volume controls
- Backlight & tri-colour status light for feedback
- IP 65, IK 09
- H: 118 W: 99 D: 21 (mm)



Vandal Resistant Keypad

This keypad is robust enough for any public facing outdoor applications. The backlit keys make access code entry in the dark easy. An integral sounder gives a key beep and 'Prolonged Door Open' alarm function.

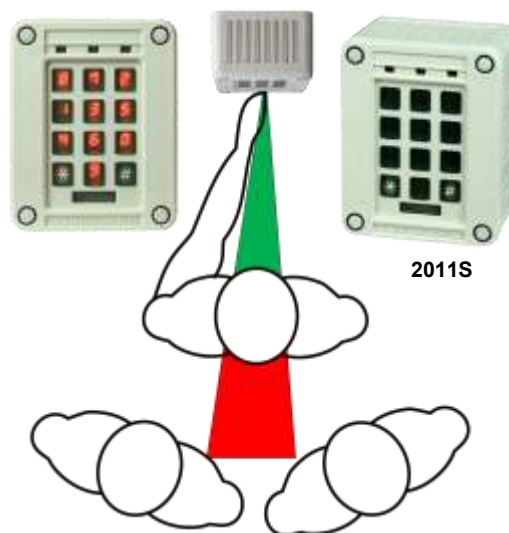
- Vandal Resistant with Vandal Proof Guarantee
- Anti-Tamper Screws
- Simple 4 wire interface
- Independent sound volume controls
- Backlight & tri-colour status light for feedback
- H: 118 W: 99 D: 21 (mm)
- IP 65, IK 10



Scramble Keypad

These keypads interface with the P4 controllers in a similar way to any standard keypad but provide much greater security by ensuring that only the person using the keypad can see which numbers are being entered. Each time the keypad is used, the numbers for each key are randomly moved to new positions. Observing which keys are pressed will not reveal the code or PIN to an onlooker.

There are over 3.6 million permutations! This also ensures even wear on all keypad keys, even if the same code is always used.



Product Codes	
4124	Standard Keypad
4121	Crystal Vandal Resistant Keypad
4132	Optional Surface Mount Back Box
2011S	Scramble Keypad (Surface Mount)
2011P	Scramble Keypad (Panel Mount)
4133	Spy Proof Cover for 4124 & 4121

Dark Crystal

Proximity Readers

The Dark Crystal Proximity reader is an RFID reader that takes advantage of a simple 4 wire interface to P4 Controllers.

The unique back light and multi-colour light indicators give excellent user feedback on the operation of the system including:

- Interlock
- Programming Mode
- Lock Status
- Alarms



Dark Crystal Readers

Progeny dark crystal readers are available for just about any situation including,

- 'Switch-plate' for a convenient 'second fix' internal use
- IP 65 rated 'mullion reader' for external use
- 'panel mount' version for integration into Intercom and other equipment
- vandal resistant version for exposed and unsupervised situations.

With a simple 4 wire interface, intuitive lighting and sound and durable construction, the Dark Crystal range is ideal for installers and end users alike. The Readers have a contemporary design with adjustable lighting so they can be as discreet or prominent as required.

Features such as light and sound control can be accessed Online via the software or Standalone via the P4 Controllers built in keypad.

Dark Crystal Mullion

The Mullion reader is suitable for mounting onto door frames, posts or other locations that cannot make use of a single gang back box. It is also available with a pigtail lead to provide extra flexibility when mounting onto surfaces that cannot be easily chased out. It is IP 65 rated, making it ideal for outdoor installation

- Suitable for outdoor use
- Fits standard door mullion
- Durable construction
- IP 65, IK 09
- Simple 4 wire interface - easy to install
- H: 80, W: 45, D: 18 (mm)



4820

Product Code	
4820	Dark Crystal Mullion Reader

Dark Crystal

Dark Crystal Switch Plate

This reader mounts directly onto a standard UK single gang back box. Ideal solution for the 'second fix' installation.

- Intuitive light & sound feedback
- Volume & Brightness Control
- Simple 4 wire interface - easy to install
- Indoor use
- H: 90 W: 90 D: 19 (mm)



Combined Keypad & Proximity Reader

This keypad reader is ideal for 'Sequential' or 'Non-Sequential' multifactor authentication. Sequential authentication options include 'Card & PIN', 'Card & Code'. Non-Sequential authentication options include 'Card or Code', 'Card or Virtual Card'.

The keypad comes with screw termination and can be flush mounted or, using the optional back box (4132), it can be surface mounted.

- Keypad with built-in RFID
- Independent sound volume controls
- Backlight & tri-colour status light for feedback
- Surface mount back box available 4132
- IP 65, IK 09
- H: 118 W: 99 D: 21 (mm)



Dark Crystal Vandal Resistant

For public-facing installations, the Vandal Resistant Reader is ideal. With a sturdy steel cover plate, it is backed by our Vandal Proof Guarantee.

- Panel Mount Reader with Steel cover plate
- Suitable for indoor or outdoor use
- Vandal Proof Guarantee
- Simple 4 wire interface
- Surface Mount box available 2132
- IP 65, IK 10
- H: 118 W: 99 D: 2 (mm)



Dark Crystal Panel Mount

This IP rated reader has standard mounting holes and is designed to fit into an intercom or entry panel.

- Fits standard recess in Intercom Panel
- Intuitive sound feedback



Product Codes	
4800	Dark Crystal Switch Plate Reader
4830	Dark Crystal Panel Mount Reader
4840	Dark Crystal Vandal Resistant Reader
4124-RF	Combined Keypad & Reader
4132	Optional Keypad Surface Mount Back Box
2132	Optional Reader Surface Mount Back Box
4803	Desktop Reader with USB Connection
4133	'Spy Proof' shield for the Keypads

Crystal Credentials

Crystal ISO Card

For applications where the user is likely to need to carry or wear the credential throughout the day. They can be kept in purse or wallet, or in a card holder with a Yo-Yo or Lanyard.

These polyester cards conform to the ISO standard dimensions (CR80). This means the cards will fit in standard card holders and they are also suitable for Photo ID printing.

- Large printable area on surface for use with photo ID printers
- Compatible with all Progeny Crystal readers.
- Available as 'Site-coded' or 'Non-site-coded UID'.
- 100 Million possible card IDs.
- H 54 x W 86 x D 0.82 (mm)
- Lifetime warranty



3840 & 3804

Crystal Fob

For applications where it is more convenient to keep the RFID credential with other keys on a keyring.

- Easily attached to a key ring.
- Compatible with all Progeny Crystal readers.
- Available as 'Site-coded' or 'Non-site-coded UID'.
- 100 Million possible IDs.
- Lifetime warranty.



3841 & 3805

Egress Device

Touch Switch

The Progeny Touch Switch is a general purpose switch capable of detecting near-proximity or touch. It detects tiny changes in the capacitance at the front surface. The switch uses a patented spread-spectrum charge-transfer technology.

Every 80 seconds the switches self-calibrate, this means that the switch can accommodate large changes in surface capacitance due to humidity, nearby objects etc.

Designed specifically for 'Request to Exit' or 'Request to Enter Call' applications. The fully sealed enclosure makes it suitable for both internal or external use.

- No moving parts
- Auto adjust to environment
- Mounts on a single-gang Patten Box
- IP 65, IK 09
- Lifetime warranty.



4810

Product Code

4810	Dark Crystal Touch Switch
------	---------------------------

UID Credentials

3804-10	Crystal ISO Cards - pack of 10
3804-100	Crystal ISO Cards - pack of 100
3805-10	Crystal Key Fobs - pack of 10
3805-100	Crystal Key Fobs - pack of 100

Site Coded Credentials

3840	Crystal Site Coded ISO Card
3841	Crystal Site Coded Key Fob

Biometric



Biometric Identification

Biometric identification is the third of the three widely accepted 'Authentication Factors':

- Secret Knowledge (Something you know)
- Token (Something you have)
- Biometric (Something you are)

Biometric Readers compare a physical feature of the person themselves with a stored template. This template contains feature points called minutiae. The template is not a copy of the original fingerprint.

If the comparison is successful, an ID number associated with that template is then processed by the access control system. Access levels and time profiles are all then applied in the same way as any other identifying factor (Card or PIN).

Biometric authentication can work in one of two main ways:

- 'Identification', one to many (1:N)
- 'Verification', one to one (1:1)

Identification

Biometric identification has an advantage in that there is no need to carry any cards, fobs or remember codes.

Verification

A fob or card is presented first to allow selection of the correct biometric template. Progeny Fingerprint Readers have an RFID reader built in, allowing for verification or to act as a backup to biometric Identification.

Progeny Biometric System

The progeny biometric system consists of a P4 controller and one of the Progeny Fingerprint readers. These can be used standalone or together with Doors Enterprise V8 for online operation. The reader is available as an 'Indoor reader' with the ergonomically positioned sensor or as an 'External reader' which is sealed against weather and protected from very low temperatures.



User Friendly

The Fingerprint Reader is simple for end users to operate - with intuitive light and sound feedback, an optical sensor which allows reliable and easy operation and the option to use Gesture Sensing to enrol users at the door. A Desktop Reader is also available for enrolment via a PC.

Simple to Install

Fingerprint Templates are distributed using the existing P4 system architecture - no need for network duplication. The internal reader fits a standard UK single gang back box, making it ideal for 2nd fix installation - and uses the simple Crystal 4 wire interface.



Features

- Up to 1000 users with 2 templates each
- Easily retrofitted to an existing Progeny system.
- Simple 4 wire interface and full integration with the P4 system,
- No additional network required.
- 4 stage sequential multi-factor authentication
- Multifactor identification
- RFID reader built-in as standard
- Intuitive lighting & sound feedback

Biometric Fingerprint Reader



Multifactor Authentication

The Built-in RFID included in the Reader for 2-factor identification as standard - Fingerprint & Card/Fob, simply add a Keypad for Code/PIN as a 3rd factor. The authentication sequence can be tailored; Card first, then Fingerprint, then Code etc.

Enrolment

There is a choice of 3 Enrolment methods - enrol online using the Reader and Doors Enterprise software, at the Reader using the unique 'Gesture Sensor' feature or via a Keypad to access the advanced programming features.

The stored template is recorded at a designated point of trust and distributed to all the biometric-enabled doors.

Data Security

To enhance data security, actual fingerprints are not stored - the biometric enrolment reader converts the fingerprint to a template (similar to a card number), so users fingerprints cannot be stolen.

Templates are first encrypted and then sent to the P4 controller. If the P4 controller is online then the template will be passed on to the Doors Enterprise software. This also means there is a backup if any hardware ever needs replacing.

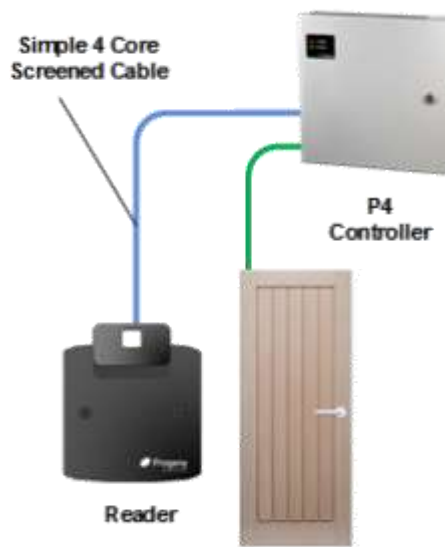
Progeny Biometric System

Features

- Simple 4 wire interface - easy to install
- User friendly
- Intuitive light & sound feedback
- Volume & Brightness control
- Internal temperature control
- Gesture sensors
- Optional local administration
- Made in UK
- Lifetime Warranty & Support

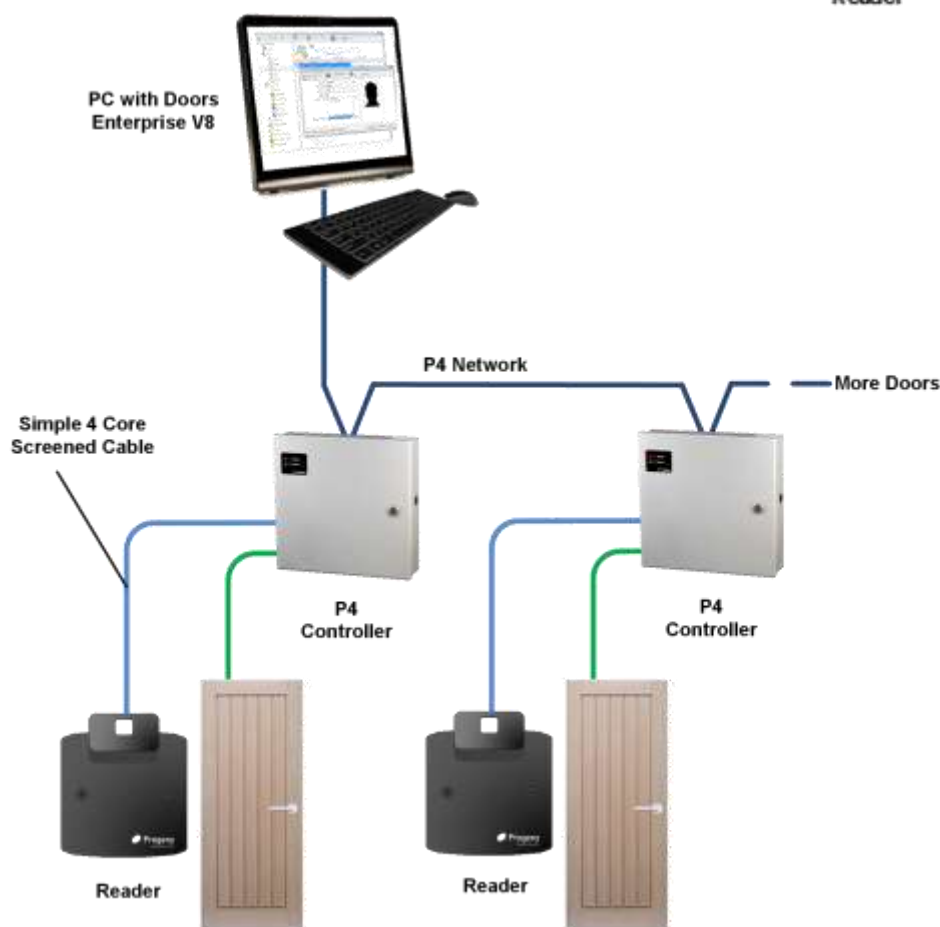
Standalone Biometric System

The gesture sensors built into the reader make it possible to manage the enrolment of users without the need for a computer or any complicated programming procedures.



Online Biometric System

When the online operation is chosen, the biometric template database is automatically synchronised to all the biometric-enabled doors by Doors Enterprise software. This feature is fully integrated into the P4 biometric system and no additional wiring is needed. The templates are moved using the standard interface hardware between readers, controllers and computer.



Biometric Fingerprint Readers

Internal Reader

The external reader has screw terminals for connection. Fixing centres are at 60mm suitable for a standard UK Pattress back box. Alternatively this reader can be surface mounted with a small rebate for the speaker to operate.



4850

External Reader

The external reader has a pigtail cable for termination. This version of the reader is weather and temperature protected.



4851

Specification

- Users (2 Templates each) 1000
- Minutiae points ≥ 19
- FAR (1:1) 0.001%
- FRR 0.1%
- Processing Time (1:2000) <1.5 s
- Processing Time (1:1) <1.0 s
- Operating Voltage Range 8-14 VDC
- Peak Current 150 mA
- Average Current 50 mA
- Cable Distance 50 m
- Temperature range 0 to 40 °C
- Impact Protection IK 05
- Dimensions (mm) W90 x H105 x D40

Specification

- Users (2 Templates each) 1000
- Minutiae points ≥ 19
- FAR (1:1) 0.001%
- FRR 0.1%
- Processing Time (1:2000) <1.5 s
- Processing Time (1:1) <1.0 s
- Operating Voltage Range 8-14 VDC
- Peak Current 150 mA
- Average Current ($T_a > 7^\circ\text{C}$) 50 mA
- Average Current ($T_a < 5^\circ\text{C}$) 100mA
- Cable Distance 50 m
- Temperature range -20 to 40 °C
- Ingress Protection IP 65
- Impact Protection IK 05
- Dimensions (mm) W50 x H120 x D20

Product Codes	
4850	Internal Biometric Reader
4851	External Biometric Reader
4803-Bio-Net	Biometric Reader - Desktop (Ethernet Connection)

Barcode & Magstripe

Barcode Reader

The 2030-SC is a scanning optical barcode reader. The reader is weather protected and suitable for both indoor and outdoor use.

The switch plate style has 60mm spaced mounting points to fit a standard single gang back box, making it simple to install and ideal for 2nd fix

The switch plate reader comes with an attractive stainless steel cover to give protection and a modern aesthetic. This reader can be surface mounted. Cards are presented below the reader.



2030-SC

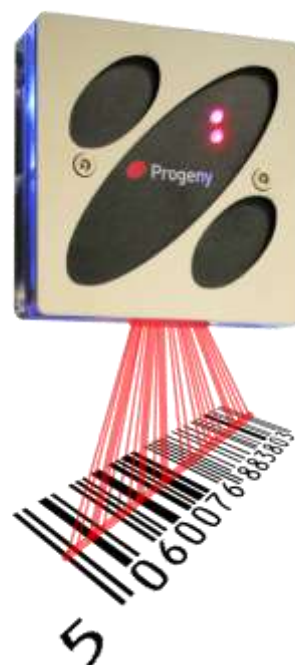
Position Target

This optional accessory assists the novice user to position the card at the correct distance and location. This is particularly useful in full sunlight when the scanning light bar is difficult to see.



2030-ST

Product Codes	
2030-SC	Crystal Barcode Reader (Scanning)
2030-ST	Optional Position Target



Magstripe

The magnetic stripe often referred to as 'Magstripe', is read by swiping past a reading head. Magnetic stripe cards are commonly used in credit cards, identity cards and transport tickets. Track 1 & Track 2 are available.

Suitable for indoor or outdoor use, the readers head provides an extremely reliable reading capability with over 1 million head passes. Made from an ultra-tough UV resistant polycarbonate, this reader is very durable, even in the harshest conditions.



2075

Magstripe Readers	
2075	Magstripe reader (TRK2)
2075-TRK1	Magstripe reader (TRK1)
2150	Pack of 10 Cleaning Cards

Credentials	
2014	Mono Magstripe Card
2015	Colour Magstripe Card



Progeny HID Readers

Prox Range

HID proximity cards and readers are recognised as the industry standard for physical access control. Featuring 125 kHz RFID technology.

HID proximity products are robust, affordable and integrate seamlessly with Progeny access control systems.



2050-HID



2052

Progeny HID Prox Readers	
2052-HID	Prox Point Reader (Mullion Pig Tail)
2050-HID-KB	Prox Pro Reader with Keypad
Site Coded Credentials	
2042-HID	ISO Prox Card
2043-HID	Prox Key Fob
2044-HID	Prox Clam Shell Card
2045-HID	Prox Sticky Dot

2137

Progeny iCLASS

Progeny iCLASS offers widely supported card level integration to third party systems such as:

- Cashless Vending
- Pull/Follow me Printing

iCLASS SIO-Enabled (SE™) smart card readers support Secure Identity Object™ (SIO), a new portable credential methodology from HID, and HID's Trusted Identity.

Technology-independent - Supports multiple technologies (iCLASS Seos and iCLASS SE credential platforms, standard iCLASS, MIFARE, and MIFARE DESFire EV1)

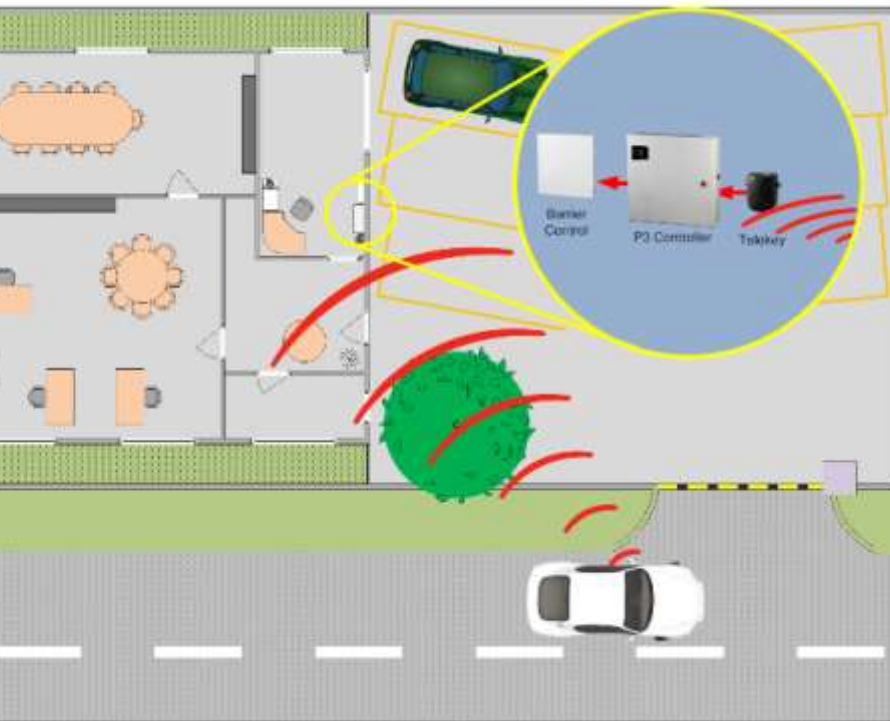


3233

3235

3232

Product Codes	
3231	Progeny iCLASS Mullion Reader
3237	Progeny iCLASS Reader with Keypad
3232	iCLASS ISO Card (CR80)
3233	iCLASS Key Fob
3235	iCLASS Sticky Dot

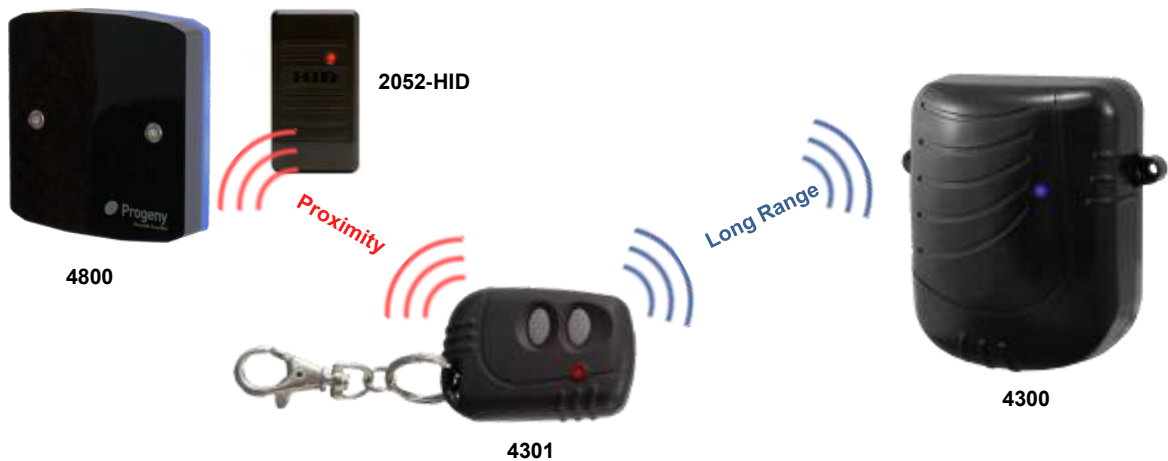


Long Range RFID

The Progeny Long Range Reader has a read range of 20 metres (can be extended to 100 metres with an aerial). It is an ideal way to control access through automated gates, rising barriers etc. Fobs can be enabled or disabled from the access control system and all users will be identified and logged.

This also offers greater freedom of the location of the reader. Vehicle users do not need to get out of the cab in order to open a barrier.

The Key fob is also available with embedded Progeny prox, HID prox or iCLASS credentials.



How it works

Each key fob has a unique ID number (site code & card number), pressing one of the buttons on the fob transmits this number. When in range, this number is read by the reader and passed onto a standard access controller for decision making.

Each fob can be treated as any other credential and allocated:

- Access Levels
- Time zones
- Calendar limits
- 'Valid from' and 'Valid to' dates

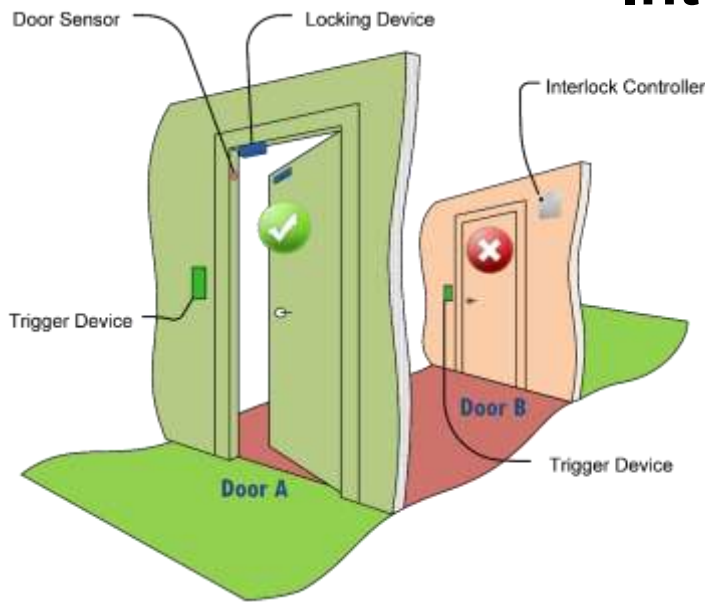
The IP56 rated enclosure of the reader makes it suitable for indoor or outdoor mounting. This removes any need to dig up the road or car park to run cables to readers near the gate or barrier. The reader also has two reader outputs that correspond to the two buttons on the fob. This can be used to control two barriers from one reader, possibly for in/out applications.

Overview

- 2 channels (2 buttons)
- Up to 100 metre range possible, when used with an aerial
- Available with Crystal, HID or MIFARE proximity credentials
- Standard Progeny reader interface
- Surface mount

Long Range Reader	
4300	Long Range Reader
Site Coded Credentials	
4301	Key Fob
2045-HID	Prox Sticky Dot
3235	iCLASS Sticky Dot

Interlock Systems



Normal Action

With this type of interlock all the doors are normally locked and a 'Trigger' device of some kind is used to request the opening of a door.

While a door is unlocked or open, other doors are prevented from unlocking.

Reverse Action

With reverse action interlocks, all the doors are normally unlocked and free to open. However, when one of the doors is detected as 'open', all the other doors will be locked. This type of interlock most commonly used for functional control rather than security. 'Reverse' and 'Normal' action interlocks can also be mixed on the same system.

Applications

The product is suitable for numerous applications:

- Bank Lobbies
- Cash Handling
- Photo Processing
- Laboratories
- Clean Rooms
- Jewellery Stores

High Security

Interlock systems control the locking of two or more doors. If one door is open or unlocked, all the other doors remain locked and will not open until the first door is closed and locked. Interlocks are sometimes referred to as 'Air Locks' or 'Tiger Traps'.

Adaptable

Doors can be normally locked (normal action) or unlocked (reverse action) to suit the application. Doors may have full access control using card readers, keypads etc or simply be released using push buttons or touch switches.

Scope

2, 3 and 4-way interlocks can be created as standard. Contact our support team for systems with more doors involved.

Simple 2 Door Interlock

Each door is electrically locked and monitored. The control electronics then generates a control signal to indicate when the door is closed and secure. Each controller also has a control input that will prevent the releasing of the locking device.

By cross connecting these control signals, the door controllers communicate the door status and only allow one door open at any given time.

Interlock Programmer

An "Interlock Programmer" is used to greatly simplify connecting the interlock signals. It also allows for easy and flexible programming of the interlock system. A 12 way DIP switch allows the interlocking to be programmed in any combination. On board, indicators show current interlock signal status.

Interlock Product Codes

2089	Interlock Controller with 5A PSU (1 Door)
2089D	Interlock Controller with 5A PSU (2 Door)
2069	Interlock Programmer
Access Controllers with Interlock	
4163	Stand Alone Controller with 5A PSU
4001	P4 Controller with 5A PSU
4002	P4.net Controller with 5A PSU
4006	P4.GPRS Controller with 5A PSU

Compact Keypad Controller

Features:

- Low Power
- 2 Channels
- 50 Codes Per Channel
- Adjustable 'Lock' Release timer
- Voltage Free Contacts
- Tamper Switch
- Individual Request to Exit Inputs
- Hacker Alarm
- 'Door Failed to Close' Alarm
- 'Door Forced' Alarm



2059

Simple and cost effective systems . The keypads have the access control mechanism built into the keypad. To complete the system, a low voltage power supply and a locking device are all that is required.

Simple Installation

Any competent installation engineer will be able to install this equipment without any special training. Simply connect the power supply unit, locking device and egress device and you are then ready to program the control unit.

Easy to Use

Each channel can be operated with up to 50 codes per channel. The two channels can be combined to give a total of 100 access codes for a single door. The codes can be 4, 5 or 6 digits in length, to operate one of the channels simply enter the access code for that channel.

2059 Compact Keypad

This keypad is fully potted and weather proof with a membrane keypad and key press 'beep'. This design features a call button for visitors and includes a tamper switch.

Access Codes

- | | |
|-----------------|-----------------|
| • Channel A | 50 |
| • Channel B | 50 |
| • Code length | 4,5 or 6 digits |
| • Penalty Timer | 0 to 99 s |

Relays

- | | |
|-----------------------|-----------|
| • Relay timers | 1 to 99 s |
| • Relay contacts (DC) | 2.0 A |

Inputs

- Request to exit input NO contact
- Door monitor input NC when door closed

Outputs

- | | |
|----------------------------------|-----------|
| • Door forced alarm | 100 mA |
| • Call output (switched to OV) | 100 mA |
| • Duress output (switched to OV) | 100 mA |
| • Tamper switch N/C contacts | 50 mA |
| • Door open Alarm | 1 to 99 s |

Compact

2059

Classic combined keypad controller

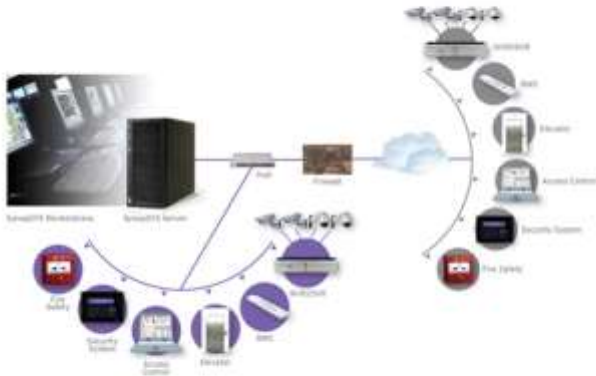
Integration

Progeny Access Control Systems have a wealth of integration options at the Software, Hardware & Credential level, so you can integrate your access control into your existing management systems.

Integrated Security & Building Management

RISCO SynopSYS software integrates with Doors Enterprise through the SQL server database and also integrates with Milestone OpenNVR system and enables:

- Graphic display of all of the buildings areas and doors
- Execution of remote actions such as opening doors
- Real-time monitoring of all access control events
- Customizable triggering of actions when specific events occur, such as camera pop-up when an unauthorised entry occurs



Golf Club

Membership management system synchronises with Doors Enterprise using the ADI interface. This is used both for members with RFID fobs and also for Day members by changing the daily access code. The doors then have both RFID reader and Keypad to allow access for both full and day members.



Leisure Park Booking System

This system makes use of the automated data import facility in Doors Enterprise. The online booking system allows for booking and payment of the Leisure facility and at the end of the payment process issues a generated access code (PIN) that will be used on the site. At the same time, a text file is saved with the booking details including; the PIN and its valid from and valid to dates. This is then automatically picked up by Doors Enterprise which copies the details onto its own database and updates the controllers with required access data.



Time & Attendance

Thinking Software 'Rota Horizon' software also links to Doors Enterprise via the SQL server database. Access control Readers points are identified as terminals and the 'Rota Horizon' software collects data recorded from the readers. The data is then processed using defined rules to produce reports and optionally link to payroll systems.



Training

Office Based Training

Progeny Access Control provides training courses at Progeny House. The courses are aimed at the installer of access control systems and give the installation engineer a thorough insight into the P4 & Crystal hardware, Doors Enterprise software and related products.

Our training courses run for a full day, commencing at 9.30am with the course drawing to a close around 4 pm. Lunch and all refreshments are provided.

Our highly experienced technical team deliver the training courses. Not only will all delegates have both an enjoyable and rewarding day with us but will also gain valuable technical knowledge which will have a positive impact on your day-to-day jobs.

Courses are held once a month, if you would like to attend, please book online www.progeny.co.uk/training.

Or contact our customer support team on **01254 883348**.



On-Site Engineer Training

Progeny can also provide on-site training. The course length will be approximately five hours long and will provide an overview of the product along with a solid grounding on the use and the setup of the system on Doors Enterprise.

Onsite Commissioning and End User Training

Progeny can provide commissioning on a per day basis. Also, if required (and time permitting), end user training. The hardware installation will be inspected and tested, and the software installation (if an online system) will also be inspected and tested for correct setup.

Compliance

CE

CE marking is a declaration by the manufacturer that the product meets all the appropriate provisions of the relevant legislation implementing certain European Directives.

WEEE

Waste Electrical & Electronics Equipment Directive

This directive is aimed at the reduction of waste from Electrical and Electronic Equipment and to improve the environment. Producers are encouraged to improve the life cycles of the equipment they manufacture.

DDA

Disability Discrimination Act

This directive builds on and extends earlier disability discrimination legislation, principally the Disability Discrimination Act 1995.

Progeny products have features to help meet these requirements including:

- P4 Controller - Two stage lock release for automatic door openers
- Controller delay to lock release
- P4 Controller auto relock feature
- P4 Controller with Dark Crystal Readers - Adjustable sound levels
- Keypad Reader - Adjustable sound levels

RoHS

Restricted use of certain Hazardous Substances Directive

Directive 2002/95/EC on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

IP Ratings

Ingress Protection or "IP" Ratings are defined in international standard EN 60529 (British BS EN 60529:1992, European IEC 60509:1989).

IK Ratings

Mechanical Impact Protection. EN 50102 defines the IK coding system. In simple terms, the IK XX number indicates an energy of impact that can be withstood. For example, IK09 would be 10 J (5Kg swung from 20cm Height)

A guide (UTE C 3-103) has tables showing the IK rating required for according to the installation location.

How to find us



Google Maps

Scan this QR code with your smart phone or tablet to find us on google maps:



Find us online

For information on all our products plus much more visit our website at:

www.progeny.co.uk





T: 01254 883348

F: 01254 889113

E: Sales@Progeny.co.uk

www.progeny.co.uk



Designed and Manufactured in England