

# Kantech Access Control Solutions



North America Product Guide 2021

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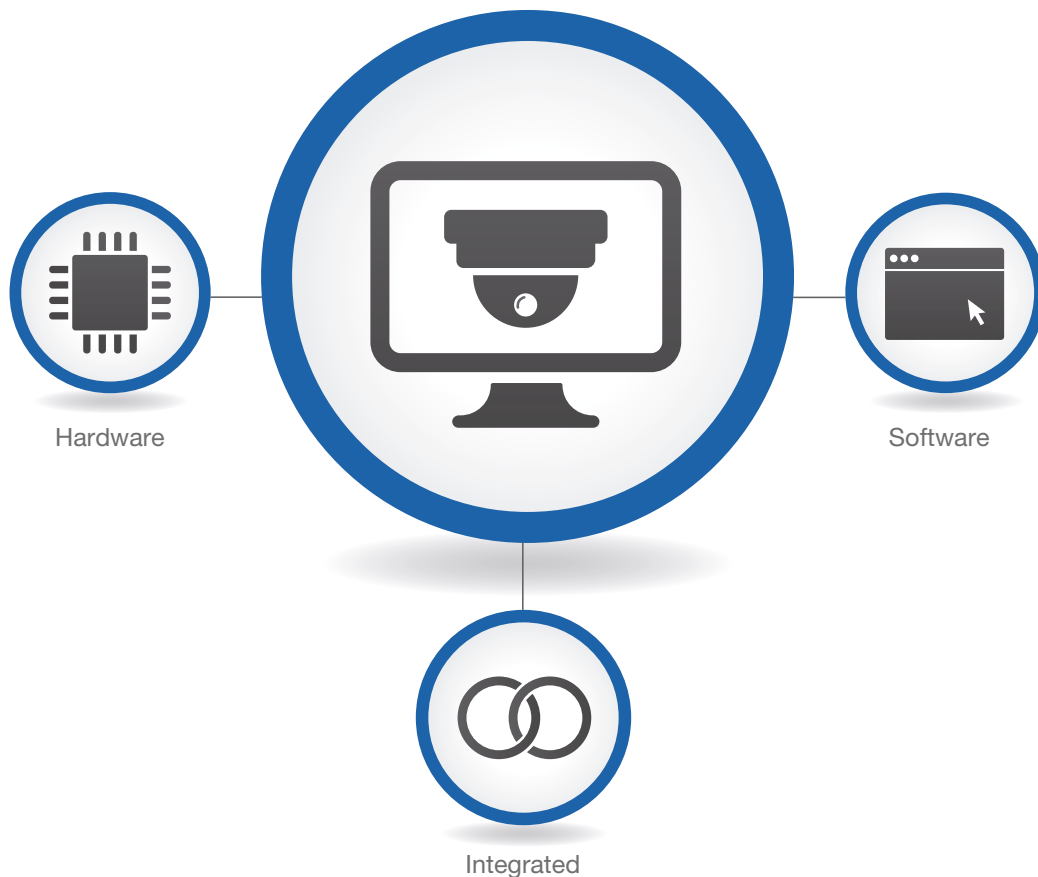
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# Introduction

Founded in 1986, serving small to medium-sized businesses, Tyco Kantech, part of Johnson Controls, provides integrated access control technologies that are easy to install right out of the box, scalable, and reliable. Our flagship solution, EntraPass security management software and KT door controllers, allow for simpler configurations and provide robust reporting to enhance the user experience for both the installer setting up the system and the operator using the system. Available as a traditional or hosted/managed access control solution, Kantech Managed Service Dealers (MSD) and Managed Service Providers (MSP) are able to offer customers an highly tailored and intuitive user experience.

At Johnson Controls, we understand the importance of quality products and customer service, and we are dedicated to providing both to ensure long-term satisfaction.



# EntraPass Security Management

EntraPass is a robust suite of high-performance software that allows customers to design and operate any number of doors where card access is required – securely, quickly, and efficiently. EntraPass is compatible with Kantech's entire line of door controllers. Kantech offers three different editions, which are suitable for everything from single sites to large multi-location businesses.



	Special Edition	Corporate Edition	Global Edition
Video Integration	✓	✓	✓
Intrusion Integration	✓	✓	✓
Smart Cards	✓	✓	✓
Wireless Locks	✓	✓	✓
Multi-Site	✗	✓	✓
Mobile Apps	✗	✓	✓
Web Client	✗	✓	✓
Active Directory	✗	✓	✓
Global Anti-Passback	✗	✗	✓
Muster Reports	✗	✗	✓

Detailed EntraPass product line positioning matrix available on [www.kantech.com](http://www.kantech.com)

# EntraPass Special Edition

## Single-Workstation Security Management Software

EntraPass Special Edition is a comprehensive, menu-driven, single-workstation security software. It controls 64 doors with KT-1, up to 128 doors with KT-300, and up to 256 doors with KT-400 door controllers. Administrators can define or modify parameters such as schedules or access levels, generate reports and activate controlled devices – that is, locking and unlocking doors, or activating replays for lighting or air conditioning.

EntraPass offers full integration with exacqVision Network Video Recorders (NVRs), American Dynamics VideoEdge NVRs, and DSC PowerSeries Neo intrusion alarm panels.

### Features

- Fast, user-friendly installation and operation
- Badge layout creation
- Programming holidays, card access groups, and elevator control
- Built-in reporting emailing, export, and printing
- Monitoring real-time events
- Embedded Sybase SQL database engine
- Double and triple-swipe card at reader (with KT-1 and KT-400 controller) to activate features, such as activate relay, arm alarm system, and lock/unlock doors
- Integrates with ASSA ABLOY™ Aperio wireless locks for an integrated lock management solution

EntraPass  
Special Edition Software



EntraPass Special Edition	
Model	Description
E-SPE-V8	EntraPass Special Edition software
E-SPE-V8-LIC	EntraPass Special Edition software license
Kantech Advantage Program (KAP) Token	
Model	Description
E-SPE-KTK-1	1 Kantech Token
Wireless Lock Integration Licenses	
Model	Description
E-SPE-DOOR-X	Special Edition Wireless lock integration Licenses (X = 1, 4, 8, 24, 48, 96)



# EntraPass Corporate Edition

## Multiple-Workstation Security Management Software

EntraPass Corporate Edition is a multiple-workstation software platform that offers the ultimate balance between power and affordability in a network environment. It offers the flexibility to securely connect controllers directly to the network, as well as over RS-485. EntraPass software is compatible with Kantech IP devices such as KT-1 and KT-400 door controllers, and Kantech IP Link, each of which utilize 128-bit AES encryption to protect communications against compromise.

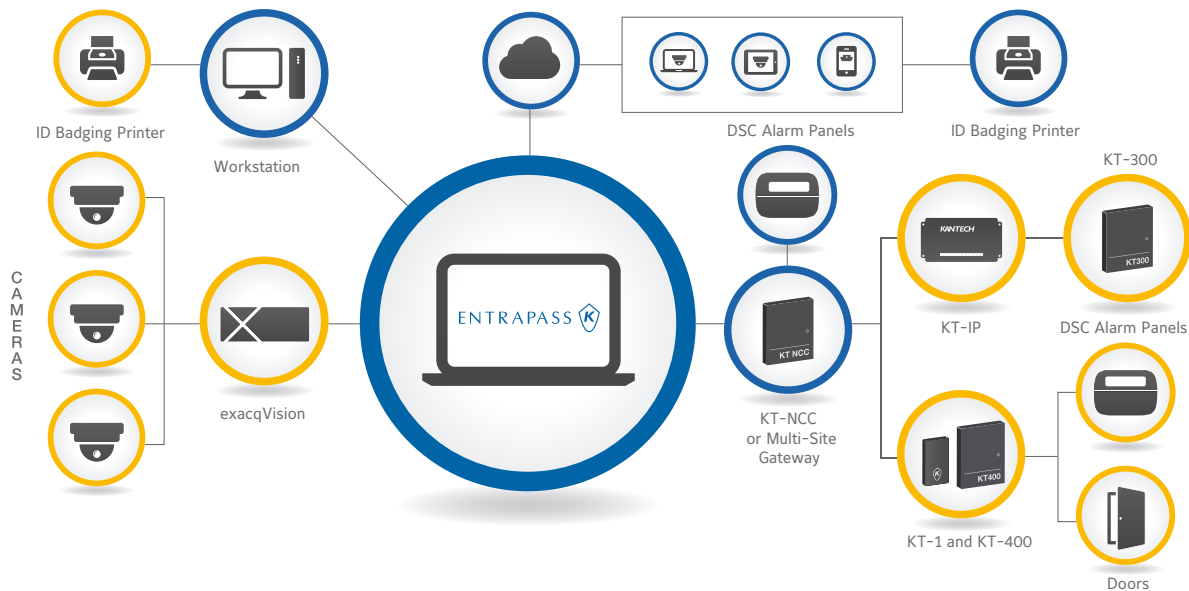
The software integrates advanced security features, such as the EntraPass go mobile app and the EntraPass web platform. These enable remote and convenient access to common access control, video and intrusion tasks, and reporting. The enhanced user experience makes navigation and operation easy and intuitive.

### Features

- Supports up to 20 workstations and controls hundreds of thousands of doors
- Import/synchronize EntraPass operators and users (cardholders) with Microsoft™ Active Directory for centralized management
- Gain access to doors with a one-time unlock command using the EntraPass go mobile app
- Supports up to 50 concurrent logins with EntraPass web and/or EntraPass go
- Full integration with exacqVision NVRs, American Dynamics VideoEdge NVRs, and DSC PowerSeries Neo intrusion alarm panels
- Integrates with ASSA ABLOY™ Aperio wireless locks for an integrated lock management solution



## EntraPass Corporate Edition Software



### EntraPass Corporate Edition

Model	Description
E-COR-V8	EntraPass Corporate Edition software
E-COR-V8-LIC	EntraPass Corporate Edition software license

### Additional Workstation and Gateway Licenses

Model	Description
E-COR-WS1	License for 1 Workstation (v3.xx and higher)
E-COR-WS6	License for 6 Workstations (v3.xx and higher)
E-COR-COM	License for 40 Multi-Site Gateways (v3.xx and higher)

### EntraPass Corporate Edition Options

Model	Description
E-COR-LDAP	License for Active Directory Lightweight Directory Access Protocol (LDAP) integration
E-COR-RDN	License for 1 Redundancy Server (v3.xx and higher)
E-COR-SQL	License for 1 Card Gateway - MS SQL Database Interface (v3.xx and higher)
E-COR-VVM	License for 1 EntraPass VideoVault (v3.xx and higher)
E-COR-WEB-X	License for concurrent web login (v4.xx and higher) (X = 1, 3, 10, 25 or 50)
E-COR-DVR-1	License for single third-party DVR (v5.02 and higher)
E-COR-PASS-X	EntraPass go Pass (X=50, 100, 500)
E-COR-CONNECT	License for 1 concurrent integration (v7.0 and higher)

### Kantech Advantage Program (KAP) Token

Model	Description
E-COR-KTK-X	Kantech Tokens (X = 1, 2, 3, 5, 10, or 20)

### Wireless Lock Integration Licenses

Model	Description
E-COR-DOOR-X	Corporate Edition Wireless lock integration Licenses (X = 1, 4, 8, 24, 48, 96)

# EntraPass Global Edition

## Enterprise-Level Security Management Software

EntraPass Global Edition is a network-ready, enterprise-level security management software solution. This powerful solution accommodates widely-dispersed applications with an unlimited number of users controlling thousands of doors. In addition, it gives you the ability to simultaneously access the system from up to 128 workstations connected to the network.

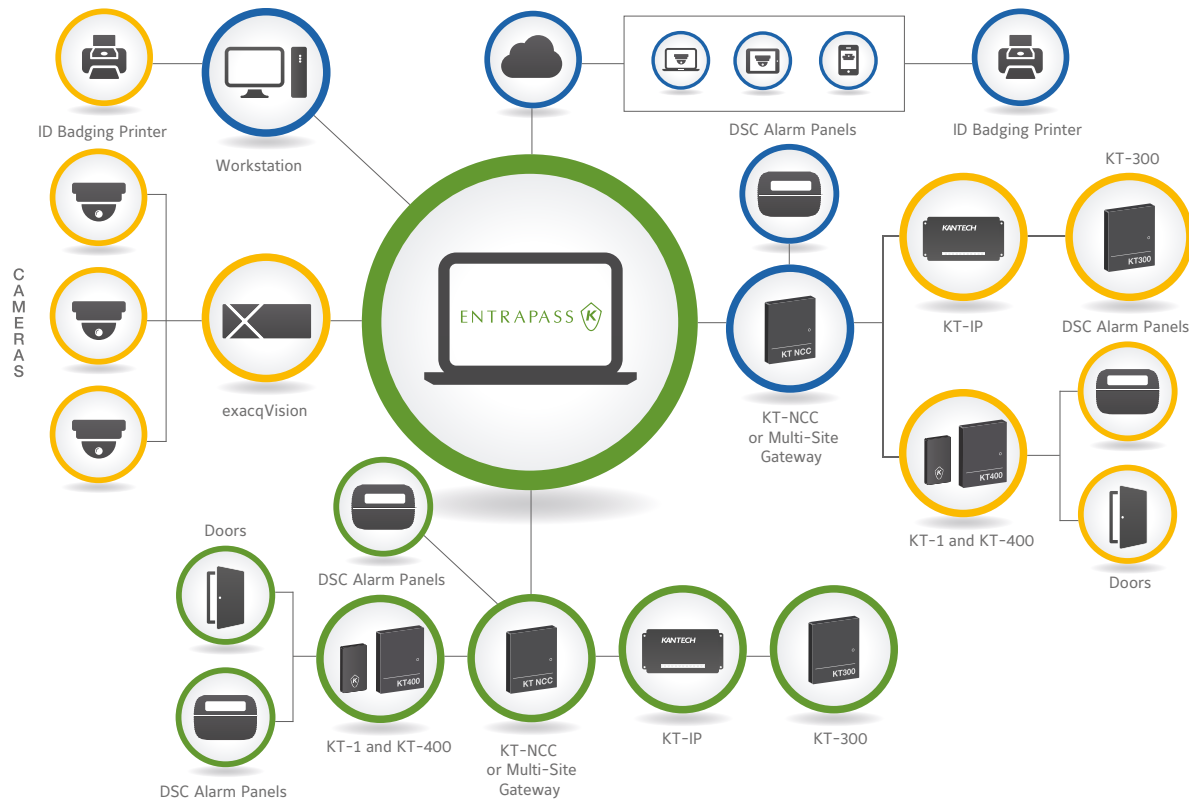
A redundant server and gateway enhance fault tolerance and ensure the system is always running. Global Edition software integrates advanced security features, such as the EntraPass go mobile app and the EntraPass web platform, to deliver remote and convenient access to common access control, video, and intrusion tasks.

The enhanced user experience makes navigation and operation easy and intuitive. Each EntraPass Global Edition software package includes four additional Workstation licenses, one Server/Workstation license, one Global Gateway (Windows NCC) license, and one web license.

### Features

- Supports up to 128 workstations and controls hundreds of thousands of doors
- Automatically log into EntraPass with Windows® credentials using Single Sign-On in Microsoft™ Active Directory
- Global virtual alarm system, anti-passback, guard tours, and muster reporting
- Gain access to doors with a one-time unlock command using the EntraPass go mobile app
- Redundant server and gateway to enhance the fault-tolerance capabilities of the system
- Supports up to 200 concurrent logins with EntraPass web and/or EntraPass go
- Full integration with exacqVision NVRs, American Dynamics VideoEdge NVRs, and DSC PowerSeries Neo intrusion alarm panels
- Integrates with ASSA ABLOY™ Aperio wireless locks for integrated lock management solution

## EntraPass Global Edition Software



### EntraPass Global Edition

Model	Description
E-GLO-V8	EntraPass Global Edition software
E-GLO-V8-LIC	EntraPass Global Edition software license

### Additional Workstation and Gateway Licenses

Model	Description
E-GLO-WS1	License for 1 Workstation (v3.xx and higher)
E-GLO-WS8	License for 8 Workstations (v3.xx and higher)
E-GLO-COM-WIN	License for 16 Global Gateways – Windows NCC – (v3.xx and higher)
E-GLO-CORCOM	License for 40 Multi-Site Gateways (v3.xx and higher)
E-GLO-CORCOM-RDN	License for Redundancy Gateway (v7.0 and higher)

### EntraPass Global Edition Options

Model	Description
E-GLO-LDAP	License for Active Directory (LDAP) integration
E-GLO-RDN	License for 1 Redundancy Server (v3.xx and higher)
E-GLO-SQL	License for 1 Card Gateway – MS SQL Database Interface (v3.xx and higher)
E-GLO-VVM	License for 1 EntraPass VideoVault (v3.xx and higher)
E-GLO-WEB-X	License for concurrent web login (v4.xx and higher) (X = 1, 3, 10, 25 or 50)
E-GLO-INFVID	License for EntraPass InfiniView – 128 additional video servers (v5.01 and higher)
E-GLO-DVR-1	License for single third-party DVR (v5.02 and higher)
E-GLO-DVR-UNL	License for unlimited third-party DVR (v5.02)
E-GLO-PASS-X	EntraPass go Pass (X=50, 100, 500)
E-GLO-CONNECT	License for 1 concurrent integration (v7.0 and higher)

### Kantech Advantage Program (KAP) Token

Model	Description
E-GLO-KTK-X	Kantech Tokens (X = 1, 2, 3, 5, 10, or 20)

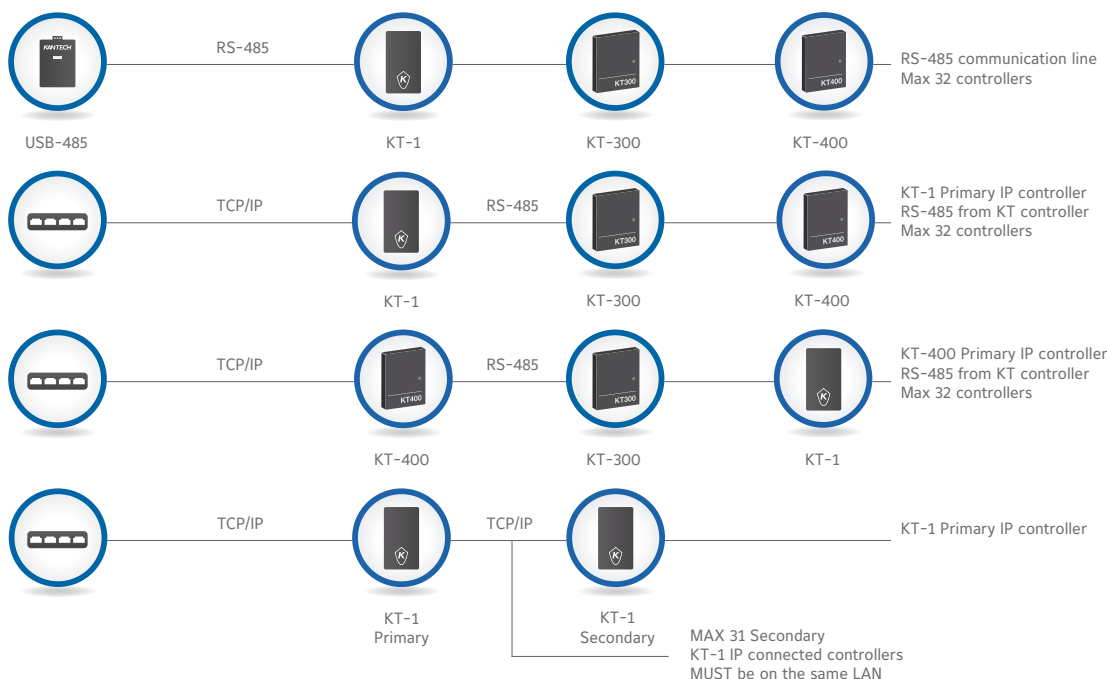
### Wireless Lock Integration Licenses

Model	Description
E-GLO-DOOR-X	Global Edition Wireless lock integration Licenses (X = 1, 4, 8, 24, 48, 96)

# EntraPass Architecture

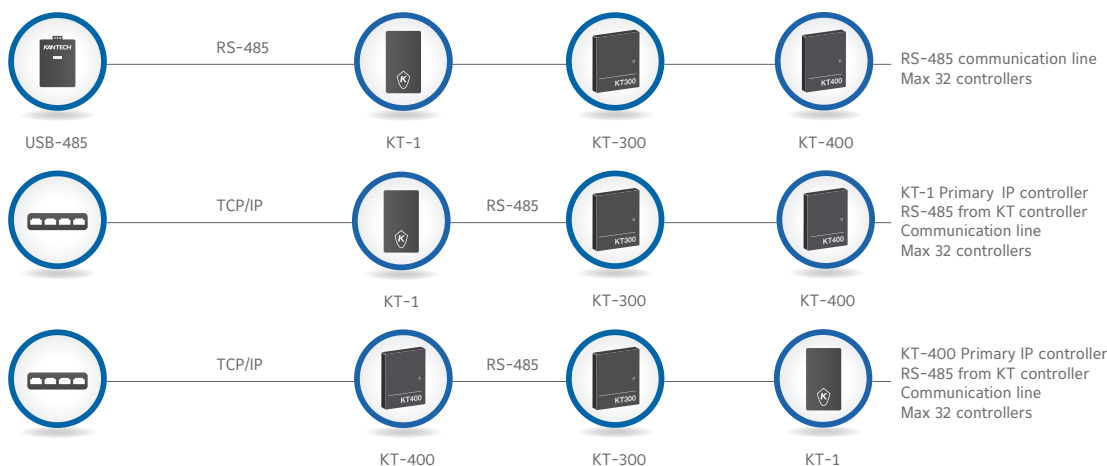
## Gateways

System architecture for EntraPass Special Edition and Multi-Site Gateway architecture with EntraPass Corporate Edition and Global Edition



## Global Gateways

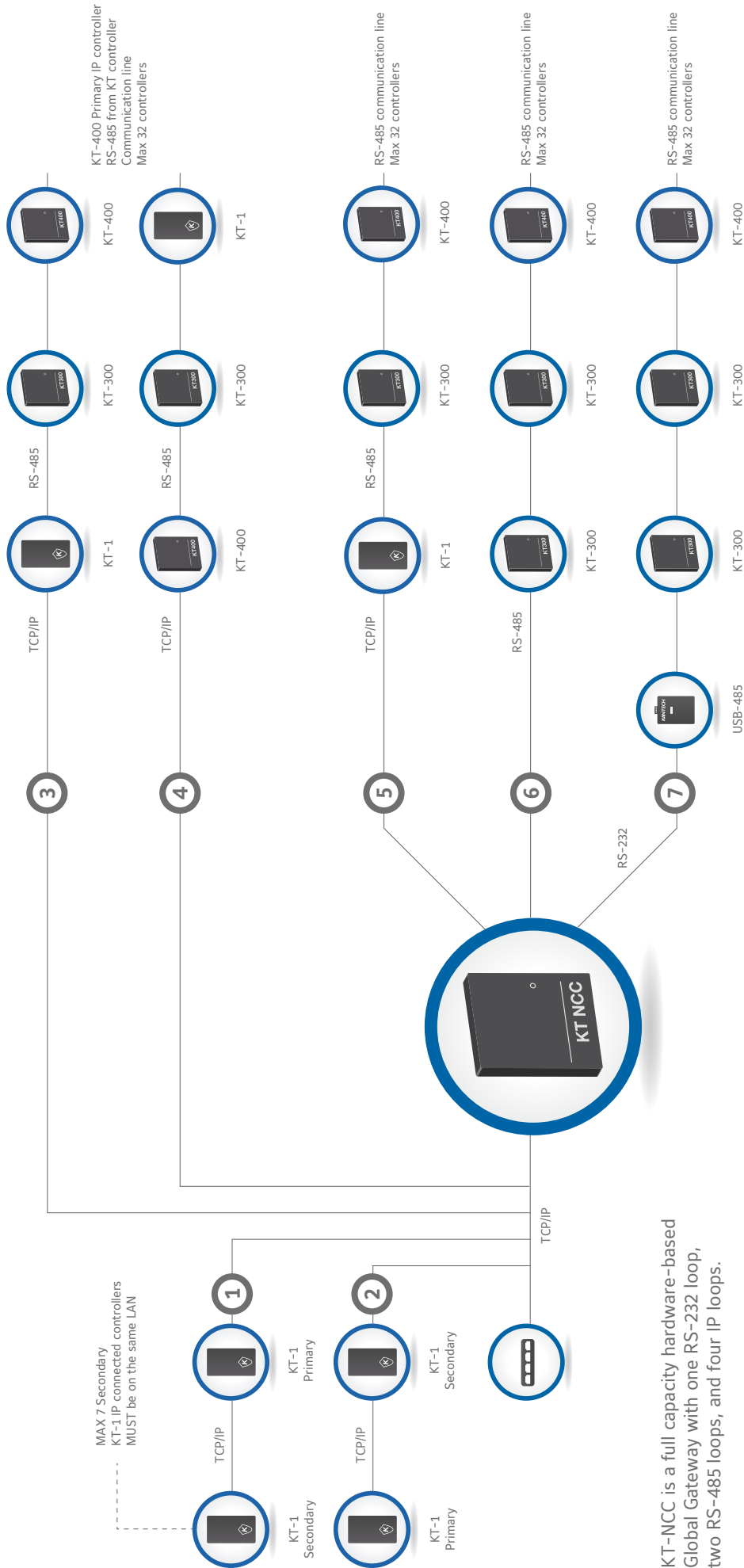
System architecture for EntraPass Special Edition and Multi-Site Gateways with EntraPass Corporate Edition and Global Edition



For RS-485 KT-controllers to a Primary controller connected to Global Gateway respect the maximum of eight controllers. It is advisable to use the KT controllers for remote site Global Gateway functionality.

## Global Gateways KT-NCC

System Architecture for EntraPass Global Edition



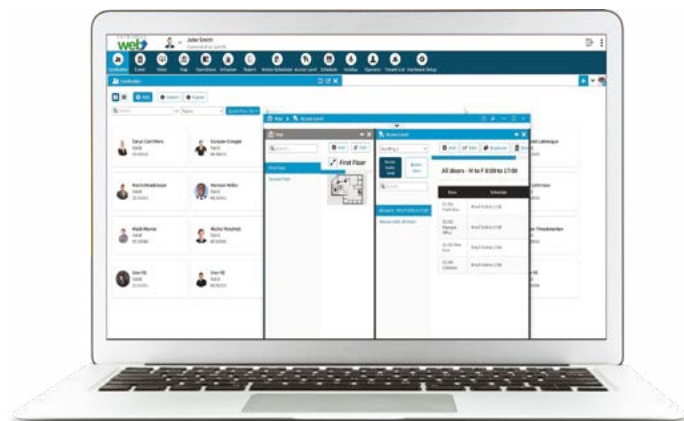
KT-NCC is a full capacity hardware-based Global Gateway with one RS-232 loop, two RS-485 loops, and four IP loops.

# EntraPass web

EntraPass web is a remote user platform that allows access to EntraPass security management software from any computer connected to the internet or via a mobile device. It provides real-time management capabilities for various security-related tasks, including managing and creating cards, locking and unlocking doors, scheduling, requesting reports, and even more access control functionality.

## Features

- Intuitive design
- Monitor, manage, and maintain security system without on-site personnel
- One interface for viewing video, operating intrusion system, and managing doors
- Configurable to your specific needs for higher productivity
- Connect multiple monitors
- Complete hardware setup
- Watch list alarms and email notifications



EntraPass web Licenses for Corporate Edition	
Model	Description
E-COR-WEB-X	License for concurrent connection for EntraPass web station (X = 1, 3, 10, 25)
EntraPass web Licenses for Global Edition	
Model	Description
E-GLO-WEB-X	License for concurrent connection for EntraPass web station (X = 1, 3, 10, 25, 50)

# hatrix

hatrix is Kantech's powerful hosted/managed access control solution. It uses industry-renowned EntraPass security management software. By providing users with a full spectrum of hosted and managed access control services, hatrix ensures that each user receives a solution that is customized to their specific business needs. This level of innovation makes our access control system flexible and scalable, which reduces the infrastructural and training costs associated with traditional security systems.

hatrix offers compelling advantages for Managed Service Dealers (MSD), Managed Service Providers (MSP), and end users alike.



# EntraPass go

EntraPass go puts you in control of your security. EntraPass go allows you to remotely control your security system without being tied to a workstation. It enables you to interact with EntraPass security management software using only a few taps on your mobile device. EntraPass go allows you to access a wide range of functions remotely, including the management or creation of cards, the locking and unlocking of doors, and the instantaneous requesting of reports.

EntraPass go is available for download on the App Store and Google Play. EntraPass go requires EntraPass Corporate Edition, or Global Edition v6.0 or higher.

## Features

- Convenient and intuitive interface
- Manage cards and take a user's photo
- Integrates with EntraPass Corporate and Global Edition software
- Control more than 20 security tasks in real-time
- Apple and Android compatible

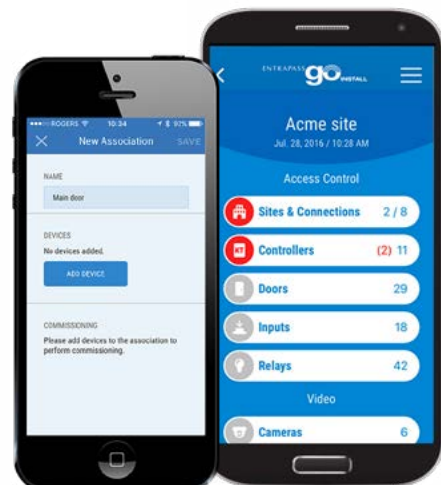


# EntraPass go Install

The EntraPass go Install mobile app provides easy configuration of KT-1 and KT-400 door controllers by scanning a QR code. It enables you to interact with EntraPass security management software using only one tap and one scan on your mobile device.

## Features

- "Kantech-easy" mobile app for installers
- QR code provides MAC address and serial number
- Easily associate Exacq video, DSC PowerSeries Neo intrusion panels, and Kantech card readers
- Commissioning reports
- Automatically save commissioning report with date, time, and technician name for easy retrieval
- Store corroborating photos such as door, reader, strike, and video camera in database for future service calls
- Store corroborating photos in database for future service calls
- Available for free on the iTunes App Store and Google Play





# EntraPass go Pass

The EntraPass go Pass mobile app allows cardholders to gain access to doors, or other entry points, by simply pressing the appropriate icon in the app as they approach a door from anywhere, at any time. Using a Wi-Fi, 3G or 4G connection, the app communicates directly with the EntraPass system's server. Utilizing access levels, the server then sends a one-time unlock command to the doors to which the cardholder has access. Customers can add thousands of EntraPass go Pass users to the system by simply sending them an email notification.

## Features

- Give remote access
- Open doors using your mobile device
- Access rights are managed by EntraPass go
- Communication goes through the server
- No communication with reader or controller
- Can be activated or deactivated
- Link for download and access through email
- Support for Android and iOS mobile devices including Apple Watch



EntraPass go Pass Credentials for Corporate Edition	
Model	Description
E-COR-PASS-10	Pack of 10 EntraPass go Pass credentials (v8.00 and higher)
E-COR-PASS-50	Pack of 50 EntraPass go Pass credentials (v7.10 and higher)
E-COR-PASS-100	Pack of 100 EntraPass go Pass credentials (v7.10 and higher)
E-COR-PASS-500	Pack of 500 EntraPass go Pass credentials (v7.10 and higher)
EntraPass go Pass Credentials for Global Edition	
Model	Description
E-GLO-PASS-10	Pack of 10 EntraPass go Pass credentials (v8.00 and higher)
E-GLO-PASS-50	Pack of 50 EntraPass go Pass credentials (v7.10 and higher)
E-GLO-PASS-100	Pack of 100 EntraPass go Pass credentials (v7.10 and higher)
E-GLO-PASS-500	Pack of 500 EntraPass go Pass credentials (v7.10 and higher)

# How to link with other systems: EntraPass Database Integrations

## SQL Database Access

EntraPass security management software – Global Edition offers an embedded high-performance SQL database engine that allows administrators to generate custom reports from the EntraPass database. Use the powerful Open Database Connectivity (ODBC) protocol to connect to third-party reporting tools and to create your own reports.

## LDAP Connector, synchronizing users and operators

Active Directory is a commonly used authentication directory supporting enterprise IT systems that synchronize contact information and scheduling integration, along with providing a means for centralized desktop access management. EntraPass now synchronizes EntraPass users and operators with Microsoft™ Active Directory users, which eliminates the manual creation and maintenance in EntraPass. Note

that Active Directory is the authoritative source and is never modified by EntraPass. Synchronization with Active Directory also permits Single Sign-On authentication. This means that operators are authenticated with their Windows credentials, which allows them to automatically log on to an EntraPass workstation with a single click. Up to ten concurrent Active Directory connections are possible.

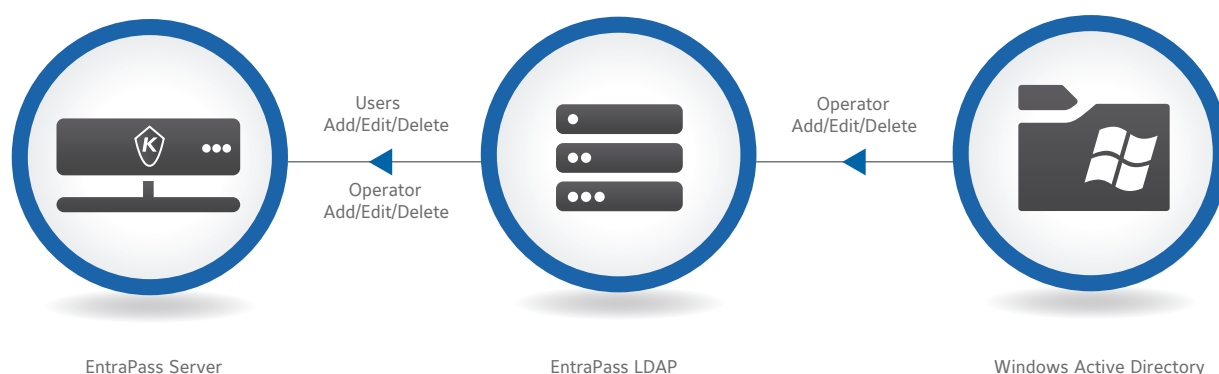
## Features

- Single user name and password
- Password synced between Active Directory and LDAP Directory Services
- Reduced overheads through standardization
- Improved services through centralized management capabilities
- Improved workstation security

Active Directory Integration LDAP License for Corporate Edition	
Model	Description
E-COR-LDAP	License for Active Directory LDAP integration
Active Directory Integration LDAP License for Global Edition	
Model	Description
E-GLO-LDAP	License for Active Directory LDAP integration

## Active Directory Integration

Microsoft™ Active Directory integration for operator and user management



# Alarm Panel Integration

By integrating all security assets such as intrusion detection, access control, video, and telephone entry into one common platform, users can interface with just one system for greater simplicity and optimum control.

The integration kits connect a DSC intrusion alarm panel to a Kantech access control system to create a single integrated solution. Integration with DSC PowerSeries or MAXSYS intrusion alarm panels allows the access control system to receive intrusion events, view the status of zones, and to manage partitions/user codes along with serial communication between Kantech controllers and DSC PowerSeries Neo intrusion panels. Kantech also offers new IP connectivity. This not only creates flexibility in cabling, but intrusion panel connections over IP can be assigned to a gateway or one controller (KT-1/KT-400) for ease in day-to-day configuration and security tasks.

## Virtual Zones

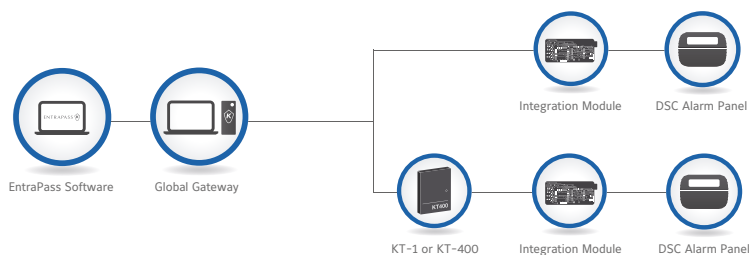
To overcome system complexity for end users, a clean straightforward visualization of sites, zones, and status is needed. There is no longer a need to wire the door contacts for the intrusion panel – simply use the one used in the access control system. The alarm generated on the access control system can trigger a zone alarm on the DSC PowerSeries Neo. EntraPass makes use of up to 32 definable virtual zones in DSC PowerSeries Neo, giving the customer the ability to share physical door contacts and monitoring of doors, controllers, inputs, and events. This deeper level of integration reduces costs and provides a higher level of situational awareness.

With the enhanced interaction between intrusion and access control systems, operators in the central monitoring stations have a better view of the situation on-site. It gives them the ability to act more quickly and efficiently to security issues. Kantech provides a one system experience with a holistic view of all security functions.

All Tyco video platform integrations are, by default, available with EntraPass. Approved third-party video integrations with EntraPass may require additional optional licenses.

## Features

- Integration of EntraPass access control system and DSC intrusion systems
- Multiple panels supported – PowerSeries, PowerSeries Neo, and PowerSeries Pro
- Integrated virtual DSC keypad used to remotely arm or disarm DSC panels (not available on Neo interface)
- DSC panels and sensor locations are represented on graphical maps
- DSC intrusion alarms are reported instantly on EntraPass
- Modify alarm panel user codes to or from EntraPass
- Intrusion events can trigger video recordings for fully integrated access, video, and intrusion security management



# Video Integrations

Real-time monitoring capability is a response to the growing importance of video in access control systems. Integration with Exacq video management systems, American Dynamics Digital Video Recorders (DVRs)/NVRs (VideoEdge, Hybrid Video Recorders (HDVR), ADTVR, Intellex), and Kantech INTEVO Integrated Security Platform provides real-time video monitoring as well as video playback. Video clips can be linked to access events (such as “door forced

open”) and recorded from one to sixteen cameras to a compatible DVR/NVR simultaneously. All cameras can easily be called up directly from a floor plan by double-clicking on the camera or dome icon.

All Tyco video platform integrations are, by default, available with EntraPass. Approved third-party video integrations with EntraPass may require additional optional licenses.

## Third-Party Video Integration Licenses for EntraPass Corporate Edition

Model	Description
E-COR-DVR-1	License for single Third-Party DVR (v5.02 and higher)

## Third-Party Video Integration Licenses for EntraPass Global Edition

Model	Description
E-GLO-DVR-1	License for single Third-Party DVR (v5.02 and higher)
E-GLO-DVR-UNL	License for unlimited Third-Party DVR (v5.02)
E-GLO-INFVID	License for EntraPass InfiniView - 128 additional video servers (v5.01 and higher)

# Video Vault

Video Vault offers an alternative to manually saving each video clip one by one. Simply pre-define groups for the video clips, such as “door forced open” or “access denied”. Video Vault then saves the clips to the appropriate group based on whatever schedules are chosen. Video clips can also be organized as .BMP images in lieu of icons. It can connect up to 128 Exacq and/or American Dynamics NVRs via integration with EntraPass software and can archive the imported video to as many as 24 digital storage devices. Video Vault requires EntraPass Corporate Edition or Global Edition v3.xx and higher.

## Features

- Organize video clips by event category for future reference
- Thumbnail images can be created on the first frame of each video clip
- Stores unlimited amount of video clips
- Automatically associate .BMP image with each video clip
- Connect up to 128 Exacq and/or American Dynamics NVRs

## Video Vault Integration Licenses for EntraPass Corporate Edition

Model	Description
E-COR-VVM	License for 1 EntraPass VideoVault (v3.xx and higher)

## Video Vault Integration Licenses for EntraPass Global Edition

Model	Description
E-GLO-VVM	License for 1 EntraPass VideoVault (v3.xx and higher)



# INTEVO – Integrated Security Platform

INTEVO is an easy-to-deploy integrated security platform that gets you up and running in minimal time. It is simple to configure, built on Windows 10 IoT and includes a customized dashboard for easy system management. INTEVO integrates access control, IP video, and intrusion into one common and powerful platform to deliver a holistic security solution. It is pre-loaded with Kantech's EntraPass security management software – Corporate Edition, exacqVision video management software, and includes support for DSC PowerSeries and PowerSeries Neo intrusion alarm panel integration.

INTEVO provides an ideal platform for small to medium-size businesses, especially as they can grow the system to meet their organizational needs over time. INTEVO also supports the EntraPass web remote user platform and the EntraPass go mobile application right out of the box. It is also compatible with advanced EntraPass features such as VideoVault and Redundant Server. Seamless integration of the latest version of exacqVision video management software provides real-time video monitoring and playback. The inclusion of exacqVision allows INTEVO to offer faster and more intuitive video searching capabilities.

## INTEVO Compact features

- Plug and play capability
- Pre-configured for EntraPass go mobile app and EntraPass web remote user platform
- Connects up to 32 IP cameras
  - 16 x 1080p@30FPS
  - 32 x 1080p@15FPS
- Seamless integration of exacqVision video management software
- Windows 10 IoT
- 4 PoE ports with Dynamic Host Configuration Protocol (DHCP) for controllers and cameras
- Retain the latest version of EntraPass through auto-update on initial power-up



INTEVO Compact	
Model	Description
INTEVO-CMP-2TB	INTEVO Compact with 2TB hard drive, includes 2 IP camera channel licenses.
INTEVO Compact Licenses and Software Service Agreements	
Model	Description
INTEVO-IPCAM01	1 IP camera channel license
INTEVO-IPCAM04	4 IP camera channel licenses
INTEVO-IPCAM08	8 IP camera channel licenses
INTEVO-IPCAM16	16 IP camera channel licenses
INTEVO-CMP2SSA1Y	INTEVO Compact Gen 2, one-year Support Software Agreement (SSA). Adds one year to the current SSA expiry date of the INTEVO.
INTEVO-CMP2PSSA	INTEVO Compact Gen 2, Retroactive Support Software Agreement (SSA). Sets SSA to the current date regardless of SSA expiry date. Only required if SSA is expired for over one year.
INTEVO Compact Accessories	
Model	Description
INTEVO-CMP-PS2	External power supply (Compact Gen 2)
INTEVO-CMP-RM2	INTEVO Gen 2 Rack Mount Kit (Compact Gen 2 only)
INTEVO-KEYBOARD	USB wired keyboard
INTEVO-MOUSE	USB wired mouse

## INTEVO Advanced features

- Plug and play capability
- Pre-configured for EntraPass go mobile app and EntraPass web remote user platform
- Connects up to 64 IP cameras
  - 32 x 1080p@30FPS
  - 64 x 1080p@15FPS
- Seamless integration of exacqVision video management software
- Windows 10 IoT
- Eight Power over Ethernet (PoE) ports with DHCP – eight for all cameras, or four controllers or four cameras
- Retain the latest version of EntraPass through auto-update on initial power-up



INTEVO Advanced	
Model	Description
INTEVO-ADV-4TB	INTEVO Advanced with 4TB hard drive. Includes 4 IP camera channel licenses.
INTEVO Advanced Licenses and Software Service Agreements	
Model	Description
INTEVO-IPCAM01	1 IP camera channel license
INTEVO-IPCAM04	4 IP camera channel licenses
INTEVO-IPCAM08	8 IP camera channel licenses
INTEVO-IPCAM16	16 IP camera channel licenses
INTEVO-ADV2SSA1Y	INTEVO Advanced Gen 2, one-year Support Software Agreement (SSA). Adds one year to the current SSA expiry date of the INTEVO.
INTEVO-ADV2PSSA	INTEVO Advanced Gen 2, Retroactive Support Software Agreement (SSA). Sets SSA to the current date regardless of SSA expiry date. Only required if SSA is expired for more than one year.
INTEVO Advanced Accessories	
Model	Description
INTEVO-ADV-PS2	External power supply (Advanced Gen 2)
INTEVO-ADV-RM2	INTEVO Gen 2 Rack Mount Kit (Advanced Gen 2 only)
INTEVO-KEYBOARD	USB wired keyboard
INTEVO-MOUSE	USB wired mouse

# Integration flexibility with Connected Partner Program

The Connected Partner Program from Kantech gives third-party technology partners the opportunity to integrate with our security solutions. Through the Connected Partner Program, partners can connect to a Kantech EntraPass access control system, enabling a high-quality integration with every installation. The Connected Partner Program also gives our partners the functionality to upgrade integrations in sync with every upcoming release.

Tyco Security Solutions makes it easy for all partners to go through our self-certification process. Our partners can select the speed they want to design and develop the integration. Partners have the opportunity to validate the integration, ensure feature support, and optimize performance with Tyco's facilitation and support every step of the way.

Tyco offers private access to our fully equipped test labs and direct access to our best-in-class technical and engineering support team. Our dedicated support team will ensure that all your questions are answered for a seamless integration.

## Integration Types

- Our Application Program Interface (API) and sample source code provides partners with the tools they need to develop an integrated security solution
- The web service provides a RESTful API with the ability to interface with the application server database.

## Where to start

Complete an online application at <https://connectedpartnerprogram.partnerproducts.com> providing as much detail as possible to start the process.

Once the application is completed, the Connected Partner Program team will review the application and walk you through the next steps to move forward with the partnership.



**connected**  
PARTNER PROGRAM



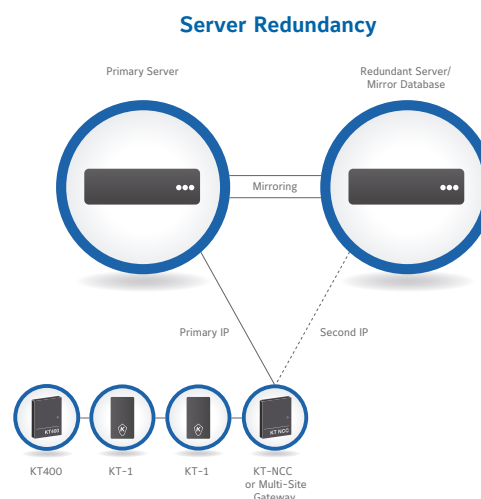
# Avoid unplanned Downtime with EntraPass Redundancy Architecture

## Server Redundancy and Database Mirroring

A redundancy server protects the EntraPass database against unexpected failures and is an option available with Corporate and Global Edition software. It features real-time data transfer, creating fully functional redundancy at a low cost. In the event of primary server failure, the mirror database automatically launches the redundancy server that supports all the features and functionality of the primary server. Best of all, the redundancy server is easy to implement and configure. Multiple redundant servers with a mirror database can be used to provide local redundancy in an enterprise environment.

### Features

- Easy to implement and configure
- Connect up to 128 redundant servers
- Fast and reliable data transfer
- Hardware and software redundancy
- Automatic switch over to redundant server
- Real-time data synch – achieve accurate and consistent data across the platform



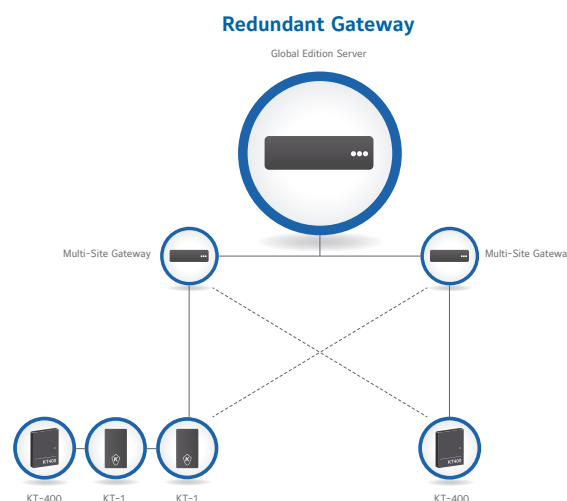
Enable server redundancy with EntraPass Corporate Edition	
Model	Description
E-COR-RDN	License for 1 Redundancy Server (v3.xx and higher)
Enable server redundancy with EntraPass Global Edition	
Model	Description
E-GLO-RDN	License for 1 Redundancy Server (v3.xx and higher)

# Gateway Redundancy–Secured Communication

Keeping your security system running is of the utmost importance. Critical information and functionality as well as the safety of people and the security of facilities and property are at stake when a security system is not functioning properly. In the event of a gateway failure, EntraPass will switch to the redundant gateway automatically when the connection to the primary gateway is lost so there is no system downtime.

### Features

- Up to two redundant gateways per gateway
- Customers can manually failover for a planned event
- Only available with Global Edition and Multi-Site Gateways



Redundancy Gateway License for Global Edition and Multi-Site Gateway	
Model	Description
E-GLO-CORCOMRDN	Redundancy Gateway license for Global Edition and Multi-site Gateway (per redundant gateway instance)

# Kantech Controllers

With a controller for every application, Kantech’s portfolio is designed to be easy to install and maintain. From the full-featured, Ethernet-ready KT-400, offering the highest levels of security and integration capabilities, to the easily deployed and affordable standalone KT-1, Kantech’s door controller family provides users with a wide range of scalable options.



	KT-1	KT-300	KT-400
Number of Online Doors	1	2	4
ASSA ABLOY™ Aperio Wireless Doors	8	x	8
Encrypted Communication over IP	✓	x	✓
Serial Communication	RS-485	RS-232 and RS-485	RS-485
Power over Ethernet (PoE+)	✓	x	✓
Power +12V DC Battery Backup	✓	✓	✓
Number of Cards in Offline Mode	100k	8K/56k	100k
Events in Offline Mode	20k	18k	20k
Inputs and Output Expansion Boards	✓	✓	✓
Direct DSC PowerSeries Neo Integration	✓	x	✓
Standalone Mode, Embedded Web Server	✓	x	✓

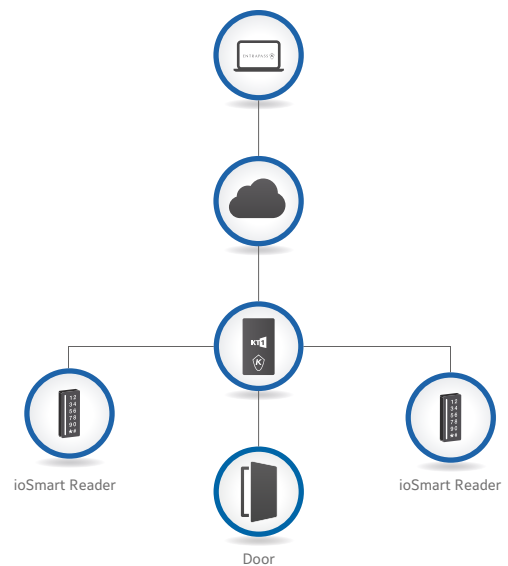
Controllers

# Kantech Standalone Controllers

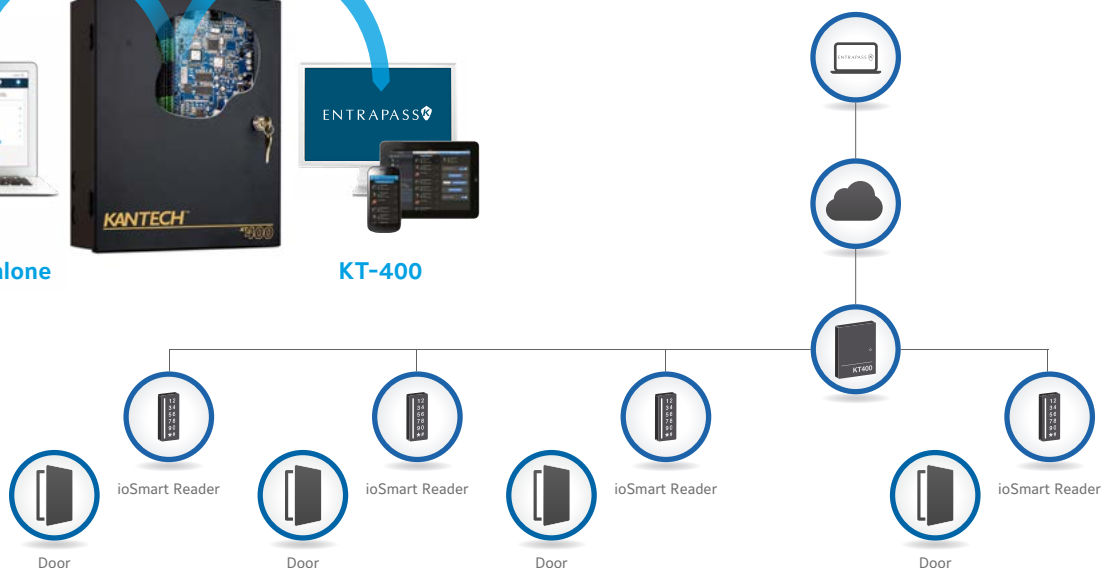
Kantech's KT-controllers can also operate in Standalone Mode. This gives you the option to control and manage your controllers via a simple, intuitive, web-based software program. This lowers the total cost of the access control system, and eliminates the need for customers to purchase and maintain dedicated EntraPass security management software and workstations.



## KT-1 Standalone



## KT-400 Standalone



# KT-1 One-Door Controller

## Single Door Controller

The KT-1 Ethernet-ready one-door controller supports two readers (entry and exit) and can be configured in two user-friendly operating modes. KT-1's Standalone Mode offers basic one-door security using a simple web browser without the need to connect to a host system. Alternatively, KT-1 can be used with the powerful EntraPass security management software to provide more advanced and fully integrated access control features.

## One-Touch Setup

With its elegant design and innovative single button enrollment, KT-1 offers installers the ultimate experience in access control installation. Simply provide an IP connection, push the touch-sensitive button and you are done.

## Power over Ethernet (PoE)

KT-1 has flexible power input including support for Power over Ethernet and PoE+ technology. Using a single Ethernet cable, the KT-1 controller connects directly from an Ethernet PoE injector to the EntraPass system. This eliminates the need for a local mains power supply at the door.

## Web-based Software Solution

Ideal for small sites that only need basic door security, the KT-1 single-door IP controller features an embedded web server that enables it to operate in Standalone Mode – meaning no EntraPass software is required. Intuitive and responsive web-based software enables you to simply manage and configure your single-door security from anywhere, using a desktop or mobile device.

KT-1	
Model	Description
KT-1	Ethernet-ready, one-door controller, single-gang mount
KT-1-M	Ethernet-ready, one-door controller (KT-1-PCB) and metal cabinet (KT-1-CAB-M)
KT-1-PCB	Ethernet-ready, one-door controller for metal cabinet mount (Compatible with KT-1-CAB-M, not included)
KT-1 Accessories	
Model	Description
KT-1-CVR	Black plastic replacement cover, fits KT-1 and KT-1-PCB
KT-1-CAB-M	Black metal cabinet; fits KT-1-PCB (H x W x D) 29.9 x 28.8 x 7.7 cm (11.75 x 11.4 x 3 in)
KT-PS4085	Power supply for KT-1, 12 VDC – 1.5 A. Requires a 16.5 VAC 40 VA transformer and a rechargeable battery, 12V (7Ah).
KT-PTC1640CG	KT-1 transformer, plug-in, 110 VAC/16 VAC (40 VA), CSA approved

\*Please see page 33 for compatible expansion modules.

## Easy and flexible installation

The KT-1 controller features a removable terminal clip and is extremely simple to install. Flexible cabling and system architecture using an Ethernet or serial RS-485 port from controller to controller.

## Features

- Supports two readers (entry and exit)
- Single capacitive touch button for fast controller enrollment
- Flexible architecture with serial and Ethernet connectivity
- Highly secure 128-bit AES encryption
- Interchangeable connections for easy install or replacement
- Flexible power input – PoE, PoE+, or 12 VDC
- Choose from single-gang mount (KT-1), or cabinet mount (KT-1-PCB) installation options
- DSC PowerSeries Neo panel-to-panel intrusion integration

## Standalone Mode Parameters

Features	Description
Cardholders	2000
Events	60,000 (Offline Mode)
Operators	2 (Installer, Operator)
Schedules	20 (5 intervals)
Holidays	25
Action Scheduler	100
Browsers	Safari®, Google Chrome®, Mozilla Firefox®, Internet Explorer®, Microsoft Edge®
Integrations	Basic intrusion via relays
Upgrade Path	EntraPass/hatrix
Languages	English, French, Spanish, Italian



# KT-300 Two-Reader Controller

## Two-Door Controller

The KT-300 door controller supports up to two readers, installed on either a single door to monitor both entry and exit or on two separate doors. It provides connections for all peripheral devices necessary for a complete access control system and can link with other door controllers to give you control over thousands of doors. Offline mode protects against power or system failures where the system stores cardholder and event data – this information is automatically transmitted back to the EntraPass system once the network connection is restored.

## Connectivity

With integral built-in Combus communication expansion, relay, input and output modules can be added to connect HVAC systems, elevators, motion detectors, and other devices.

## Features

- Supports two readers and two doors
- Ready to go, no dual in-line package (DIP) switches or jumpers to set
- Serial connectivity
- Provides 5V and 12V reader power
- Self-resetting PTC power outputs individually protected against short circuits
- Choice of 128K or 512K memory capacities



KT-300	
Model	Description
KT-300/128K	KT-300 two-door controller, 128KB memory, accessory kit (KT-300-ACC), metal cabinet (KT-300CAB) with lock (KT-LOCK)
KT-300/512K	KT-300 two-door controller, 512KB memory, accessory kit (KT-300-ACC), metal cabinet (KT-300CAB) with lock (KT-LOCK)
KT-300PCB128	KT-300 two-door controller PCB only, 128KB memory, accessory kit (KT-300-ACC)
KT-300PCB512	KT-300 two-door controller PCB only, 512KB memory, accessory kit (KT-300-ACC)
KT-300 Expansion Modules	
Model	Description
KT-PC4108	8-zone programmable input expansion module
KT-PC4204	4-relay output and Combus power supply module
KT-PC4216	16-zone programmable output expansion module
KT-300 Accessories	
Model	Description
KT-300-ACC	KT-300 accessory kit, includes: two 1.0K ohm, ten 5.6K ohms, two 120 ohms end-of-line resistors, PCB standoff, lock hole cover, ground wire, and screwdriver
KT-RM1	External isolation relay, single pole, double through Single Pole Double Throw (SPDT) for output RL1/RL2
KT3-LCD	LCD time and date display
KT-300CAB	Black metal cabinet with lock (KT-LOCK)
KT-4051CAB	Black metal cabinet for KT-300 expansion modules
KT-LOCK	Lock for KT-300-CAB and KT-4051-CAB, metal cabinets, 2 keys
KT-300FLASH	Replacement firmware
KT-TAMPER	Tamper switch for KT-300-CAB and KT-4051CAB metal cabinets

# KT-400 Four-Door Controller

## Four-Door Controller

The KT-400 is an Ethernet-ready, four-door controller that provides 128-bit AES encrypted communication with the EntraPass security management software. It is a highly secure solution for any business that is conscious of security. The KT-400 can easily be integrated into an existing EntraPass system with other Kantech controllers (KT-1 and KT-300) or can provide the foundation for a brand new security installation.

## KT-400 Four-Door Controller with Standalone Mode

The KT-400 single-door IP controller is perfect for compact sites that may only require simple door security. The controller uses an embedded web server to function in Standalone Mode so that no EntraPass software is needed. Our easy-to-use, web-based software lets you administer and organize your single-door security remotely, using a desktop or mobile device.

### Features

- Supports four readers and four doors
- Supports eight readers and four doors using ioProx Extended Secure Format (XSF) readers
- Flexible architecture with Serial and Ethernet connectivity
- Highly secure 128-bit AES encryption
- 100,000 cards and 20,000 stored events in offline mode
- 256 outputs (four onboard) provide scalability
- DSC PowerSeries Neo panel-to-panel intrusion integration
- Double and triple swipe card at reader to activate relay, arm alarm system, lock/unlock

## Standalone Mode Parameters

Features	Description
Cardholders	2000
Events	60,000 (Offline mode)
Operators	2 (Installer, Operator)
Schedules	20 (5 intervals)
Holidays	25
Action Scheduler	100
Browsers	Safari®, Google Chrome®, Mozilla Firefox®, Internet Explorer®, Microsoft Edge®
Integrations	Basic intrusion via relays
Upgrade Path	EntraPass/hatatrix
Languages	English, French, Spanish, Italian



KT-400	
Model	Description
KT-400	KT-400 PCB, accessory kit and metal cabinet with lock and keys
KT-400-PCB	KT-400 PCB and accessory kit
KT-400 Accessories	
Model	Description
KT-400-ACC	Accessory Kit: resistors (4x 1K Ω, 32x 5.6K Ω), ground wire, battery connector and screwdriver
KT-400-CAB	Black metal cabinet with lock and keys
KT-MOD-CAB	Cabinet for up to 6 expansion modules, including lock, keys and 92 cm (36 in) Serial Peripheral Interface (SPI) cable
KT-TAMPER	Tamper switch
KT-LOCK	Cabinet lock and 2 keys
KT-400-CON	Removable terminal block
KT-3LED-PLATE	Alarm (3 LED) indicator
TR1675	Wire-in transformer, 110 VAC/16.5 VAC (7 VA), UL approved
KT-BATT-12	Gel cell battery, 12 V, 7 Ah
KT-BATT-1212	Gel cell battery, 12 V, 12 Ah

\*Please see page 33 for compatible expansion modules.

# Access Control Cable Reference

This table lists a wide range of cables for security and access control applications, including security control panels, junction boxes, door control, lock power systems, Request-to-exit (REX), and card reader systems. These cables provide fast and simplified security installations.

Model	Max Length	Beleden Ref	Alpha Ref	Description
Readers and Keypads				
ioSmart Readers KT-MUL and KT-SG Versions (RS-485 or Wiegand)	150 m (500 ft)	8742	1304C	3 twisted pairs, solid, #22AWG, unshielded
ioSmart Readers KT-MUL and KT-SG Versions (RS-485 or Wiegand)	150 m (500 ft)			UTP CAT 5E (1 pair for 12vdc+ and 1 pair for the 12dvc-)
ioProx Readers P225, P225KP, P325 and P325KP	300 m (1000 ft)	8742	1304C	3 twisted pairs, solid, #22AWG, unshielded
P600 ioProx Reader	150 m (500 ft)	5304UE	N/A	6 wire, stranded, #18AWG, unshielded
Multi-Technology Readers P345MTR and P345KPMTR	150 m (500 ft)	5304UE	N/A	6 wire, stranded, #18AWG, unshielded
ioProx Receiver and Transmitters	150 m (500 ft)	9553	6428	3 twisted pairs, #18AWG, unshielded
Polaris-2 Readers	150 m (500 ft)	9554	6429	4 pairs, stranded, #18AWG, shielded (foil), drain wire
ShadowProx and Wiegand Readers	150 m (500 ft)	9553	6428	3 pairs, stranded, #18AWG, shielded (foil), drain wire
HID Readers	150 m (500 ft)	9553	6428	3 pairs, stranded, #18AWG, shielded (foil), drain wire
Bar Code Readers	150 m (500 ft)	9553	6428	3 pairs, stranded, #18AWG, shielded (foil), drain wire
KP-2500, ES-KTP/103SN	150 m (500 ft)	8466	1898/12C	12 conductors, stranded, #18AWG, unshielded
Auxiliary devices				
KT-1 N/A	600 m (2,000 ft)	9794	1204	4 conductors, solid, #22AWG, unshielded
KT-100 Inputs (zones 1-4)				
KT-200 Inputs (zones 1-16)				
KT-300 Inputs (zones 1-8)				
T.Rex Request to Exit Detector				
PB-EXIT Control Button				
Serial Peripheral Interface (SPI)				
KT-MOD-INP16, KT-MOD-OUT16, KT-MOD-REL8	SPI cable 41 cm (16 in) for expansion modules, with connector at one end. Optional 92 cm (36 in) SPI cable with connector at one end is also available.			
Bus and Communications				
RS-485 Bus from VC-485/USB-485 to KT-1/KT-100/200/300/400/ KTES to KT-1/KT-100/200/300	1,1 km (4,000 ft)	1227A1	N/A	2 twisted pairs, #24AWG, unshielded, Ethernet Category 3 cable
RS-485 Bus, from KT-NCC to KT-1/KT-100/200/300/400 to KT-1/KT-100/200/300/400	1,1 km (4,000 ft)	1227A1	N/A	2 twisted pairs, #24AWG, unshielded, Ethernet Category 3 cable
RS-232 from EntraPass System to KT-200/300/400	30 m (100 ft)	N/A	N/A	6 conductors, #24AWG, stranded flat telephone cable
Power and Grounding System				
AC Transformers to Kantech Products	8 m (25 ft)	9571	6501	2 conductors, solid, #18AWG, unshielded
Door Lock Power from KT-1/KT-100/200/300/400	150 m (500 ft)	9571	6501	2 conductors, solid, #18AWG, unshielded
KT-1/KT-100/200/300/400 and KT-NCC Grounding	8 m (25 ft)	N/A	N/A	1 conductor, solid, #18AWG



# Kantech Telephone Entry System (KTES)

## Telephone Entry System

The KTES is an ideal entry system for small, medium, and large sites with an existing access control system, or applications that require telephone entry access only. The system provides visitor access control to apartment buildings, gated communities, condominiums, office buildings, and industrial sites. A tenant communicates directly with a visitor using the KTES and can grant or deny admittance directly from a telephone land line or cellular phone with the touch of a button. The KTES is simple and easy to install, can co-exist with Kantech controllers, and can be remotely managed using EntraPass software.

## Features

- Standalone or integrates with an access control system
- Convenient remote programming and management with EntraPass security management software
- Electronic directory with a capacity of up to 3000 tenants
- Four-line, 20-character backlit LCD, vandal- and weather-resistant stainless steel housing
- Onboard 128-bit encrypted, protected IP communication with EntraPass



KTES	
Model	Description
KTES-US	KTES with standard 250 tenant capacity, KTES EntraPass Software, 110 V/ 16 V/UL plug-in transformer, postal lock, and accessory kit. (USA only)
KTES-CDN	KTES with standard 250 tenant capacity, KTES EntraPass Software, 110 V/ 16 V/CSA plug-in transformer, postal lock, and accessory kit. (Canada only)
No Phone Bill System	
Model	Description
KTES-5048MC	Main controller, for up to 48 lines maximum
KTES-5000MC	Main controller, for up to 1152 lines maximum; requires an auxiliary relay cabinet (KTES-5000AC)
KTES-5000AC	Auxiliary relay cabinet for up to 96 lines per cabinet; compatible with the main controller (KTES-5000MC)
KTES-5000RB	Line card for 12 tenants
KTES-5000IC	CA71A/RJ71C interconnecting cable
Accessories and Options	
Model	Description
KTES-FBOX	Enclosure including black trim ring used for flush mounting KTES
KTES-HEAT	Cold weather heater kit for installations where temperature is below 0°C (32°F)
KTES-INDEX-F	LED illuminated directory index paper
KTES-INDEX-R	Trim ring for directory index paper. Used in flush mount installation of KTES.
KTES-MPLATE	Mounting plate for goose-neck installation
E-KTES-3000	Option to increase capacity to 3000 tenants
DU-MODEM-HOS	Required at host computer for dial-up
KTES-POSTAL	Postal lock bracket with switch for KTES-US/CDN unit
KTES-PS-NA	Power supply 100V - 240 VAC IN / 19 VDC, 3.15 Amps OUT and AC power cord, 3-pin model. Compatible with KTES-US and KTES-CDN
KTES-ACC-KIT	Accessory kit for KTES-US/CDN units

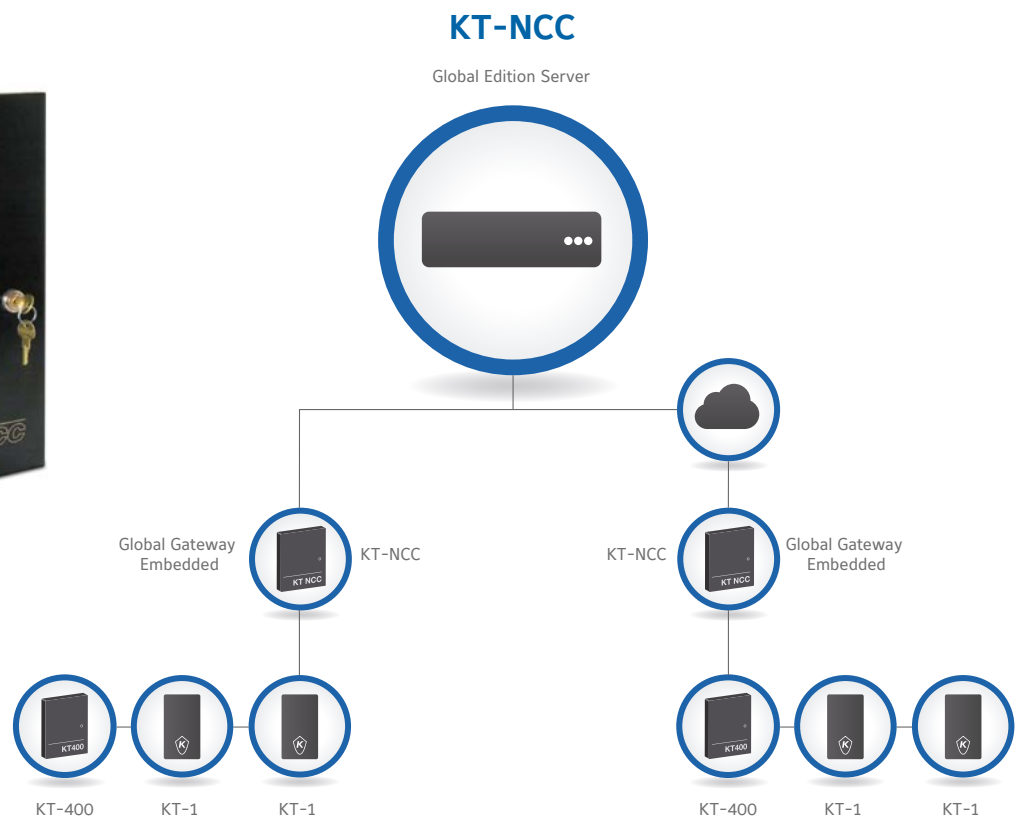
# Kantech Network Communication Controller (KT-NCC) Gateway

## EntraPass Global Gateway

The KT-NCC manages communication from the EntraPass Global Edition security management software to the door controllers. Instead of relying on a PC for communication between the controllers and server, the KT-NCC is a reliable wall-mounted, maintenance-free, Global Gateway. It also controls features and functions such as areas, alarm systems, global I/O, guard tours, and secondary access levels. It makes the access control system easier to manage, easier to expand, and much more reliable.

## Features

- Powerful panel architecture removes a layer of PCs to improve reliability and save on costs
- Supports any combination of up to 128 controllers (KT-1, KT-300, and KT-400)
- Embedded redundancy ensures critical data is always protected
- LEDs provide system status
- Easy battery backup provides alternative for Universal Power Supply (UPS)
- Supports global functionality such as anti-passback, guard tours, and alarm systems management is easier



KT-NCC Gateway	
Model	Description
KT-NCC	Kantech embedded network communication controller (NCC), which includes a black metal cabinet (KT-NCC-CAB) and accessory kit (KT-NCC-ACC) with lock (KT-LOCK) and tamper switch (KT-TAMPER), compatible with EntraPass Global Edition v3.18 and higher
KT-NCC-PCB	Embedded NCC PCB only, which includes an accessory kit (KT-NCC-ACC), battery cables and ground cable, plus hardware to affix the ground cable and the PCB
KT-NCC Accessories	
Model	Description
KT-NCC-ACC	Embedded NCC accessory kit includes RS-232 to VC-485 flat cable with RJ-12 male connectors and screwdriver
KT-NCC-CAB	Kantech NCC accessory, which includes a black metal cabinet with KT-LOCK and ground cable

# Network Communication Devices

Kantech offers network communication devices, including IP Link modules, converters, and modems – everything you need to secure entry and exit at your facilities.

## Features

- Powerful panel architecture removes a layer of PCs to improve reliability and save money
- Supports any combination of up to 128 controllers (KT-1, KT-300, and KT-400)

- Embedded redundancy ensures critical data is always protected
- LEDs provide system status
- Easy battery backup provides alternative for UPS
- Supports global functionality such as anti-passback and guard tours, plus alarms systems management is made easier

## IP Link

KT-IP is an RS-232 to TCP/IP interface that connects KT-300 door controllers to a network. It reduces cabling, and gives the controllers real-time access to information and enhanced functionality. The KT-IP is compatible with EntraPass software and uses 128-bit AES encryption to ensure secure communication. It also acts as a polling device to ensure the controllers communicate with EntraPass only as required, reducing network traffic.



IP Link	
Model	Description
KT-IP	IP Link to RS-232 module with enclosure including ground wire, plastic stand off, cable/connector. 12VDC
KT-IP-PCB	IP Link to RS-232 PCB module including ground wire, plastic stand off, cable/connector. 12VDC

## VC-485 RS-232 to RS-485 Converter

VC-485 is an RS-232 to RS-485 protocol converter that acts as the interface between a host computer's RS-232 port and up to 32 door controllers connected together on an RS-485 multi-drop network. The maximum length for a RS-485 data line is 1200 meters. Powered by 5 or 12 VDC, VC-485 converters may be connected back-to-back to act as a repeater on the data line.



VC-485	
Model	Description
VC-485	RS-232/RS-485 protocol converter which allows a connection to a daisy-chained set of Kantech KT-Series controllers from a serial port on the host PC. Max bus length 1.2 km. Observe cable type requirements.

## USB-485 USB to RS-485 Converter

The USB-485 unit is designed to connect to (and be powered by) the USB port of a host computer. It supplies the data at the required RS-485 communications protocol necessary for door controllers. Up to 32 door controllers can be connected together on an RS-485 multi-drop network. Installed between the host and the door controllers, the USB-485 permits a "daisy chain" configuration, which extends the maximum transmission distance to 1200 meters.



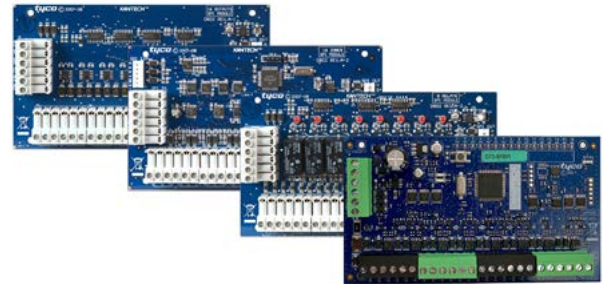
USB-485	
Model	Description
USB-485	"Transparent" USB/RS-485 protocol converter from a USB port on the host PC

# Input/Output Modules

The Kantech Input, Output, and Relay family of modules (INP16, OUT16, REL8, IO16) provides a flexible, cost-effective means to expand the Input/Output functionality of the KT-1 and KT-400 door controllers.

## Features

- Provides cost-effective expansion of Input and Output capacity
- Small, modular size requires minimal panel space
- Reduces length of sensor and control wiring (IO16)
- Dedicated tamper input included on each module
- 16 terminals for use as inputs/outputs or elevator control (IO16)
- 16 LED indicators offering visual status of each terminal enable quick diagnostics and troubleshooting (IO16)
- Total of 256 inputs and 256 outputs per KT controller (IO16)
- Compatible with KT-1 (IO16 only) and KT-400 door controllers
- Fully compatible with EntraPass security management software (IO16 v8.10 and higher)



Expansion modules	
Model	Description
KT-MOD-IO16	RS-485 Input/Output Module; compatible with KT-400 and KT-1 controllers
KT-MOD-INP16	16-zone input expansion module with 40 cm SPI cable (KT-MOD-SPI-16)
KT-MOD-OUT16	16-zone output expansion module with 40 cm SPI cable (KT-MOD-SPI-16)
KT-MOD-REL8	Eight-relay expansion module with SPI cable (KT-MOD-SPI-16)
Accessories	
Model	Description
KT-MOD-CAB	Cabinet for up to 6 expansion modules, including lock, keys and 92 cm (36 in) SPI cable
KT-1-CAB-M	Black metal cabinet; fits KT-1-PCB (H x W x D) 29.9 x 28.8 x 7.7 cm (11.75 x 11.4 x 3 in)
KT-400-CAB	Black metal cabinet with lock and keys
KT-MOD-SPI-16	16 in SPI cable
KT-MOD-SPI-36	36 in SPI cable

# Kantech Readers

Kantech offers a full range of single and multi-technology readers and card options to fit any access control requirements. With smart card, proximity, biometric, multi-technology wireless long-range options, Kantech readers feature intuitive design for ease of use and installation. The entire line of readers are fully compatible for use with Kantech door controllers as part of a complete access control system.

## ioSmart Smart Card and multi-technology readers

### ioSmart

Based on MIFARE® Plus EV1, Kantech's ioSmart Card Readers provide a high level of security by enabling end-to-end encryption between the credentials and the EntraPass access control software. The multi-technology readers also give customers an easy and powerful way to move from proximity cards to advanced smart card technology, whether they are using the popular Kantech ioProx solution or another proximity system.

### Versatile, Time-Saving Design

Unlike other solutions on the market that use restrictive, proprietary technology, ioSmart's open technology offers versatility. Based on MIFARE® Plus smart technology for readers, and MIFARE® Plus EV1 for credentials, ioSmart supports many different card formats, including HID® Prox. The reader can also be used with any access controller using the Wiegand protocol. To save installation time and money, ioSmart Smart Card Readers can be wired directly to standard door contacts and T.Rex devices. ioSmart Smart Card Readers are available in single-gang or mullion models and can be installed in indoor or outdoor applications.

### High Level of Security

ioSmart readers provide end-to-end AES 128-bit encryption between the ioSmart card and ioSmart reader when connected to KT-400 and KT-1 controllers over RS-485 and controllers to EntraPass software over IP.

### Intuitive User Experience

ioSmart Smart Card Readers include an intuitive LED status bar that clearly indicates various access conditions to the user. There are also models available with an integrated backlit capacitive keypad for two-factor authentication, combining contactless card presentation with a PIN.

### Future-Proof Technology

ioSmart Smart Card Readers are Bluetooth-ready and feature upgradeable field firmware, providing a solution that customers can rely on for long-term performance. Beyond access control, customers can use the ioSmart MIFARE® Plus EV1 card's additional unlocked sectors for third-party applications such as vending, cafeteria, bus/train, and other functions.

### Features

- End-to-end encryption for added security
- Cost-effective solution to transition from Prox to advanced smart technology
- Open technology provides versatility
- Capacitive touch keypad available
- Bluetooth-ready for future-proofing
- Unique design allows time-saving wiring to standard door contacts and T.Rex devices
- Mullion and single-gang models
- Available on KT-1 and newer KT-400 controllers

ioSmart readers	
Model	Description
KT-MUL-MT	ioSmart Smart Card Reader, multi-technology, mullion
KT-MUL-MT-KP	ioSmart Smart Card Reader, multi-technology, mullion with keypad
KT-MUL-SC	ioSmart Smart Card Reader, smart card only, mullion
KT-SG-MT	ioSmart Smart Card Reader, multi-technology, single-gang
KT-SG-MT-KP	ioSmart Smart Card Reader, multi-technology, single-gang with keypad
KT-SG-SC	ioSmart Smart Card Reader, smart card only, single-gang



## Specifications

	Mullion			Single-Gang		
Model	KT-MUL-MT-KP	KT-MUL-MT	KT-MUL-SC	KT-SG-MT-KP	KT-SG-MT	KT-SG-SC
RF Technologies	13.56 MHz 125 kHz	13.56 MHz 125 kHz	13.56 MHz	13.56 MHz 125 kHz	13.56 MHz 125 kHz	13.56 MHz
Power Consumption (mA) @ 12 VDC Peak/Average	200 mA /80 mA	100 mA /70 mA	100 mA /70 mA	200 mA/80 mA	100 mA /70 mA	100 mA /70 mA
Weight	110 g (0.24 lbs)	110 g (0.24 lbs)	105 g (0.23 lbs)	175 g (0.4 lbs)	170 g (0.37 lbs)	165 g (0.36 lbs)
Capacitive Touch Keypad with Backlighting	Yes	No	No	Yes	No	No
Typical Read Range 125 kHz ioProx ID-1 Credentials (Cards)	Up to 5.1 cm (2.0 in)			Up to 6.8 cm (2.7 in)		NA
Typical Read Range 13.56 MHz MIFARE® Plus EV1, Encrypted Sector, ID-1 Credentials (Cards)	Up to 3.8 cm (1.5 in)			Up to 4.3 cm (1.7 in)		
Mounting	Mullion			Single-Gang North America/Europe		
Dimensions (H x W x D)	115.8 x 44.6 x 24.7 mm 4.56 x 1.75 x 0.97 in			115.8 x 71.5 x 24.7 mm 4.56 x 2.81 x 0.97 in		
Supported Credentials 125 kHz	ioProx and HID		NA	ioProx and HID		NA
Supported Credentials 13.56 MHz	MIFARE® Plus EV1 and ISO/IEC 14443A and 14443B					
Supported Credentials BLE (Bluetooth Low Energy) 2.4 GHz	ioSmart mobile credentials and smart keys					
Wiring Terminal	6 screwless poles					
Tamper	Optical					
Wiegand Communication Formats	Kantech Smart card Security Format (SSF), Kantech XSF, 26-bit, 34-bit					
Sounder	Integrated					
AES-128 Security	From the ioSmart card to the reader. From the reader to the access control unit over RS-485. From the smartphone application to the reader.					
Output	RS-485 or BLE panel-less: 1 supervised open-drain, up to 750 mA					
Operating Temperature	Non-UL listed product: -40°C to +70°C (-40°F to +158°F) UL listed product: -35°C to +66°C (-31°F to +151°F)					
Operating Humidity	0 to 95% non-condensing					
LED Indicator	Multi-Color bar: Red, Green, Yellow, Blue, configurable					
Inputs in Wiegand Mode	LED and buzzer					
Inputs in RS-485	2 to 4, configurable					
Inputs in BLE Panelless	2 configurable					
Input Voltage	8.5 VDC to 16 VDC (provided by UL 294 or UL 603 listed, power limited power source)					
Housing	Polycarbonate, smoked black					
Flammability Rating	UL94 V-2					
Firmware	Fully upgradable using RS-485					
Ingress Protection Rating	IP55 (not verified by UL)					
Communication	RS-485 (AES 128-bit), Wiegand or BLE (AES 128-bit)					
Cabling	3 twisted pairs AWG 22 unshielded or CAT5, up to 150 m (500 ft)					
Warranty	Limited lifetime					
Certifications	FCC, IC, CE, UL 294, FIPS 197, RoHS, WEEE. For RS-485, NIST CAVP validation number AES 3667, key length 128.					
Compatible RS-485 Access Control Units	KT-400 (newer models without heatsinks only) and KT-1					

# ioSmart Cards and Fobs

## ioSmart Cards

Contactless smart cards offer advantages to both the organization issuing the card and the cardholder. A smart card provider can support multiple applications on a single card, consolidating an appropriate mix of technologies and supporting a variety of security policies for different situations. Applications such as logical access to computer networks, electronic payment, vending machines, and restaurant payments can be combined with physical access to offer a multi-application ID credential. Contactless smart card technology is based on ISO/IEC 14443 and ISO/IEC 15693 standards. Cards that comply with these standards are intelligent, read/write devices capable of storing different kinds of data, and operate at different ranges.

ioSmart cards are the new generation of the mainstream MIFARE® classic card, and offer enhanced security contactless smart card functionality. The ioSmart, an NXP MIFARE® EV1 Plus X technology, offers more flexibility to optimize speed and confidentiality. It offers a wide range of features, including proximity checks against relay attacks. MIFARE® EV1 Plus uses Advanced Encryption Standard (AES) for authentication, data integrity protection, and data encryption.



ioSmart Credentials	
Model	Description
MFP-2KDYE	MIFARE® Plus EV1 2K Printable Smart Card
MFP-2KDYE-COM	MIFARE® Plus EV1 2K Printable Smart Card. Composite, 40% Polyester / 60% PVC
MFP-2KSHL	MIFARE® Plus EV1 2K Shell Smart Card
MFP-2KKEY	MIFARE® Plus EV1 2K Keyfob
MT-2KDYE	Dual Tech Smart Card; MIFARE® Plus EV1 2K; 7-Byte UID; 125 kHz ioProx



# Multi-Technology Readers (Proximity and Smart Cards)

Kantech multi-technology readers offer a flexible approach for supporting a range of proximity and smart card technologies on the same access control system. It is an ideal solution for transitioning to secure smart cards over time. These multi-frequency, multi-modulation, and multi-protocol readers are also suitable for a mixed environment where smart and proximity cards are in use at the same building. This is a future-proof solution with firmware updates that will ensure today's readers are ready for tomorrow's card technologies.

**Features**

- Reads more than 12 different types of proximity card/smart card formats
- Secure card data transmission
- Future-proof solution
- Built-in tamper switch provides secure installation

**Compatible Card Formats:**

Kantech ioProx proximity  
HID KSF proximity  
HID 26-bit Wiegand  
HID 36-bit/37-bit Wiegand  
HID Corporate 1000  
Deister proximity  
MIFARE® serial number

MIFARE® sectors  
DESFire EV1 serial number  
ISO 14443A, 14443B, and  
15693 serial number  
iCLASS® serial number  
CASI-RUSCO® Prox Lite



Multi-Technology Readers	
Model	Description
P345MTR	Multi-Technology reader with ioProx support, smart card and proximity, up to 10.2 cm (4 in) read range depending on technology of card, single-gang, black



# ioProx Card Readers

ioProx readers easily meet the demands of any application. They are a secure and easy-to-install solution to manage and control access all the while ensuring the safety of people and property. Attractive, compact, weatherized, and vandal-resistant, these readers are suitable for installation in a variety of environments. Compatible with dual-encoded 26-bit Wiegand and Kantech XSF proximity cards, these readers seamlessly integrate with access control systems including Kantech door controllers, KTES, and EntraPass security management software.



ioProx Readers	
Model	Description
P225XSF	ioProx reader, XSF, mullion
P225W26	ioProx reader, 26-bit Wiegand, mullion
P225KPXSF	ioProx reader, XSF, mullion
P225KPW26	ioProx reader, 26-bit Wiegand, mullion
P325XSF	ioProx reader, XSF, single-gang
P325W26	ioProx reader, 26-bit Wiegand, single-gang
P325KPXSF	ioProx reader, XSF, single-gang
P325KPW26	ioProx reader, 26-bit Wiegand, single-gang
P600	ioProx reader, long range, XSF/ 26-bit Wiegand selectable

# ioProx Credentials

The ioProx card uses proven, reliable technology that seamlessly integrates with ioProx readers. ioProx cards are available in a variety of shapes and materials. These cards are flexibly designed and can be attached to a key ring, badge clip, lanyard, or any flat surface. Kantech XSF cards can be encoded with more than four billion unique codes.



ioProx Credentials	
Model	Description
P10SHL	ioProx card, XSF/ 26-bit Wiegand, standard (Min. Qty. 50, Increment Qty. 50)
P20DYE	ioProx card, XSF/ 26-bit Wiegand, printable (Min. Qty. 50, Increment Qty. 50)
P30DMG	ioProx card, XSF/ 26-bit Wiegand, high-coercivity magnetic stripe, printable (Min. Qty. 50, Increment Qty. 50)
P40KEY	ioProx keytag, XSF/ 26-bit Wiegand, (Min. Qty. 25, Increment Qty. 25)
P50TAG	ioProx self-adhesive round tag, XSF/ 26-bit Wiegand (Min. Qty. 50, Increment Qty. 50)

# Receivers and Wireless Transmitters

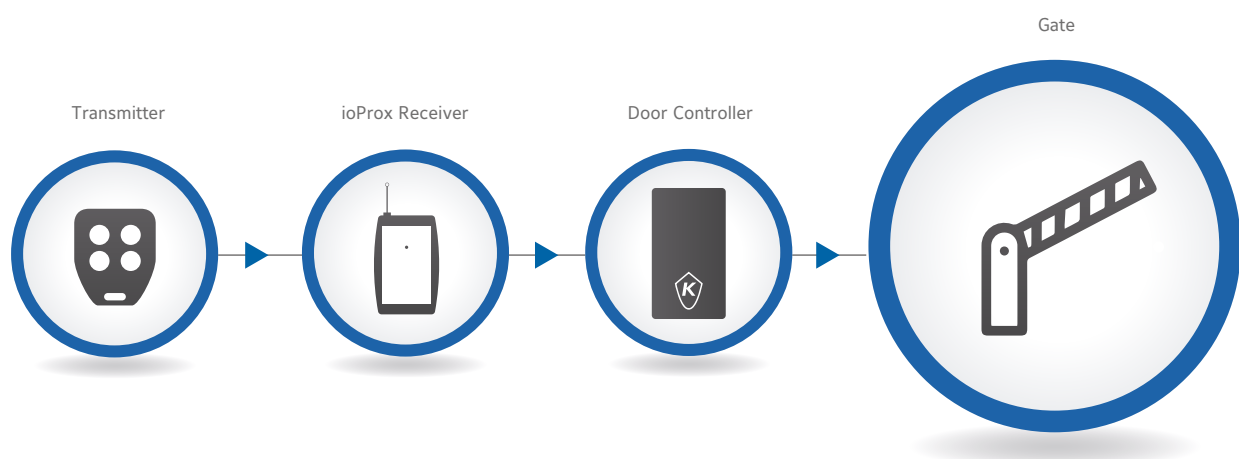
The ioProx Transmitter is ideal for long-range applications up to 45m (150 ft) – for example, opening parking gates. The transmitter is available with an optional integrated ioProx tag, which can be read by an ioProx card reader, making it an ideal solution to access both a parking facility and an office building without searching for multiple access cards. The ioProx transmitter uses radio frequency (RF) technology secured with encrypted coding. The ioProx Receiver is field selectable for either 26-bit Wiegand format or for Kantech XSF.

## Features

- Four-channel receiver can be matched to a button on the transmitter
- Long read range – up to 45 m (150 ft)
- Encrypted code ensures high level of security
- Two- or four-button transmitter with optional integrated ioProx tag
- Indoor/outdoor use



Receiver and Wireless Transmitter	
Model	Description
P700WLS	Four-channel receiver, standard whip antenna
P82WLS	Two-button transmitter
P82WLS-TAG	Two-button transmitter, integrated ioProx tag
P84WLS	Four-button transmitter
P84WLS-TAG	Four-button transmitter, integrated ioProx tag



# Starter and Expansion Kits

Choosing an access control system need not take hours sorting through hundreds of software, hardware, and reader offerings. Kantech's Access Control Kits include all the components you need to get up and running quickly and easily.

## Starter Kits

Kantech Starter Kits offer a comprehensive solution for growing businesses that are seeking an easy-to-use and highly reliable access control system. This all-inclusive kit provides everything you need to create a complete access control system. From the powerful EntraPass software to the KT-1, KT-300, and KT400 door controllers, and all peripherals in between, the Starter Kit ensures that nothing is left to chance.



## Expansion Kits

Kantech Expansion Kits offer a comprehensive and easy-to-install solution for small to medium-size businesses to expand their access control system in one-door (KT-1), two-door (KT-300), or four-door increments (KT-400). The expansion kits are compatible with EntraPass Special Edition, Corporate Edition, and Global Edition.



Starter Kits				
Model	Security Software	Controller	Readers	Other Items
SK-CE-400-SCM	EntraPass Corporate Edition	KT-400	KT-MUL-SC (3), KT-MUL-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (U.S. and Canada)
SK-CE-400-SCSG	EntraPass Corporate Edition	KT-400	KT-SG-SC (3), KT-SG-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (U.S. and Canada)
SK-SE-400-SCM	EntraPass Special Edition	KT-400	KT-MUL-SC (3), KT-MUL-MT-KP (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1), MFP-2KSHL smart cards (5) (U.S. and Canada)
SK-CE-1M-SCM	EntraPass Corporate Edition	KT-1-M	KT-MUL-SC (1)	MFP-2KSHL smart cards (5), KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
SK-SE-1M-SCM-C	EntraPass Special Edition	KT-1-M	KT-MUL-SC (1)	MFP-2KSHL smart cards (5), KT-PTC1640CG 120V / 16 VAC 40 VA transformer (Canada only), KTPS4085 12 VDC power supply, KT-BATT-12 battery
SK-SE-1M-SCM	EntraPass Special Edition	KT-1-M	KT-MUL-SC (1)	MFP-2KSHL smart cards (5), JT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
SK-CE-1M-SCM-C	EntraPass Corporate Edition	KT-1-M	KT-MUL-SC (1)	MFP-2KSHL smart cards (5), KT-PTC1640CG 120V / 16 VAC 40 VA transformer (Canada only), KTPS4085 12 VDC power supply, KT-BATT-12 battery
SK-CE-1-RDR	EntraPass Corporate Edition	KT-1	P225XSF (1)	P40KEY keyfob (5)
SK-CE-1M-RDR	EntraPass Corporate Edition	KT-1-M	P225XSF (1)	P40KEY keyfob (5), KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
SK-SE-1-RDR	EntraPass Special Edition	KT-1	P225XSF (1)	P40KEY keyfob (5)
SK-SE-1M-RDR	EntraPass Special Edition	KT-1-M	P225XSF (1)	P40KEY keyfob (5), KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
SK-CE402	EntraPass Corporate Edition	KT-400	P225XSF (3), P225KPXS (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1) and P40KEY keyfob (5). (U.S. and Canada)
SK-CE403	EntraPass Corporate Edition	KT-400	P325XSF (3), P325KPXS (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1) and P40KEY keyfob (5). (U.S. and Canada)
SK-SE402	EntraPass Special Edition	KT-400	P225XSF (3), P225KPXS (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1) and P40KEY keyfob (5). (U.S. and Canada)
SK-SE403	EntraPass Special Edition	KT-400	P325XSF (3), P325KPXS (1)	USB-485 converter (1), TR1675 transformer (1), KT-BATT-12 battery (1) and P40KEY keyfob (5). (U.S. and Canada)
SK-SE302	EntraPass Special Edition	KT-300	P225XSF (2)	USB-485 converter (1), TR1640P/UL transformer (1), KT-BATT-12 battery (1), KT-RM1 relay (2) and P40KEY (5). (U.S. Only)

Expansion Kits			
Model	Controller	Readers	Other Items
EK-400-MTM	KT-400	KT-MUL-MT (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (U.S. and Canada)
EK-400-MTSG	KT-400	KT-SG-MT (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (U.S. and Canada)
EK-1M-MTSG	KT-1-M	KT-SG-MT (1)	KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1M-MTSG-C	KT-1-M	KT-SG-MT (1)	KT-PTC1640CG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1M-MTM	KT-1-M	KT-MUL-MT (1)	KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1M-MTM-C	KT-1-M	KT-MUL-MT (1)	KT-PTC1640CG 120V / 16 VAC 40 VA transformer (Canada only), KTPS485 12 VDC power supply, KT-BATT-12 battery
EK-1-MTM	KT-1	KT-MUL-MT (1)	n/a
EK-1-MTM-C	KT-1	KT-MUL-MT (1)	n/a
EK-400-SCM	KT-400	KT-MUL-SC (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (U.S. and Canada)
EK-400-SCSG	KT-400	KT-SG-SC (4)	TR1675 transformer (1), KT-BATT-12 battery (1) (U.S. and Canada)
EK-1M-SCM	KT-1-M	KT-MUL-SC (1)	KT-PTC1640UG transformer 120V / 16 VAC 40 VA, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1M-SCM-C	KT-1-M	KT-MUL-SC (1)	KT-PTC1640CG transformer 120V / 16 VAC 40 VA (Canada only), KTPS485 12 VDC power supply, KT-BATT-12 battery
EK-1M-SCSG	KT-1-M	KT-SG-SC (1)	KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1M-SCSG-C	KT-1-M	KT-SG-SC (1)	KT-PTC1640CG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1-RDR	KT-1	P225XSF (1)	n/a
EK-1M-RDR	KT-1-M	P225XSF (1)	KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-1M	KT-1-M	n/a	KT-PTC1640UG 120V / 16 VAC 40 VA transformer, KT-PS4085 12 VDC power supply, KT-BATT-12 battery
EK-400	KT-400	n/a	TR1675 transformer (1) and KT-BATT-12 battery (1) (U.S. and Canada)
EK-402	KT-400	P225XSF (4)	TR1675 transformer (1) and KT-BATT-12 battery (1) (U.S. and Canada)
EK-403	KT-400	P325XSF (4)	TR1675 transformer (1) and KT-BATT-12 battery (1) (U.S. and Canada)
EK-302	KT-300	P225XSF (2)	TR1640P/UL transformer (1), KT-BATT-12 battery (1) and KT-RM1 relay (2) (U.S. Only)
EK-IP302	KT-300	P225XSF (2)	VC-485 converter (1), TR1640P/UL transformer (1), KT-BATT-12 battery (1), KT-RM1 relay (2) and KT-IP communication device (1) (U.S. Only)
EK-IP300	KT-300	n/a	VC-485 converter (1), TR1640P/UL transformer (1), KT-BATT-12 battery (1), KT-RM1 relay (2) and KT-IP communication device (1) (U.S. Only)

Multi-Door Controller Kits			
Model	Controller	Readers	Other Items
EK-4D-8	KT-300-PCB (2)	n/a	4-Door Kit, 8-Door Enclosure Multi-Door Controller Kit includes: KT-CAB3000LDR 28" enclosure with door cover (1), KT-MP300 mounting plates (2), KT-BB100/BB101 battery brackets (2), KT-300-ACC accessory kits (2), TR1640P/UL transformers (2), KT-BATT-12 rechargeable batteries (2), KT-RM1 relays (4), KT-TAMPER tamper switch (1), KT-LOCK lock and keys (1). UL certified.
EK-4D-12	KT-300-PCB (2)	n/a	4-Door Kit, 12-Door Enclosure Multi-Door Controller Kit includes: KT-CAB4000LDR 42" enclosure with door cover (1), KT-MP300 mounting plates (2), KT-BB100/BB101 battery brackets (2), KT-300-ACC accessory kits (2), TR1640P/UL transformers (2), KT-BATT-12 rechargeable batteries (2), KT-RM1 relays (4), KT-TAMPER tamper switch (1), KT-LOCK lock and keys (1). UL certified kit.
EK-4D-ADD	KT-300-PCB (2)	n/a	Multi-Door Expansion Kit includes: KT-MP300 mounting plates (2), KT-BB100/BB101 battery plates (2), KT-300-ACC accessory kits (2), KT-BATT-12 rechargeable batteries (2), KT-RM1 relays (4). UL certified.
EK-4D-8CDN	KT-300PCB128 (2)	n/a	KT-CAB3000LDR 28" enclosure with door cover (1), KT-MP300 mounting plates (2), KT-BB100/BB101 battery brackets (2), KT-300-ACC accessory kits (2), TR1640P/CSA transformers (2), KT-BATT-12 rechargeable batteries (2), KT-RM1 relays (4), KT-TAMPER tamper switch (1), KT-LOCK lock and keys (1).
EK-4D-12CDN	KT-300PCB128 (2)	n/a	KT-CAB4000LDR 42" enclosure with door cover (1), KT-MP300 mounting plates (2), KT-BB100/BB101 battery brackets (2), KT-300-ACC accessory kits (2), TR1640P/CSA transformers (2), KT-BATT-12 rechargeable batteries (2), KT-RM1 relays (4), KT-TAMPER tamper switch (1), KT-LOCK lock and keys (1).
EK-4D-ADDCDN	KT-300PCB128 (2)	n/a	KT-MP300 mounting plates (2), KT-BB100/BB101 battery plates (2), KT-300-ACC accessory kits (2), TR1640P/CSA transformers (2), KT-BATT-12 rechargeable batteries (2), KT-RM1 relays (4).

# Request-to-Exit (REX) Detector

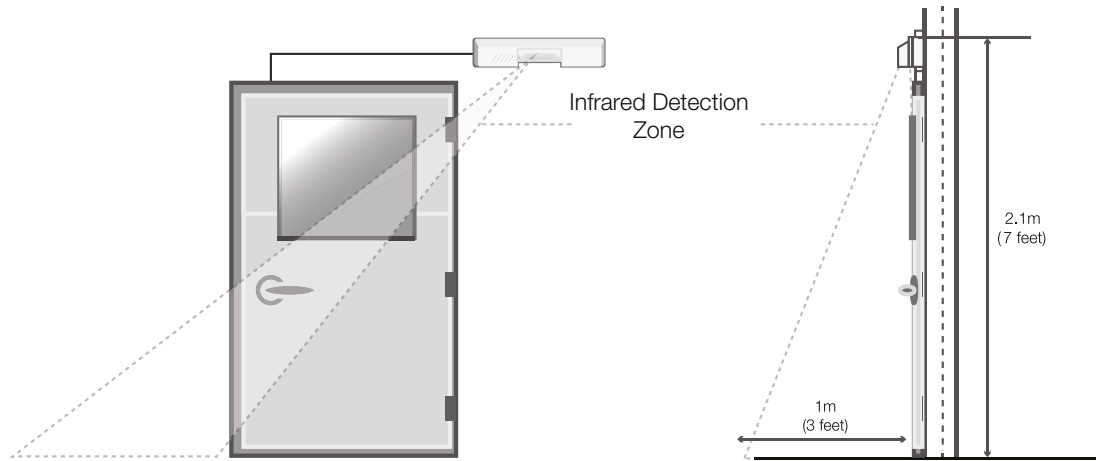
The T.Rex is a sophisticated and cost-effective REX device for all access control applications. It is also a useful alternative to installing an exit button. Outstanding innovations such as X-Y Targeting and Digital Signal Processing (DSP) implementation make the T.Rex one of the fastest and most reliable exit detectors on the market.

Features

- Zone of detection easily adjustable with pinpoint accuracy
- X-Y Targeting targets a specific area of detection
- Unlocks or shunts door automatically
- Hands-free, no buttons to push
- Integrated 90 dB local door alarm sounder independently controlled by access panel
- Infrared detection coupled with DSP prevents false "Door Forced Open" alarms



T.Rex Exit Detector	
Model	Description
T.REX-LT	T.Rex Request-to-Exit Detector with tamper and timer, white
T.REX-LT-NL	T.Rex Request-to-Exit Detector with tamper and timer, white (unbranded)
TREX-LT2	T.Rex Request-to-Exit Detector with tamper, timer and 2 relays, white
T.REX-LT2-NL	T.Rex Request-to-Exit Detector with tamper, timer and 2 relays, white (unbranded)
T.REX-XL	T.Rex Request-to-Exit Detector with tamper, piezoelectric buzzer and timer, white
T.REX-XL-NL	T.Rex Request-to-Exit Detector with tamper, piezoelectric buzzer and timer, white (unbranded)
T.REX-XLBLK	T.Rex Request-to-Exit Detector with tamper, piezoelectric buzzer and timer, black
TREX-XL2	T.Rex Request-to-Exit Detector with tamper, piezoelectric buzzer, timer and 2 relays, white
T.REX-XL2-NL	T.Rex Request-to-Exit Detector with tamper, piezoelectric buzzer, timer and 2 relays, white (unbranded)
T.REX-XL2BLK	T.Rex Request-to-Exit Detector with tamper, piezoelectric buzzer, timer and 2 relays, black
T.REX-PLATE	Single-gang box mounting back plate, white



# Push-button Exit Detector

PB-EXIT is a spring-loaded, momentary exit button mounted on a stainless steel plate. The single pole, double through (SPDT) contact switch is activated when the button is depressed, and returns to its original state when the button is released. This button can be used for momentary release of fail-safe or fail-secure electric locks. It can also be used to input an exit signal to the access control system.

**Important**

In some areas, local building or fire safety regulations may limit the use of exit buttons and it is recommended to consult the relevant authorities and/or get approval prior to installation.

**Features**

- Exit signal dispatch to access control system
- Mounts on a single-gang box



Push-button Exit Detector	
Model	Description
PB-EXIT	Push-button exit control, large green button

# Card Printing Solutions

Kantech's badging printers produce colorful, durable photo cards. Our printers are simple to use and virtually maintenance-free. We have bundled our printers together with a high-definition portable webcam, ribbon cartridge, and cleaning supplies to form a complete badging kit and to keep your printer running like new. Our solutions easily adapt to evolving security and printing needs.

## DTC4250e

The DTC4250e combines versatility with simplicity to easily print what you need. It is ideal for flexible, easy, and reliable color printing and encoding. It can be accommodated in office environments where space is an issue because of its sleek design with changeable footprint.



DTC4250e Card Printers	
Model	Description
FA-52000	DTC4250e single-sided printer, USB 2.0 and Ethernet with internal print server, 100 card input hopper
FA-52100	DTC4250e dual-sided printer, USB 2.0 and Ethernet with internal print server, 100 card input hopper

## DTC4500e

The DTC4500e card printer/encoder is the professional-grade printer that withstands the daily demands of high-volume printing. This printer delivers additional security features such as card encoding, and is the ideal printer solution for medium-to-large sized organizations.



DTC4500e Card Printers	
Model	Description
FA-55520	DTC4500e dual-sided printer, USB 2.0 and Ethernet with internal print server, 200 card dual-input hopper, lamination module, bar code printer

## HDP5000

HDP5000 produces cards with superior print quality, higher reliability/durability, and greater security. Taken together, these lower your total cost of ownership and make high-definition printing available to practically any business. The printer uses a cartridge-based card handling system for faster reloading/card stock switching.



HDP5000 Card Printers	
Model	Description
FA-89600	Fargo HDP5000 single-sided printer, USB 2.0 and Ethernet with internal print server, 100 card input hopper
FA-89640	Fargo HDP5000 dual-sided printer, USB 2.0 and Ethernet with internal print server, 100 card input hopper

## Badging Solutions Accessoriess

Ribbon Cartridges	
Model	Description
FA-45100	For DTC4250e printer. YMCKO print cartridge with cleaning roller, produces 250 imprints
FA-45110	For DTC4250e printer. YMCKOK print cartridge with cleaning roller, produces 200 imprints
FA-45210	For DTC4250e printer. YMCKOK print cartridge with cleaning roller, produces 500 imprints
FA-84052	For HDP5000 printer. YMCKK, produces 500 imprints. Must use with FA-84053 clear or FA-84054 holographic retransfer film
FA-84057	For HDP5000 printer. YMCKI, produces 500 imprints. Must use with FA-84053 clear or FA-84054 holographic retransfer film
FA-44230	For DTC400e printer. YMCKO print cartridge with cleaning roller: full-color ribbon with resin black and clear overlay panel, produces 250 imprints
FA-44240	For DTC400e printer. YMCKO print cartridge with cleaning roller: full-color ribbon with two resin black and clear overlay panel, produces 200 imprints
FA-86201	For DTC550-LC printer. YMCKOK print cartridge: full-color ribbon with two resin black panels and clear overlay panel, produces 400 imprints

# Tyco Cloud

Tyco Cloud is a cloud-based physical security application suite for managing video surveillance, access control, business intelligence, and security integration services. With the efficiencies of software as a service (SaaS) and secure cloud connected hardware, Tyco Cloud allows customers to streamline security operations by moving costly and complex infrastructure off-premises.

The Tyco Cloud web portal and mobile app interfaces provide simplicity and convenience to securely manage users, devices, and system services from anywhere without any web plugins or client software to install and maintain.

With Tyco Cloud, authorized partners can confidently deliver cloud-based security solutions and managed services that help customers reduce risk and improve cash flow.

## ioSmart Mobile Access Control

Easily manage a trusted ecosystem of cloud-connected security applications and devices all in one place.

Tyco Cloud empowers customers with secure self-service web and mobile apps to easily issue or revoke mobile access credentials and smart keys remotely for any type of personnel. This reduces the expense and hassle of managing physical cards or key tags. From employees and contractors to visitors, anyone can simply use their smartphone with the EntraPass go Pass mobile app to receive authorized access to any facility using ioSmart mobile access technology.

Kantech ioSmart multi-technology readers offer a range of cloud-managed mobile access control solutions that simplify security and reduce costs. With ioSmart readers, you can continue to use legacy contactless card and key tag technologies with existing access control systems while benefiting from the increased security and convenience of supporting mobile smartphone-based credentials.

ioSmart can be installed to function as a traditional access control reader or as a local controller providing mobile access for doors needing low-cost keyless entry with the benefit of remote cloud management. Unlike most other multi-technology credential readers on the market, ioSmart is uniquely designed as a multi-purpose access control device with the installation flexibility to address a broad range of door security and lock control applications.



### Features

- Support proximity, contactless smart card, and Bluetooth mobile credentials
- Remotely adjustable Bluetooth Low Energy (BLE) range for mobile access distance flexibility
- RS-485 and Wiegand interface for access control panel compatibility
- Installable as a panel-based reader, or panelless door controller
- End-to-end encryption and data security for added protection
- Cloud-managed mobile user credentials and smart keys



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## About Johnson Controls

Johnson Controls is a global leader creating a safe, comfortable and sustainable world. Our 105,000 employees create intelligent buildings, efficient energy solutions and integrated infrastructure that work seamlessly together to deliver on the promise of smart cities and communities in 150 countries. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat. We are committed to helping our customers win everywhere, every day and creating greater value for all of our stakeholders through our strategic focus on buildings.

For additional information, please visit [www.kantech.com](http://www.kantech.com) or follow Kantech on LinkedIn, Twitter and Facebook.