



# Kantech



## Product Guide



Tyco are pleased to unveil an exciting app that will showcase how our products and brands integrate to become a Total Solutions Provider for all your security requirements. To enjoy this experience, follow the simple instructions below and download the free app.

STEP 1

Download the free TSP App from  
[www.tyco-tsp.com](http://www.tyco-tsp.com)

STEP 2

Launch the App

STEP 3

Register as requested and skip any tutorials

STEP 4

Press the icon at the bottom and ,allow' access  
to the camera if requested

STEP 5

Hold your device up to any product image to  
reveal more information

TYCO SCANABLE VIDEOS



Aviation



Healthcare



Finance



Education



Sport & Leisure



Retail



Residential



Commercial

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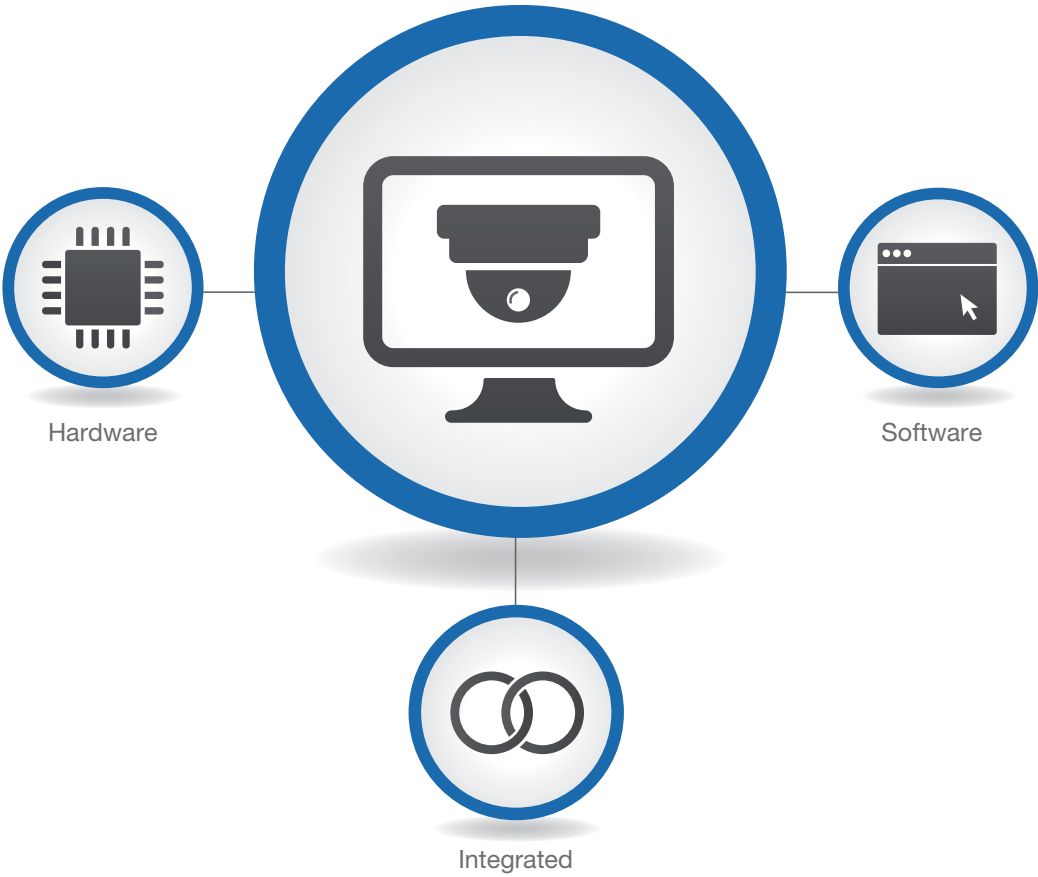
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# Kantech Introduction

Kantech’s main focus is to deliver our installers and access control users a superior, simplified access control experiences. With over 30 years of experience providing high quality customer solutions we ensure long-term satisfaction.

By designing the EntraPass Web and EntraPass Go applications, including integration with video and intrusion, Kantech unified the best of Tyco Security Products systems into one simplified security experience.

Kantech access control technologies are ready to use right out of the box, and provide solutions that are compact, and easy to use for smaller businesses while scaling to meet the needs of larger businesses.



# EntraPass Platforms

EntraPass is a robust suite of high performance software that allows customers to design & operate any number of doors where card access is required – securely, quickly & efficiently. EntraPass is compatible with Kantech’s

entire line of door controllers. Kantech offers three different Editions, from a small single site solution to large enterprise business.



	Special Edition	Corporate Edition	Global Edition
Video integration	✓	✓	✓
Intrusion integration	✓	✓	✓
Smart cards	✓	✓	✓
Wireless locks	✓	✓	✓
Multi-site	✗	✓	✓
Mobile apps	✗	✓	✓
Webclient	✗	✓	✓
Active directory	✗	✓	✓
Global-antipassback	✗	✗	✓
Muster reports	✗	✗	✓

\*Detailed Entrapass Product Line Positioning matrix available

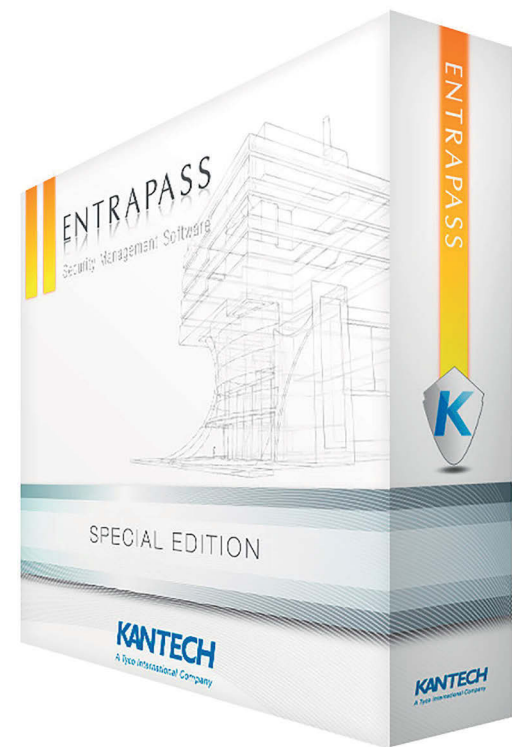
# EntraPass – Special Edition

EntraPass Special Edition is a single workstation security software. It controls 2 doors with KT-1, up to 128 doors with KT-300 and up to 256 doors with KT-400 door controllers. . The software is comprehensive and menu-driven. It is easy to learn and operate. Administrators can define or modify parameters such as schedules or access levels, generate reports and activate controlled devices

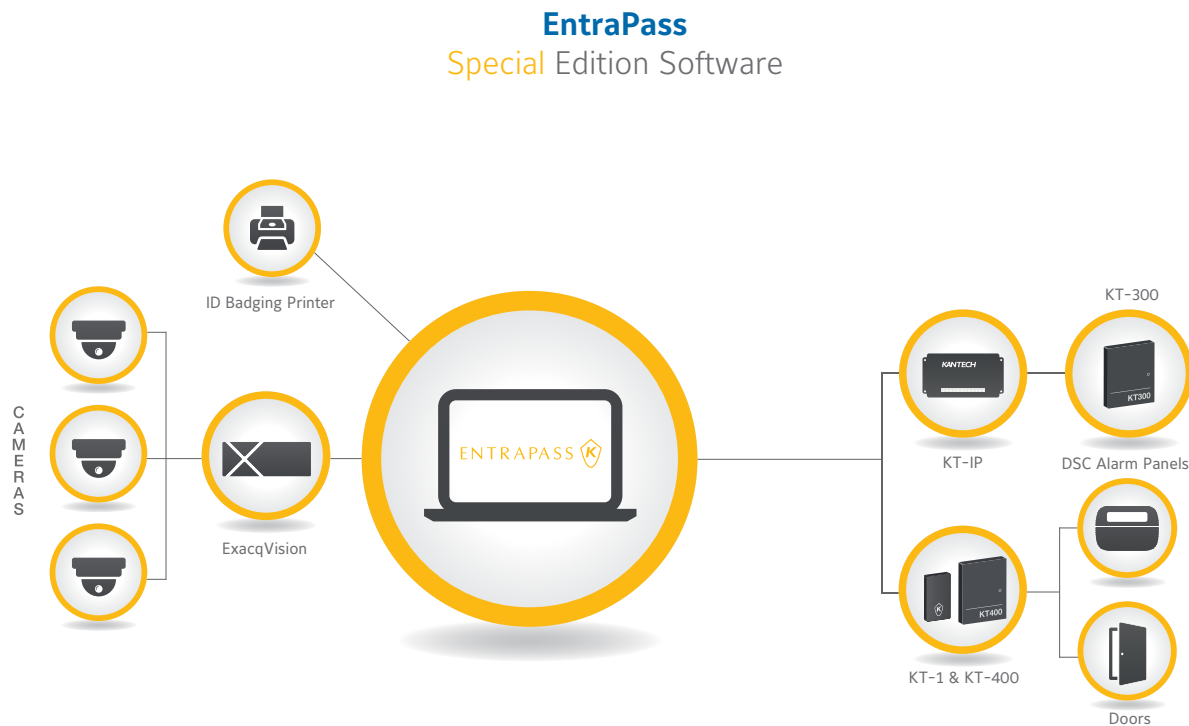
(i.e. locking/ unlocking doors, or activating relays for lighting or air conditioning). EntraPass offers full integration with ExacqVision NVR's, American Dynamics VideoEdge NVR's and DSC PowerSeries NEO, Honeywell Galaxy intrusion alarm panels.

### Features

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



# Single Workstation Security Management Software



EntraPass Special Edition	
Model	Description
E-SPE-V7	EntraPass Special Edition Multi-language Software (English, French, German, Spanish, Italian, Dutch Turkish & Portuguese). Manuals are in pdf format on the USB
E-SPE-LIC	EntraPass Special Edition License Only - Latest Version
EntraPass Special Edition Options	
Model	Description
E-SPE-GLY	EntraPass Special Edition v5 Licence enabling integration with the Honeywell Intruder Alarm Panel. (EntraPass Special Edition can manage up to 5 integrated Honeywell intrusion panels)
Aperio Wireless Locking Integration Licenses	
Model	Description
E-SPE-DOOR-1	Wireless integration License Special Edition, 1 additional door
E-SPE-DOOR-4	Wireless integration License Special Edition, 4 additional door
E-SPE-DOOR-8	Wireless integration License Special Edition, 8 additional door
E-SPE-DOOR-24	Wireless integration License Special Edition, 24 additional door
E-SPE-DOOR-48	Wireless integration License Special Edition, 48 additional door
E-SPE-DOOR-96	Wireless integration License Special Edition, 96 additional door

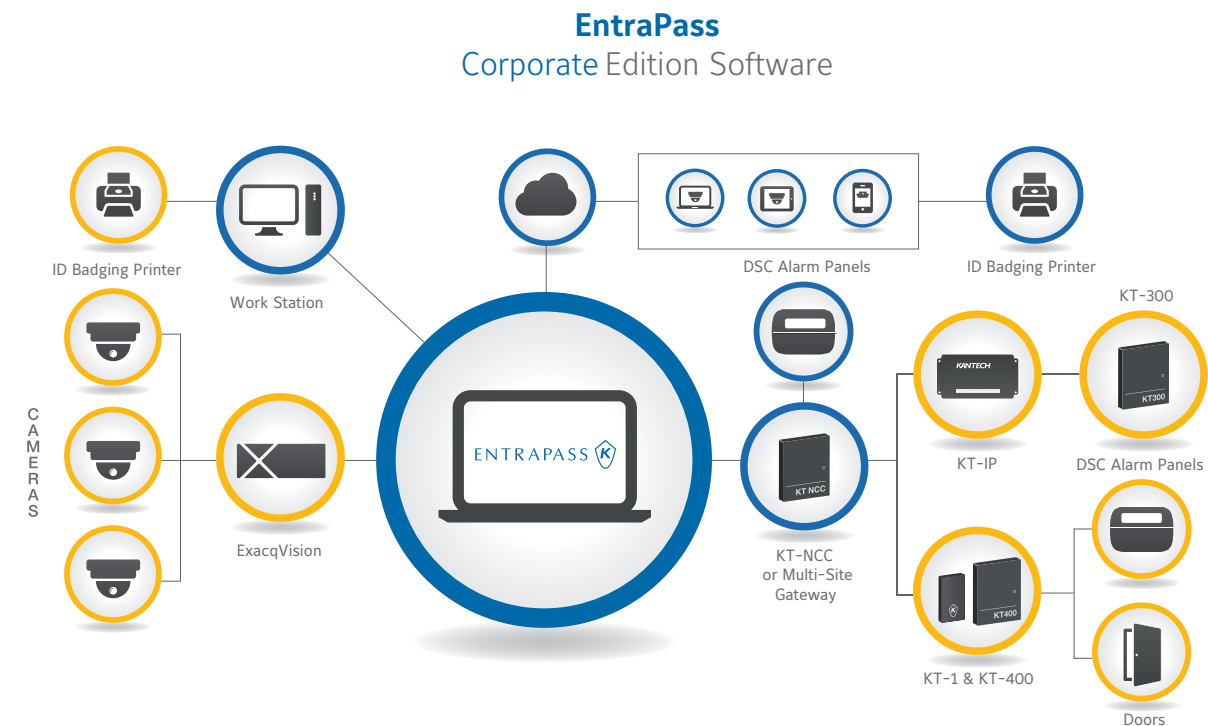
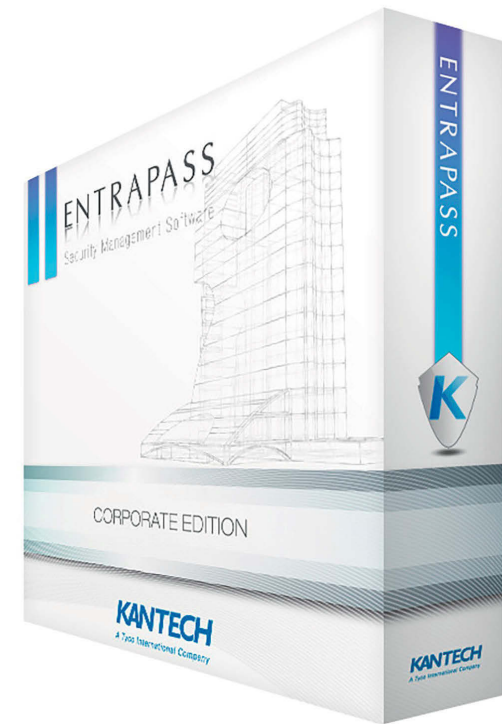


# EntraPass – Corporate Edition

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 on the network, as well as over serial connections. The KT-1 and KT-400 are IP controllers that communicate through highly secure 128-bit AES encryption to ensure communication is not compromised. The software integrates advanced security features such as EntraPass Go mobile app and EntraPass Web platform that deliver remote and convenient access to common access control, video and intrusion tasks and reporting. The enhanced user experience makes navigation and operation easy and..

### Features

- 1. Supports up to 20 workstations and controls hundreds of thousands of doors
- 2. Import/synchronize EntraPass operators and users (cardholders) with Microsoft Active Directory for centralized management
- 3. Gain access to doors with a one-time unlock command using the EntraPass Go Pass mobile app
- 4. Supports up to 50 concurrent logins of EntraPass Web and/or EntraPass Go
- 5. Full integration with ExacqVision NVR's, American Dynamics VideoEdge NVR's and DSC PowerSeries NEO, Honeywell Galaxy intrusion alarm panels.
- 6. Integrates with ASSA ABLOY Aperio wireless locks for integrated and management lock solution



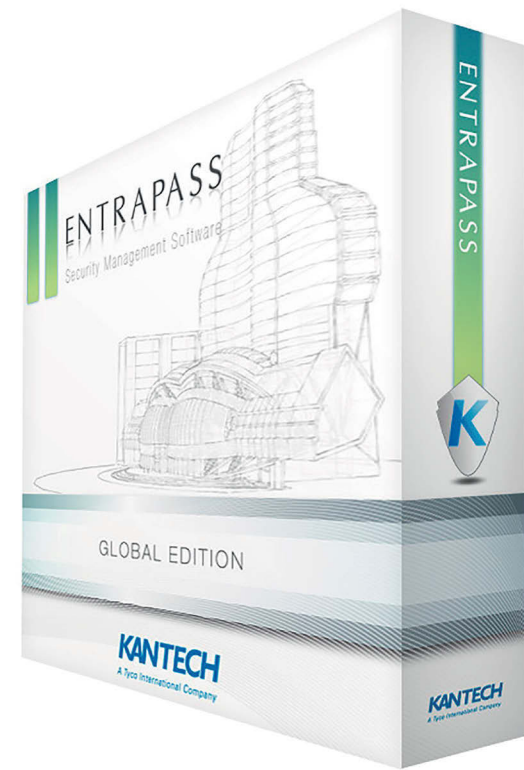
EntraPass Corporate edition	
Model	Description
E-COR-V7	EntraPass Corporate Edition Multi-language Software (English, French, German, Spanish, Italian, Dutch Turkish & Portuguese), including 2 additional workstation licenses, elevator control, badging, remote site management and Smart Link. Manuals are in pdf format on the USB
E-COR-LIC	EntraPass Corporate Edition License Only - Latest Version
EntraPass Corporate Edition Additional Gateway and Workstation Licenses	
Model	Description
E-COR-WS1	License for 1 additional workstations
E-COR-WS6	License for 6 additional workstations
E-COR-COM	License for 40 Corporate gateways
EntraPass Corporate Edition Options	
Model	Description
E-COR-GLY	EntraPass Corporate Edition v5 Licence enabling integration with the Honeywell Intruder Alarm Panel
E-COR-HID-MOBILE	HID Mobile SeoS Integration for EntraPass Corporate Edition
E-COR-LDAP	LDAP integration License for Entrapass Corporate Edition
E-COR-CONNECT	Third Party Integration Option, license for 1 concurrent integration
E-COR-DOOR-1	Wireless integration License Corporate Edition, 1 additional door
E-COR-DOOR-4	Wireless integration License Corporate Edition, 4 additional door
E-COR-DOOR-8	Wireless integration License Corporate Edition, 8 additional door
E-COR-DOOR-24	Wireless integration License Corporate Edition, 24 additional door
E-COR-DOOR-48	Wireless integration License Corporate Edition, 48 additional door
E-COR-DOOR-96	Wireless integration License Corporate Edition, 96 additional door

# EntraPass – Global Edition

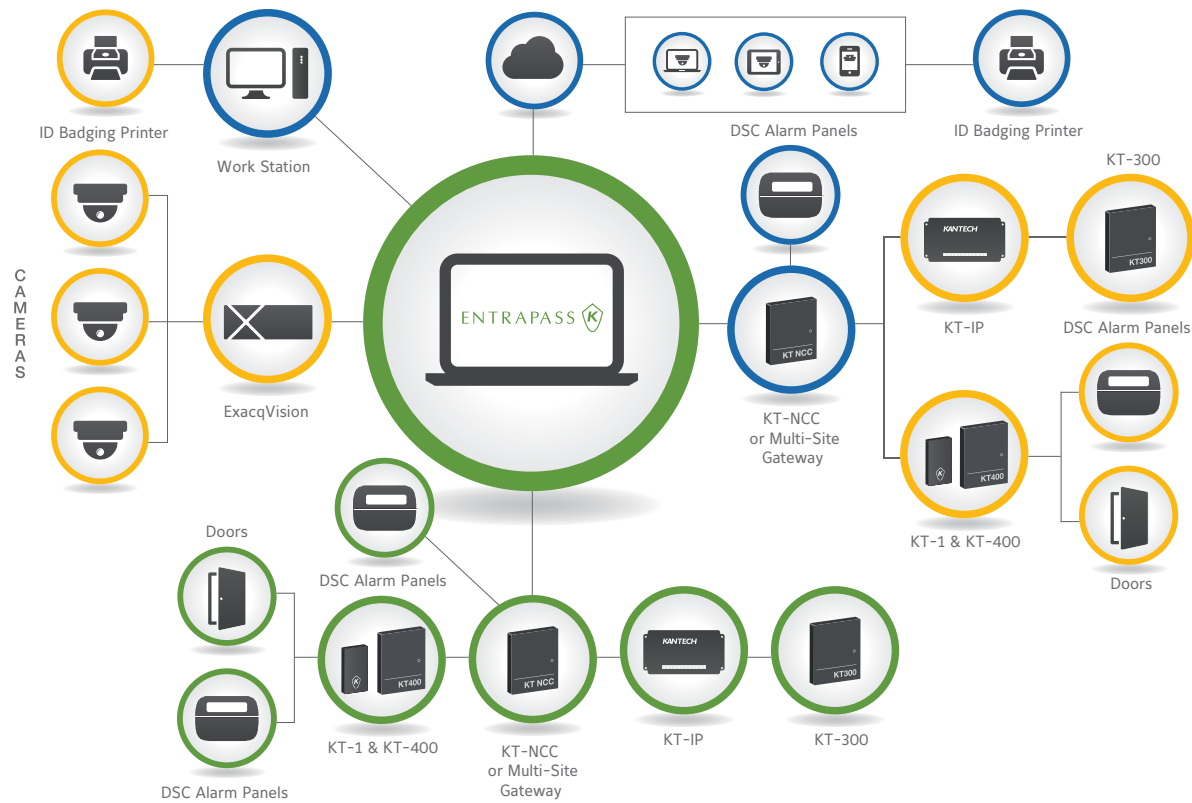
EntraPass Global Edition is a powerful, network-ready enterprise level security management software that accommodates widely-dispersed applications with an unlimited number of users, controls thousands of doors and allows you to simultaneously access the system from up to 128 workstations connected to 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 EntraPass Go mobile app and EntraPass Web (remote user platform) that deliver 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

- 1. Supports up to 128 workstations and controls hundreds of thousands of doors
- 2. Automatically log into EntraPass with Windows credentials
- 3. using Single Sign On in Microsoft Active Directory
- 4. Global virtual alarm system, anti-passback, guard tours and muster reporting
- 5. Gain access to doors with a one-time unlock command using the EntraPass Go Pass mobile app
- 6. Redundant server and gateway to enhance fault tolerance capabilities
- 7. Supports up to 250 concurrent logins of EntraPass Web and/or EntraPass Go
- 8. Full integration with ExacqVision NVR's, American Dynamics VideoEdge NVR's and DSC PowerSeries NEO, Honeywell Galaxy intrusion alarm panels.
- 9. Integrates with ASSA ABLOY Aperio wireless locks for integrated and management lock solution



### EntraPass Global Edition Software



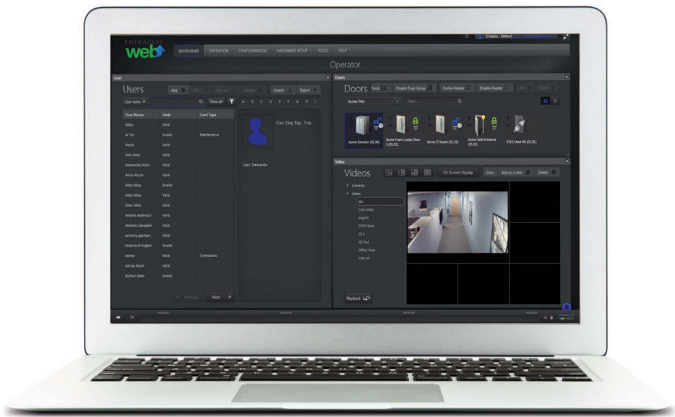
EntraPass Global Edition Licenses Only	
Model	Description
E-GLO-V7	EntraPass Global Edition Multi-language Software (English, French, German, Spanish, Italian, Dutch Turkish & Portuguese), including one server license, one workstation on server, four additional workstations license, Integrated Badging, Elevator Control and Smartlink. Manuals are in pdf format on the USB
E-GLO-LIC	EntraPass Global Edition License Only - Latest Version
E-GLO-UPG-V6-LIC	EntraPass Global Edition upgrade from v3.18 to v6.0, License Only
EntraPass Global Edition Additional Gateway and Workstation Licenses	
Model	Description
E-GLO-WS1	License for 1 additional workstation option.
E-GLO-WS8	License for 8 additional workstations option.
E-GLO-COM-WIN	License for 16 additional Global Gateways (Windows NCC).
E-GLO-CORCOM	License for 40 additional Corporate Gateways.
EntraPass Global Edition Options	
Model	Description
E-GLO-CORCOMRDN	Redundancy Gateway License
E-GLO-GLY	EntraPass Global Edition v5 Licence enabling integration with the Honeywell Intruder Alarm Panel
Aperio Wireless Locking Integration Licenses	
Model	Description
E-GLO-HID-MOBILE	HID Mobile SeoS Integration for EntraPass Global Edition
E-GLO-LDAP	LDAP integration License for Entrapass Global Edition
E-GLO-CONNECT	Third Party Integration Option, license for 1 concurrent integration
E-GLO-DOOR-1	Wireless integration License Global Edition, 1 additional door
E-GLO-DOOR-4	Wireless integration License Global Edition, 4 additional door
E-GLO-DOOR-8	Wireless integration License Global Edition, 8 additional door
E-GLO-DOOR-24	Wireless integration License Global Edition, 24 additional door
E-GLO-DOOR-48	Wireless integration License Global Edition, 48 additional door
E-GLO-DOOR-96	Wireless integration License Global Edition, 96 additional door

# EntraPass Web – Easy way to manage your system

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

### Features

- 1. Intuitive design
- 2. Monitor, manage and maintain security system without on-site personnel
- 3. One interface for viewing video, operating intrusion system and managing doors
- 4. Configurable to your specific needs for higher productivity
- 5. Connect multiple monitors
- 6. Complete hardware set-up
- 7. Watch list alarms and email notifications



Additional Entrapass Web Licenses for Corporate and Global Edition	
Model	Description
E-COR-WEB-1	License for 1 concurrent connection for EntraPass Web Station for EntraPass Corporate Edition v4.xx and higher
E-COR-WEB-3	License for 3 concurrent connections for EntraPass Web station for EntraPass Corporate Edition v4.xx and higher
E-COR-WEB-10	License for 10 concurrent connections for EntraPass Web station for EntraPass Corporate Edition v4.xx and higher
E-COR-WEB-25	License for 25 concurrent connections for EntraPass Web station for EntraPass Corporate Edition v4.xx and higher
E-GLO-WEB-1	License for 1 concurrent connection for EntraPass Web Station for EntraPass Global Edition v4.xx and higher
E-GLO-WEB-3	License for 3 concurrent connections for EntraPass Web station for EntraPass Global Edition v4.xx and higher
E-GLO-WEB-10	License for 10 concurrent connections for EntraPass Web station for EntraPass Global Edition v4.xx and higher
E-GLO-WEB-25	License for 25 concurrent connections for EntraPass Web station for EntraPass Global Edition v4.xx and higher
E-GLO-WEB-50	License for 50 concurrent connections for EntraPass Web station for EntraPass Global Edition v4.xx and higher

# EntraPass Go

EntraPass Go allows you to remotely control your security system from anywhere without being tied to a workstation. EntraPass Go puts you in control of your security. It enables you to interact with EntraPass security management software using only a few taps on your mobile device. The easy-to-use mobile app offers anytime, anywhere real-time management of over 20 security tasks. Manage/ create cards, lock/unlock doors, request reports and more.

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

### Features

- 1. Convenient and intuitive interface
- 2. Manage cards and take user's photos
- 3. Integrates with EntraPass Corporate and Global Edition software
- 4. Control over 20 security tasks in real-time
- 5. Apple and Android compatible

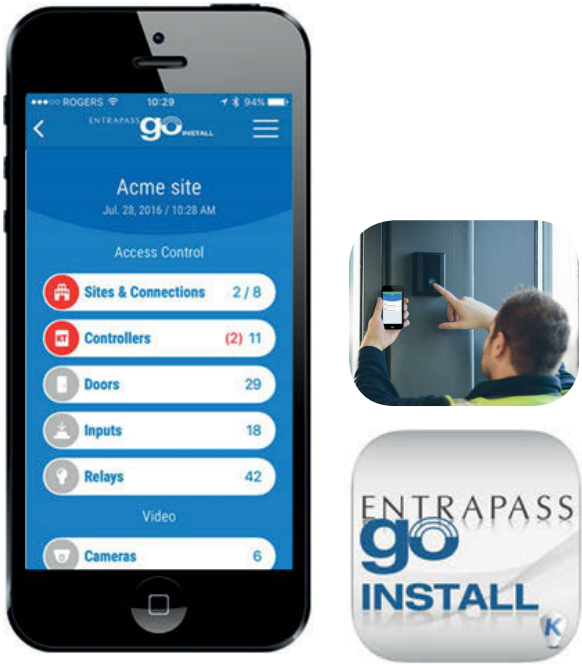


# EntraPass Go install

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

### Features

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





# EntraPass Go pass

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. The server sends a onetime unlock command to the doors that a cardholder has access to utilizing access levels. The mobile app works with any type of reader. Customers can add countless EntraPass Go Pass users to the system by simply sending them an email notification. And, EntraPass scalability allows customers to add thousands of EntraPass Go Pass users to their system.

### Features

- 1. Give remotely access
- 2. Open doors using your mobile device
- 3. Access rights are managed by Entrapass
- 4. Communication goes via the Server.
- 5. No communication with reader or controller
- 6. Can be activated or de-activated
- 7. Link for download and access through email

Go Pass credentials for Entrapass Corporate Edition	
Model	Description
E-COR-PASS-50	Pack of 50 EntraPass GO PASS credentials for Corporate Edition (v7.11 and higher)
E-COR-PASS-100	Pack of 100 EntraPass GO PASS credentials for Corporate Edition (v7.11 and higher)
E-COR-PASS-500	Pack of 500 EntraPass GO PASS credentials for Corporate Edition (v7.11 and higher)
Go Pass credentials for Entrapass Global Edition	
Model	Description
E-GLO-PASS-50	Pack of 50 EntraPass GO PASS credentials for Global Edition (v7.11 and higher)
E-GLO-PASS-100	Pack of 100 EntraPass GO PASS credentials for Global Edition (v7.11 and higher)
E-GLO-PASS-500	Pack of 500 EntraPass GO PASS credentials for Global Edition (v7.11 and higher)



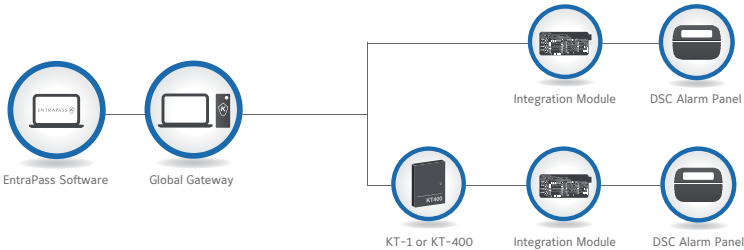
# Alarm Panel Integration

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 unified solution. Integration with DSC PowerSeries or MAXSYS intrusion alarm panels allows the access control system to receive intrusion events, view zone status 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 creates not only flexibility in cabling, but intrusion panel connections over IP can be assigned to a gateway or one controller (KT-400/KT-1) 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 statuses is needed. EntraPass makes use of up to 32 definable virtual zones in DSC PowerSeries Neo. This gives the customer the ability to share physical door contacts and monitoring of doors, controllers, inputs and events via the powerful DSC PowerSeries Neo virtual zones. This deeper level of integration helps save money and provides a higher level of situational awareness. There is no longer a need to wire the door contacts for the intrusion panel anymore – 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.



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. This gives them the ability to act more quickly and efficiently to security issues. Kantech provides a one system experience with a holistic view on all security functions

(such as “door forced open”) and recorded from one to sixteen cameras from compatible DVR/NVR simultaneously. All cameras can be called up directly from a floor plan simply 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 are option license.

### Features

- 1. Integration of EntraPass access control system and DSC intrusion systems
- 2. Multiple panels supported – PowerSeries, PowerSeries NEO & Honeywell Dimension
- 3. Integrated virtual DSC keypad used to remotely arm/disarm DSC panels \*Not available on NEO interface
- 4. DSC panels and sensor locations represented on graphical maps
- 5. DSC intrusion alarms reported instantly on EntraPass
- 6. Modify alarm panel user codes to/from EntraPass
- 7. 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 DVRs/NVRs (VideoEdge, HDVR, ADTVR, Intellex) and Kantech INTEVO integrated security platform provides real-time video monitoring as well as video playback. Video can be linked to access events (such

as “door forced open”) and recorded from one to sixteen cameras from compatible DVR/NVR simultaneously. All cameras can be called up directly from a floor plan simply 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 are option license.

Third party Video Integration licenses	
Model	Description
E-COR-DVR-1	Entrapass Corporate Edition option license for single 3rd party recorder (v5.02 and higher)
E-GLO-DVR-1	Entrapass Global Edition option license for single 3rd party recorder (v5.02 and higher)
E-GLO-DVR-UNL	Entrapass Global Edition option license for unlimited 3rd party recorder (v5.02 and higher)
E-GLO-INFVID	Entrapass Global Edition option, license for Entrapass InfiniView remote video process (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
1.

Organize video clips by event category for future reference
2.

Thumbnail images can be created on the first frame of each video clip
3.

Stores unlimited amount of video clips
4.

Automatically associate .bmp image with each video clip
5.

Connect up to 128 Exacq and/or American Dynamics NVRs

Video Vault Integration licenses	
Model	Description
E-COR-VVM	License for 1 Entrapass Video Vault for Corporate edition software
E-GLO-VVM	License for 1 Entrapass Video Vault for Global edition software



# INTEVO LTE

**Integration Evolution**

INTEVO LTE is an easy to deploy integrated security platform that gets you up and running in minimal time. It’s simple to configure, built on Windows 10 embedded 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’s pre-loaded with Kantech’s Entrapass security software - Corporate Edition, exacqVision video management software, and includes support for DSC PowerSeries NEO intrusion alarm panel integration. INTEVO LTE provides an ideal cost effective platform for small to medium businesses as well as the forward thinking ability to grow the system to meet organizational needs over time. INTEVO LTE 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 Video Vault and Redundant Server. Seamless integration of the latest version of exacqVision video management software and provides real-time video monitoring and playback. The inclusion of exacqVision allows INTEVO to offer faster and more intuitive video searching capabilities.

- Features
1.

Plug and play capability
2.

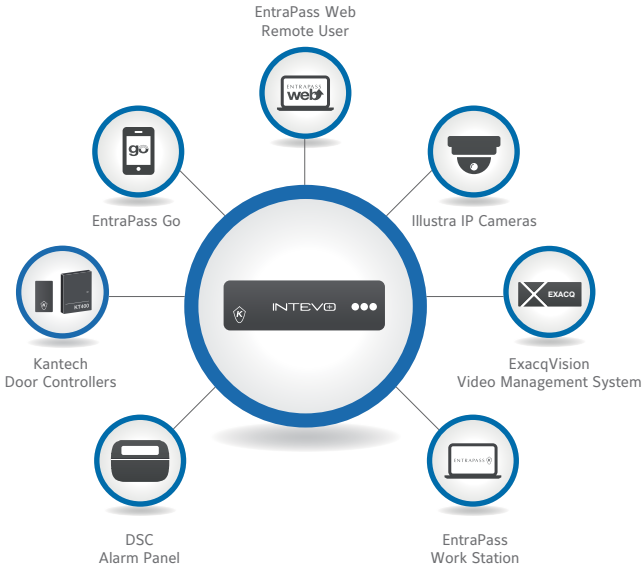
Pre-configured for Entrapass Go mobile app and Entrapass Web remote user platform
3.

Ideal for 4 x MP IP Cameras. For the best performance-capacity use online calculation tool.
4.

Featuring latest version of exacqVision video management software – faster and more intuitive search
5.

Seamless integration of exacqVision video management software
6.

Windows 10 embedded



INTEVO LTE	
Model	Description
INTEVO-LTE-2TB	INTEVO Compact LTE with 2TB hard drive. Includes 2 IP camera channel licenses.
INTEVO-IPCAM01*	1 IP camera channel license
INTEVO-IPCAM04*	4 IP camera channel license
INTEVO-IPCAM8*	8 IP camera channel license
INTEVO-IPCAM16*	16 IP camera channel license
INTEVO-LTE2SSA1Y	INTEVO LTE Gen 2, ONE YEAR Support Software Agreement (SSA). Adds one year to the current SSA expiry date of the INTEVO.
INTEVO-LTE2SSA3Y	INTEVO LTE Gen 2, THREE YEAR Support Software Agreement (SSA). Adds three years to the current SSA expiry date of the INTEVO.
INTEVO-LTE2PSSA	INTEVO LTE 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-LTE-PS2	External power supply (LTE)

# INTEVO Compact

### Integration Evolution

INTEVO Compact is an easy to deploy integrated security platform that gets you up and running in minimal time. It's simple to configure, built on Windows 10 embedded 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's pre-loaded with Kantech's EntraPass security software - Corporate Edition, exacqVision video management software, and includes support for DSC PowerSeries NEO intrusion alarm panel integration. INTEVO Compact provides an ideal cost effective platform for small to medium businesses as well as the forward thinking ability to grow the system to meet organizational needs over time. INTEVO Compact 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 Video Vault and Redundant Server. Seamless integration of the latest version of exacqVision video management software and provides real-time video monitoring and playback. The inclusion of exacqVision allows INTEVO to offer faster and more intuitive video searching capabilities.

### Features

- 1. Plug and play capability
- 2. Pre-configured for EntraPass Go mobile app and EntraPass Web remote user platform
- 3. Ideal for 8 x MP IP Cameras. For the best performance-capacity use online calculation tool.
- 4. Featuring latest version of exacqVision video management software – faster and more intuitive search
- 5. Seamless integration of exacqVision video management software
- 6. Windows 10 embedded
- 7. 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-IPCAM01*	1 IP camera channel license
INTEVO-IPCAM04*	4 IP camera channel license
INTEVO-IPCAM8*	8 IP camera channel license
INTEVO-IPCAM016*	16 IP camera channel license
INTEVO-IPCAM2SSA1Y	INTEVO Compact Gen 2, ONE YEAR Support Software Agreement (SSA). Adds one year to the current SSA expiry date of the INTEVO.
INTEVO-IPCAM2SSA3Y	INTEVO Compact Gen 2, THREE YEAR Support Software Agreement (SSA). Adds three years to the current SSA expiry date of the INTEVO.
INTEVO-IPCAM2PSSA	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-CAM-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

### Integration Evolution

INTEVO Advanced is an easy to deploy integrated security platform that gets you up and running in minimal time. It's simple to configure, built on Windows 10 embedded 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's pre-loaded with Kantech's EntraPass security software - Corporate Edition, exacqVision video management software, and includes support for DSC PowerSeries NEO intrusion alarm panel integration. INTEVO Advanced provides an ideal cost effective platform for small to medium businesses as well as the forward thinking ability to grow the system to meet organizational needs over time. INTEVO Advanced 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 Video Vault and Redundant Server. Seamless integration of the latest version of exacqVision video

management software and provides real-time video monitoring and playback. The inclusion of exacqVision allows INTEVO to offer faster and more intuitive video searching capabilities.

### Features

- 1. Plug and play capability
- 2. Pre-configured for EntraPass Go mobile app and EntraPass Web remote user platform
- 3. Ideal for 16x MP IP Cameras. For the best performance-capacity use online calculation tool.
- 4. Featuring latest version of exacqVision video management software – faster and more intuitive search
- 5. Seamless integration of exacqVision video management software
- 6. Windows 10 embedded
- 7. Retain the latest version of EntraPass through auto-update on initial power up



INTEVO Compact	
Model	Description
INTEVO-ADV-4TB	INTEVO Advanced with 4TB hard drive. Includes 4 IP camera channel licenses.
INTEVO-IPCAM01*	1 IP camera channel license
INTEVO-IPCAM04*	4 IP camera channel license
INTEVO-IPCAM8*	8 IP camera channel license
INTEVO-IPCAM016*	16 IP camera channel license
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-ADV2SSA3Y	INTEVO Advanced Gen 2, THREE YEAR Support Software Agreement (SSA). Adds three years 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 over one year.
INTEVO-ADVM-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

# How to link with other systems, EntraPass Database Integrations

## SQL Database Access

EntraPass Global Edition Software offers an embedded high-performance SQL database engine to allow administrators to generate custom reports from the EntraPass database. Use the powerful 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 common used authentication directory that supports enterprise IT systems that synchronise 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 thereby eliminating 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 onto an EntraPass workstation using a single click. Up to ten concurrent Active Directory connections are possible.

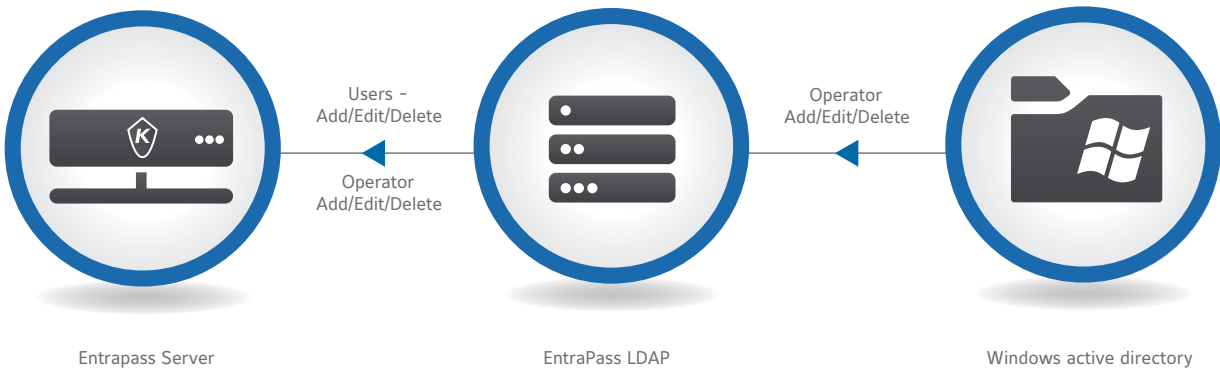
### Features

- 1. Single user name and password
- 2. Password synced between Active Directory and LDAP Directory Services
- 3. Reduced overhead through standardisation Improved services through centralised management capabilities
- 4. Improved workstation security

The Active Directory integration using LDAP connector is optional with Corporate and Global Edition:	
Model	Description
E-COR-LDAP	Optional LDAP integration license for Kantech Entrapass Corporate Edition
E-GLO-LDAP	Optional LDAP integration license for Kantech Entrapass Global Edition

## Active Directory Integration

Microsoft Active Direction integration for operator and user management



# Integration flexibility with Kantech's Connected Partner Program

The Connected Partner Program from Kantech gives third-party technology partners the opportunity to integrate into our security solutions. Through the connected partner program, partners have the ability to connect to Kantech Entrapass access control system for high quality integration that can easily be implemented in every installation. Through the connected program we give our partners the possibility to upgrade integrations in sync with every upcoming release.

Tyco Security Products has made 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 all your questions are answered for a seamless integration.

## Integration Types

- 1. Our robust software development kits (SDK) gives partners flexibility to integrate achieve the functionality desired.
- 2. The hardware integration provides direct interfacing to our products.
- 3. Our Application Program Interface (API) and sample source code provides partners with the tools they need to develop an integrated
- 4. The web service provides a RESTful API with the ability to interface with the application server database.

## Where to start

Complete an online application or simply email the Connected Partner Program team at [tspconnect@tycoint.com](mailto:tspconnect@tycoint.com) 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

These part numbers can only be ordered by registered connected program partners	
Model	Description
KT-WSRVDEV	Entrapass SDK Package agreement available after registration an NDA signature
KT-WEBSVCSSA	Entrapass SDK SSA License yearly upgrade
KT-ADDSDK	Entrapass SDK Additional 4 hours support from Engineering

Enable integrations developed with connected program	
Model	Description
E-COR-CONNECT	Third Party Integration Option for Corporate Edition, license for 1 concurrent integration
E-GLO-CONNECT	Third Party Integration Option for Global Edition, license for 1 concurrent integration

**connected**  
PARTNER PROGRAM



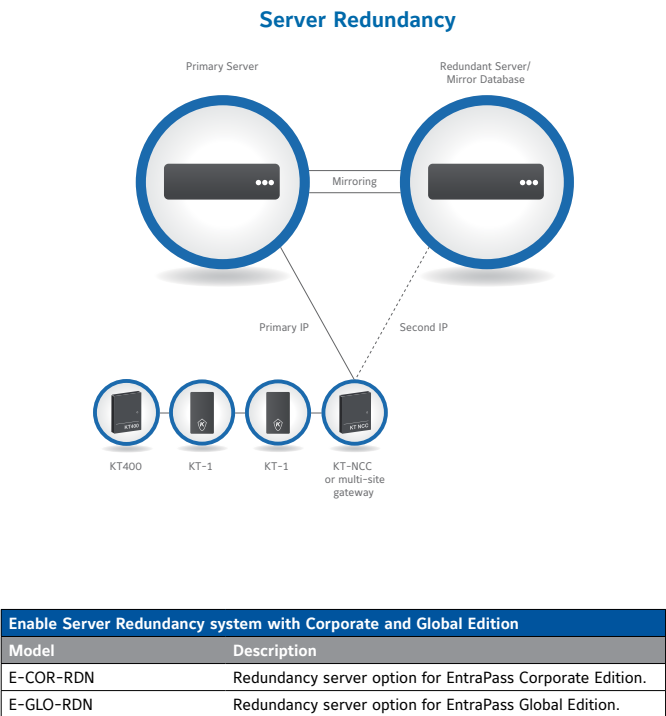
# Avoid unplanned Downtime with Entrapass Redundancy Architecture

## Server Redundancy, Database Mirroring

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 low cost. In the event of primary server failure, the mirror database automatically launches the redundancy server which 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 mirror database can be used to provide local redundancy in an enterprise environment.

### Features

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



# 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 stand-alone KT-1, Kantech's door controller family provides users with a wide range of scalable options.

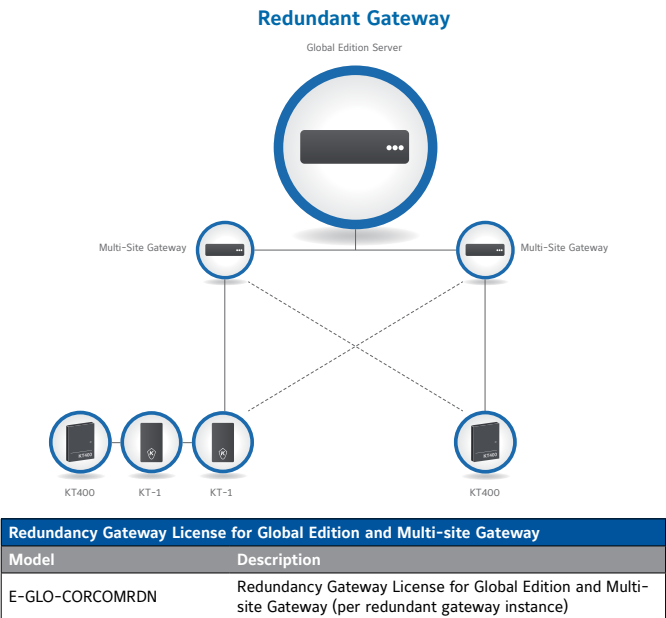
	KT-1	KT-300	KT-400
Number of online doors	1	2	4
Aperio wireless Doors	+2	X	+4
Encrypted Communication over IP	✓	X	✓
Serial communication	RS-485	RS-232 & RS-485	RS-485
Power over Ethernet (PoE+)	✓	X	✓
Power +12V DC battery backup	✓	✓	✓
Number of Cards in Offline Mode	100K	8K/56K	100K
Events in Offline mode	20K	18K	20K
Inputs and output Expansion boards	X	✓	✓
Direct DSC NEO integration	✓	X	✓
Standalone mode, Embedded web server:	✓	X	✓

# Gateways Redundancy, Secured Communication

Keeping your security system up and 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 ensuring no system downtime.

### Features

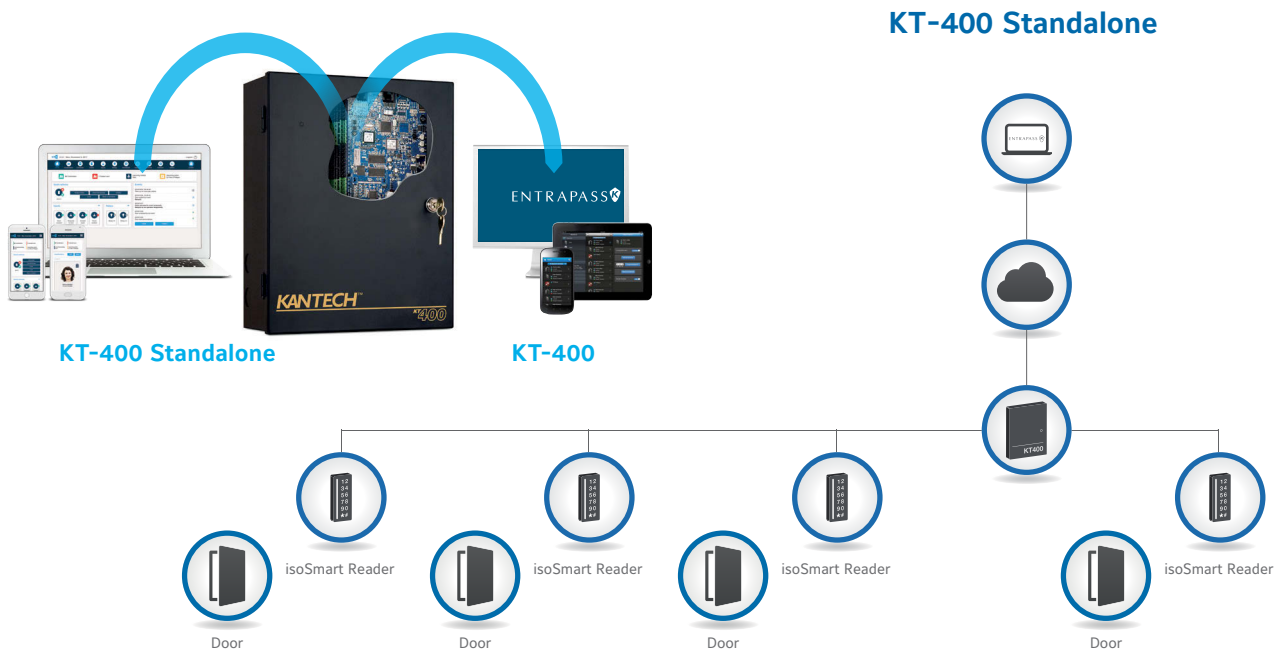
- 1. Up to 2 Redundant gateways per gateway
- 2. Customers can manually failover for planned event
- 3. Only available with Global Edition and Multi-site Gateways



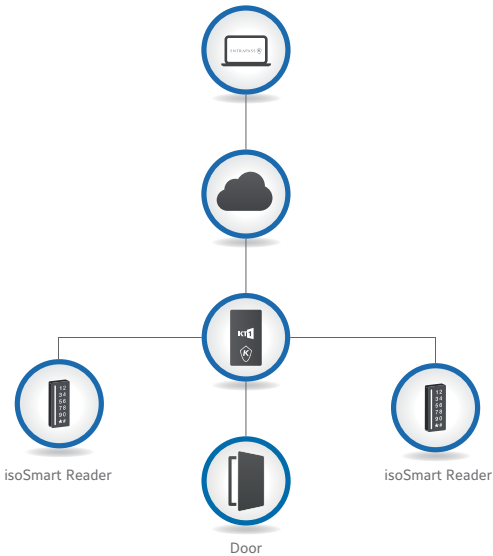
# Kantech Standalone Controllers

### Embedded Web server

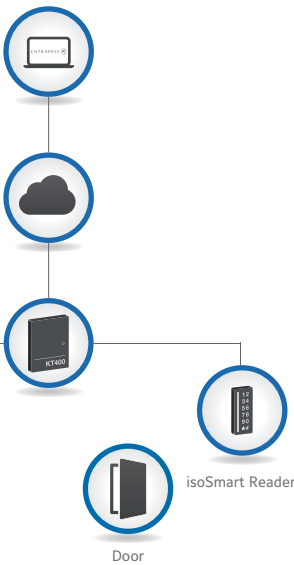
Kantech’s KT-controllers can also operate in Standalone Mode.This gives you the option to control and manage your controllers via a simple intuitive web-based software programme – no EntraPass software is required. This lowers the total cost of the access control system; eliminating the need for customers to purchase and maintain dedicated EntraPass access control software and workstations.



### KT-1 Standalone



### KT-400 Standalone



# KT-1 Single Door IP Controller

### Single Door Controller

KT-1 is a cost-effective, yet feature rich single door IP controller, supporting two readers (IN/OUT). Support all features include multi-swipe functionality and support for 100,000 cardholders.

### One Touch Set-up

The entire configuration of the KT-1 is done via a single touch-sensitive button. No need to manually enter MAC/ Serial numbers. Simply provide an IP connection, push a single button and you’re done.

### Power over Ethernet (PoE)

KT-1 has flexible power input including support for Power over Ethernet & 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 requirement 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 which enables it to operate in a Standalone Mode – meaning no EntraPass software is required. Intuitive and responsive web-based software enables you to simply manage and configure your one door security from anywhere, using a desktop or mobile device.

### 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 Ethernet or serial RS-485 port from controller to controller.

Model	Description
KT-1-EU-PC	KT-1-PCB One door controller PoE, PoE+ or 12Vdc, including: Plastic Housing and 13.8Vdc 3A power Supply
KT-1-EU-MET	KT-1-PCB One door controller PoE, PoE+ or 12Vdc, including: Metal Housing and 13.8Vdc 3A power Supply
KT-1	One KT-1, IP Controller Single gang flush Mount, PoE, PoE+ or 12Vdc, (KT-1 only, no PSU)
KT-1-M	One KT-1-PCB, IP Controller PCB with metal cabinet PoE, PoE+ or 12Vdc, including KT-1-PCB and Metal housing, No PSU)
KT-1-PCB	One Door IP Controller PCB including connector board (Compatible with KT-1-CAB-M or P)
KT-1-CAB-P	Plastic enclosure ONLY for KT-1-PCB
KT-1-CAB-M	Metal enclosure ONLY for KT-1-PCB

### Features

1. Supports 2 readers (entry and exit)
2. Singletouch-sensitive button for fast controller enrolment
3. Flexible architecture with Serial and Ethernet connectivity
4. Highly secure 128-bit AES encryption
5. 100,000 cards and 20,000 stored events in offline mode
6. Interchangeable connections for easy install or replacement
7. Flexible power input – Power over Ethernet (PoE), PoE+ or 12 VDC
8. Choosefrom flushmount on a single gang backbox (model KT1) or cabinet mount installation options
9. DSC NEO panel to panel intrusion integration

### Standalone Mode Parameters

Features	Description
Users	1,000
Events	20,000
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/ hatrrix
Languages	English, French, Spanish



# KT-300 Two Door Controller

### Two Doors Controllor

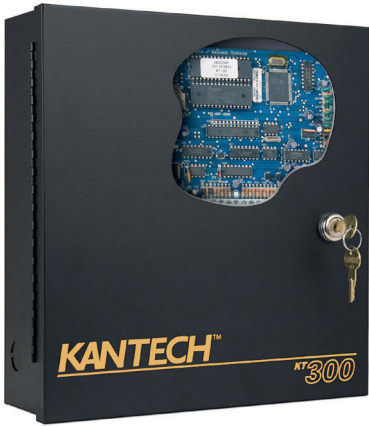
The KT-300 door controller supports up to two readers, which you can install either on a single door to monitor both entry and exit or on two separate doors. It provides connections for all peripheral devices necessary for a complete access control system and can link with other door controllers to give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

### Connectivity

Built-in Combus expansion means you can add relay, input, and output modules to connect HVAC systems, elevators, motion detectors, and more. Additionally, KT-300 can interface with external alarm systems so that an authorized individual can arm or disarm them simply by presenting his/her access control card to a reader.

### Features

- 1. Supports 2 readers and two doors
- 2. Ready to go, no DIP switches or jumpers to set
- 3. Serial Connectivity
- 4. Provides 5V and 12V reader power
- 5. self-resetting PTC power outputs individually protected against short circuits
- 6. Choice of two memory capacities for 8K or 56K cardholders



KT-300	
Model	Description
KT-300EU-8K	KT-300 controller support up to 8, 000 card holders. Enclosure supplied with transformer to power KT-300PCB + PSU to provide up to 500mA @ 12VDC for locking per lock output
KT-300EU-56K	KT-300 controller support up to 56, 000 card holders. Enclosure supplied with transformer to power KT-300PCB + PSU to provide up to 500mA @ 12VDC for locking per lock output
Accessories	
Model	Description
KT-300-ACC	KT-300 Accessory kit including: 1.0K ohm (2), 5.6K ohms (10), 120 ohms (2), PCB standoff, lock hole cover, ground wire and screwdriver
TYCO-A-ACCESS	European enclosure for KT-300. Enclosure supplied with transformer for KT-300 PCB and power supply for up to 500mA @ 12VDC for each lock output
KT-LOCK	Lock for KT-400-CAB, KT-MOD-CAB, KT-300CAB, KT-NCC-CAB, KT-4051CAB, KT-CAB3000LDR and KT-CAB4000LDR metal cabinets, 2 keys
KT-TAMPER	Tamper switch for KT-400-CAB, KT-MOD-CAB, KT-300CAB, KT-NCC-CAB, KT-4051CAB, KT-CAB3000LDR and KT-CAB4000LDR metal cabinets
KT-300FLASH	KT-300 accessory, replacement firmware
KT-RM1	KT-300 accessory, external isolation relay, single pole, double through (SPDT) for output RL1/RL2
TR1640W-220	KT-300 transformer, wire-in, 220 VAC/ 16 Vac (37 VA), CE approved
Expansion Modules	
Model	Description
KT-4051CAB	Standard black metal cabinet for KT-PCxxxx Expansion modules (order key lock separately)
KT-PC4108	8-Zone Input Expansion Module for KT-300
KT-PC4204	4-Relay and COMBUS additional Power Supply Module for KT-300
KT-PC4216	16-Output Expansion Module for KT-300

# KT-400 Four Door IP Controller

### Four Doors Controller

KT-400 is an Ethernet-ready four-door controller that provides 128-bit AES encrypted communication with the EntraPass system and is a highly secure solution for any security-conscious business. KT-400 can easily be integrated into an existing EntraPass system with other Kantech controllers (KT-100 and KT-300) or can provide the foundation for a brand new security installation. KT-400 manages network polling and communicates with the EntraPass Gateway only when an event has occurred. Communication integrity is ensured through a heartbeat signal which is sent at regular intervals to the EntraPass system. This asynchronous communication significantly reduces the amount of bandwidth required to manage the access control system over the network.

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

Ideal for small sites that only need basic door security, the KT-400 single door IP controller features an embedded web server which enables it to operate in a Standalone Mode – meaning no EntraPass software is required. Intuitive and responsive web-based software enables you to simply manage and configure your one door security from anywhere, using a desktop or mobile device.

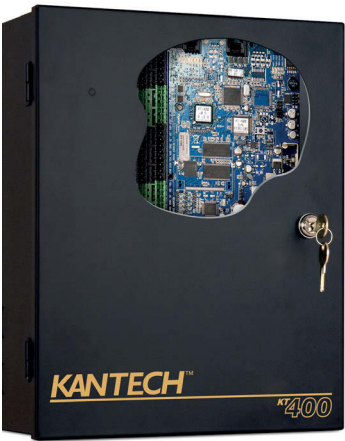
### Features

- 1. Supports 4 readers and 4 doors
- 2. Supports 8 readers and 4 doors using ioProx XSF readers
- 3. Flexible architecture with Serial and Ethernet connectivity

- 4. Highly secure 128-bit AES encryption
- 5. 100,000 cards and 20,000 stored events in offline mode
- 6. 256 outputs (four onboard) provide scalability
- 7. DSC NEO panel to panel intrusion integration
- 8. Double and triple swipe card at reader to activate relay, arm alarm system, lock/ unlock

### Standalone Mode Parameters

Features	Description
Users	1,000
Events	20,000
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/ hattrix
Languages	English, French, Spanish



KT-400	
Model	Description
KT-400-EU	Boxed EU version of four door, IP ready controller comprising PCB, Housing and Power Supply
KT-400-PCB	KT-400/KT-400-EU 4 reader controller PCB only
Accessories	
Model	Description
KT-400-CABEU	Black metal cabinet for KT-400-EU. Includes cabinet, detachable door, artwork and camlock. Does not include power supply
KT-400-CON	KT-400/KT-400-EU connector Kit
KT-LOCK	Lock for KT-400-CAB, KT-MOD-CAB, KT-300CAB, KT-NCC-CAB, KT-4051CAB, KT-CAB3000LDR and KT-CAB4000LDR metal cabinets, 2 keys
KT-TAMPER	Tamper switch for KT-400-CAB, KT-MOD-CAB, KT-300CAB, KT-NCC-CAB, KT-4051CAB, KT-CAB3000LDR and KT-CAB4000LDR metal cabinets
TR16100-240V	KT-400 transformer, wire-in, 240 VAC/ 16 Vac (100 VA), CE approved
Expansion Modules	
Model	Description
KT-MOD-INP16	16-zone, input expansion module with 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)
KT-MOD-SPI-16	KT-400 SPI Cable 16 inch
KT-MOD-SPI-36	KT-400 SPI Cable 36 inch
KT-MOD-CABEU	Expansion Module cabinet, black, with 92 cm SPI cable (KT-MOD-SPI-36) and lock (KT-LOCK)



# 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, REX and card reader systems. These cables provide fast, easy security installations.

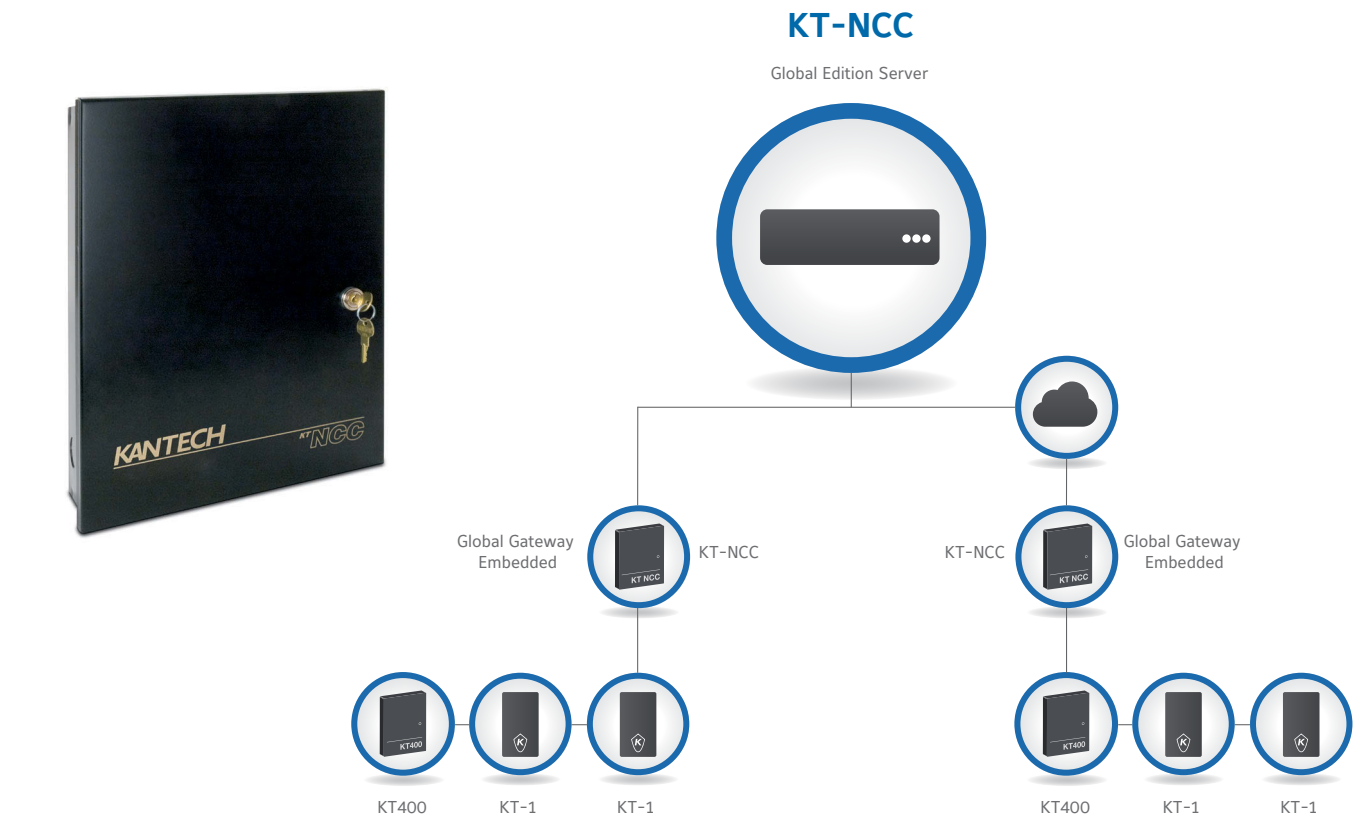
Model	Max Length	Beleden Ref	Alpha Ref	Description
Readers & Keypads				
ioSmart Readers KT-MUL and KT-SG versions (RS-485 or Wiegand)	150 m (500 ft)	8742	1304C	3 twisted pairs, solid, #22AWG, unshielded
ioSmart Readers KT-MUL and KT-SG versions (RS-485 or Wiegand)	150 m (500 ft)			UTP CAT 5E (1 pair for 12vdc+ and 1 pair for the 12vdc-)
ioProx Readers P225, P225KP, P325 & 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 & 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 & 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				
SPI (Serial Peripheral Interface)				
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				
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 & KT-NCC Grounding	8 m (25 ft)	N/A	N/A	1 conductor, solid, #18AWG

# KT-NCC Gateway – Kantech Network Communication Controller

**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 mount, 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**
- 1. Powerful panel architecture removes a layer of PCs to improve reliability and save money
  - 2. Supports any combination of up to 128 controllers (KT-1, KT-300, or KT-400)
  - 3. Embedded redundancy ensures critical data is always protected
  - 4. LED's provide system status
  - 5. Easy battery backup provides alternative for Universal Power Supply (UPS)
  - 6. Supports Global functionality such as anti-passback, guard tours, and alarm systems management is easier

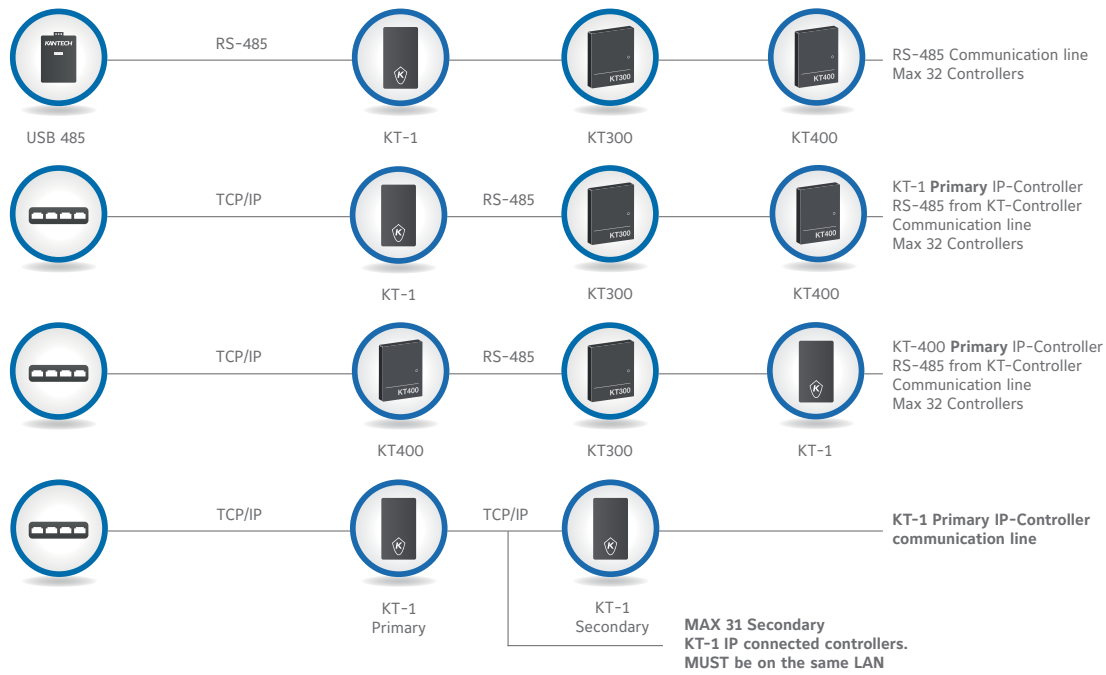
KT-NCC Gateway	
Model	Description
KT-NCC-EU	Kantech Embedded Network Communication Controller (NCC), includes: black metal cabinet (KT-NCC-CAB) and accessory kit (KTNCC-ACC) with lock (KT-LOCK) and tamper switch (KT-TAMPER), compatible with EntraPass Global Edition v3.18 and higher
KT-NCC-PCB	Embedded network communication controller (NCC) PCB only, includes: accessory kit (KT-NCC-ACC), battery cables and ground cable, plus hardware to affix the ground cable and the PCB



# EntraPass Architecture

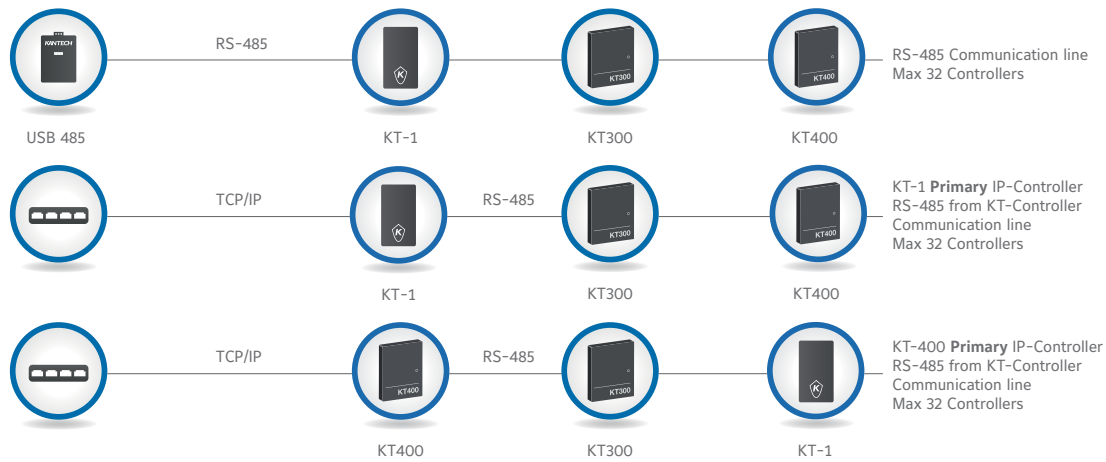
## MultiSite Gateways

System Architecture for Entrapass Special Edition and Multisite Gateway architecture with Entrapass Corporate Edition and Global edition.



## Global Gateways

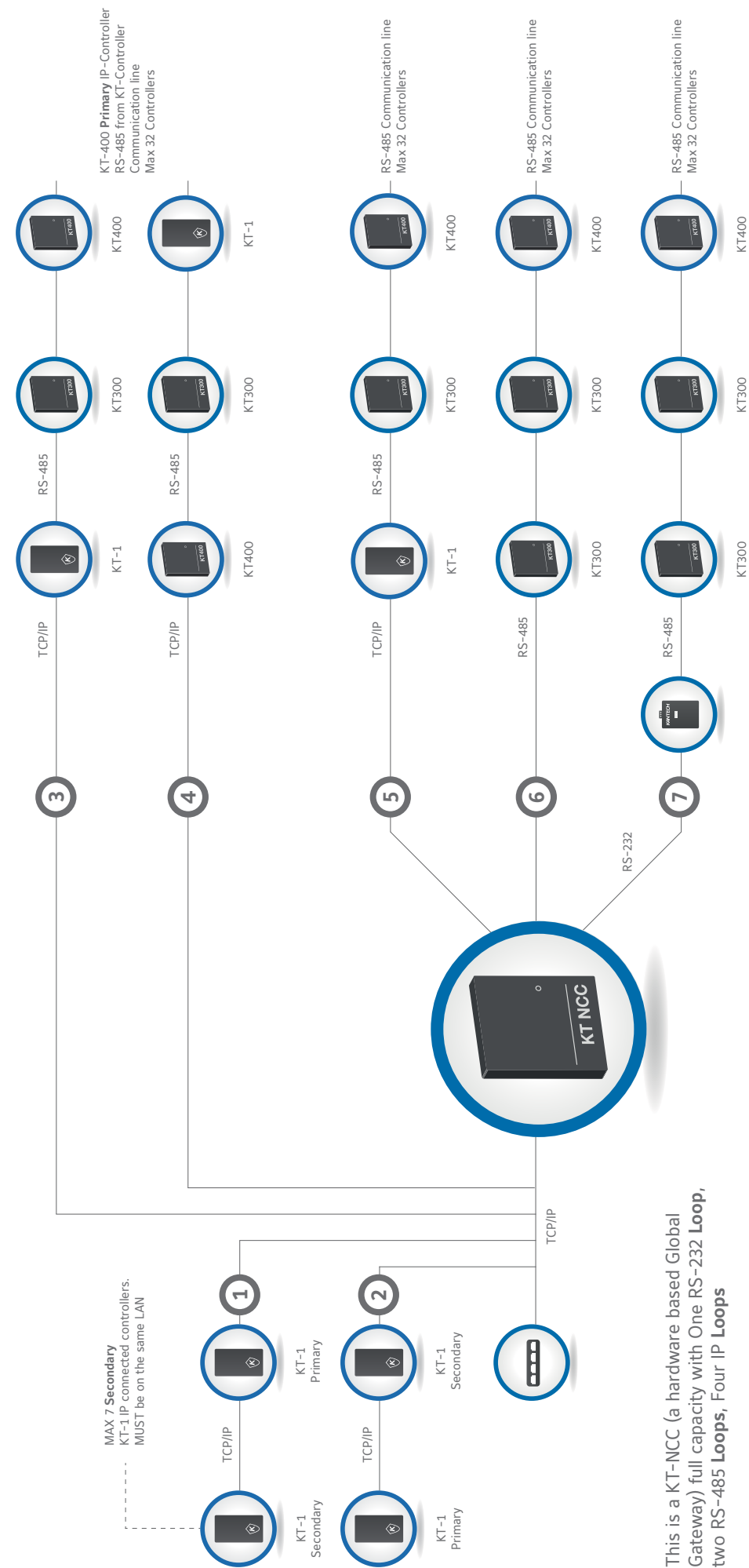
System Architecture for Entrapass Special Edition and Multisite Gateway architecture with Entrapass Corporate Edition and Global edition.



For RS-485 KT-controllers to a Primary controller connected to Global gateway respect the maximum of 8 Controllers. It is advisable to use the KT-NCC for remote site Global Gateway functionality.

## Global Gateways KT-NCC

System Architecture for Entrapass Global edition.



# 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**

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

- 3. Embedded redundancy ensures critical data is always protected
- 4. LED's provide system status
- 5. Easy battery backup provides alternative for Universal Power Supply (UPS)
- 6. Supports Global functionality such as anti-passback, guard tours, and alarm systems management is easier

**KT-IP Kantech 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.



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 RS232 port and up to 32 door controllers connected together on an RS-485 multi-drop network. The maximum length for a RS485 data line is 1200 meter Powered by 5 or 12 VDC, VC-485 converters may be connected back-to-back to act as a repeater on the data line.



Model	Description
VC-485	RS232/RS485 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 thus extending the maximum transmission distance to 1200 meter



Model	Description
USB-485	"Transparent" USB/RS485 protocol converter from a USB port on the host PC

# Kantech Readers

Kantech offers a full range of single and multi-technology readers and card options to fit any access control requirements. With Smartcard, Prox, Biometric, multi-technology and 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 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. Multi-technology readers provide the option to read both proximity and smart cards allowing the customers to migrate at their own pace.

## 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 Wiegand protocol. To save installation time and money, ioSmart Smart Card Readers can be wired directly to standard door contacts and T.Rex devices rather than running the wires all the way to a controller. 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 controller over RS-485 and aforementioned 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 integrated backlit, capacitive keypad support for dual factor authentication, combining contactless card presentation with a PIN.

## Future Proof

ioSmart Smart Card Readers are Bluetooth-ready and field firmware upgradeable, 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, etc.\* These readers offer an uncomplicated path to secure, feature-rich technology.

## Features

- 1. End-to-end encryption for added security
- 2. Cost-effective solution to transition from prox to advanced smart technology
- 3. Open technology provides versatility
- 4. Capacitive touch keypad available
- 5. Bluetooth-ready for future proofing
- 6. Unique design allows time-savingwiring to standard door contacts and T.Rex devices
- 7. Mullion and single-gang models
- 8. Available on KT-1 and newer KT-400 controller



Mullion Style readers	
Model	Description
KT-MUL-SC	ioSmart Reader Mullion Smart Secure Format, (13.56 MHz), Typical read range up to 2,8 cm, Dimensions: 115.8 x 44.6 x 24.7mm
KT-MUL-MT	ioSmart Multi-Technology reader with ioProx support, smartcard (13,56 MHz) & proximity (125KHz), up to 5,1 cm read range depending of technology of card, mullion style Dimensions: 115.8 x 44.6 x 24.7mm
KT-MUL-MT-KP	ioSmart Multi-Technology reader with ioProx support and Keypad, smartcard (13,56 MHz) & proximity (125KHz), up to 5,1 cm read range depending of technology of card, mullion style Dimensions: 115.8 x 44.6 x 24.7mm
Single Gang mount readers	
Model	Description
KT-SG-SC	ioSmart Reader Smart Secure Format, (13.56 MHz), Typical read range up to 2,8 cm, single gang mount style, Dimensions: 115.8 x 71,5 x 24.7mm
KT-SG-MT	ioSmart Multi-Technology reader with ioProx support, smartcard (13,56 MHz) & proximity (125KHz), up to 5,1 cm read range depending of technology of card, single gang mount style, Dimensions: 115.8 x 71,5 x 24.7mm
KT-SG-MT-KP	ioSmart Multi-Technology reader with ioProx support and Keypad, smartcard (13,56 MHz) & proximity (125KHz), up to 5,1 cm read range depending of technology of card, single gang mount style, Dimension: 115.8 x 71,5 x 24.7mm

# ioSmart Smart Card and Multi-Technology Readers

## Specifications

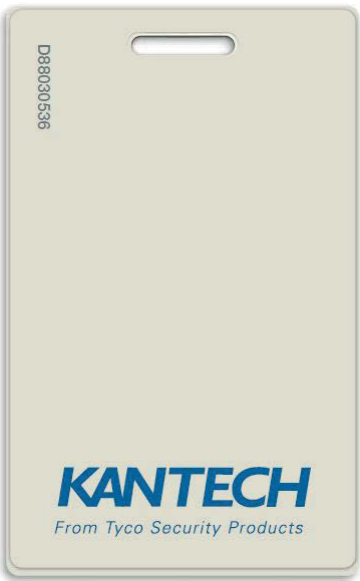
	Mullion			Single Gang		
Model	KT-MUL-MT-KP	KT-MUL-MT	KT-MUL-SC	KT-SG-MT-KP	KT-SG-MT	KT-SG-SC
RF Technologies	13.56 MHz 125 kHz	13.56 MHz 125 kHz	13.56 MHz	13.56 MHz 125 kHz	13.56 MHz 125 kHz	13.56 MHz
Power Consumption (mA) @ 12 VDC Peak / Average	200 mA /80 mA	100 mA /70 mA	100 mA /70 mA	200 mA/80 mA	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)		NA	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.W.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					
Wiring Terminal	6 screwless poles					
Tamper	Optical					
Wiegand Communication Formats	Kantech SSF, Kantech XSF, 26-bit, 34-bit					
Sounder	Integrated					
AES-128 Security	From the ioSmart card to the reader and from the reader to the access control unit over RS-485.					
Output	RS-485: 1 supervised open-drain, up to 750 mA					
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °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					
Input Voltage	8.5 VDC to 16 VDC (provided by UL listed, power limited power source)					
Housing	Polycarbonate, smoked black					
Flammability Rating	UL94 V-2					
Firmware	Fully upgradable using RS-485					
Ingress Protection Rating	IP55					
Communication	RS-485 (AES-128) or Wiegand					
Cabling	3 twisted pairs AWG 22 unshielded or CAT5, up to 150 m (500 ft)					
Warranty	Limited Lifetime					
Certifications	FCC/IC, CE, UL294, NIST, FIPS 197, RoHS, WEEE					
Compatible RS-485 Access Control Units	KT-400 (newer models without heatsinks only) and KT-1					

# ioSmart Smart Cards

## ioSmart Cards

Contactless smart cards offer advantages to both the organisation issuing the card and the cardholder. A smartcard 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, restaurant 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 operating at different ranges.

IoSmart Cards are the new generation and enhanced security level contactless smart cards of the mainstream MIFARE classic. The IoSmart, an NXP MIFARE EV1 Plus X technology offers more flexibility to optimize speed and confidentiality. It offers a rich feature set including proximity checks against relay attacks. Mifare EV1 Plus uses Advanced Encryption Standard (AES) for authentication, data integrity protection and data encryption.



MIFARE Plus EV1 offers enhanced features on the highest security level – scalable – flexible – future proof

### Cards and Tags

Model	Description
MFP-2KDYE	ioSmart Mifare Plus EV1 2K Printable Smart Card
MFP-2KSHL	ioSmart Mifare Plus EV1 2K Shell Smart Card
MPF-2KKEY	iosmart Mifare Plus EV1 keyfob

# Multi-Technology Proximity/Smart Card Readers

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’s 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 whereby firmware updates will ensure that today’s reader is ready for tomorrow’s card technologies

### Features

- 1. Reads more than 12 different types of proximity card/smart card formats
- 2. Secure card data transmission
- 3. Future-proof solution
- 4. Optional keypad for two-factor verification
- 5. With firmware upgrade to read DESFIRE V1 applications

### Compatible Card Formats:

Kantech ioProx proximity	MIFARE sectors
HID KSF Proximity	DESFire EV1 serial number
HID 26 bit Wiegand	ISO 14443A, 14443B, and
HID 36/37 bit Wiegand	15693 serial number
HID Corporate 1000	iCLASS® serial number
Deister proximity	CASI-RUSCO® Prox Lite
MIFARE serial number	



Readers	
Model	Description
P345MTR	Multi-Technology reader with ioProx support, smartcard & proximity, single-gang US size, up to 10.2 cm (4 in) read range depending of technology of card, black
P345KPMTR	Multi-Technology reader with ioProx support, integrated keypad, smartcard & proximity, single-gang US size, up to 10.2 cm (4 in) read range depending of technology of card, black
Cards	
Model	Description
DAT-MIF-1KS50-BL	Mifare Classic 1K, ISO 7810 (85mm x 55mm) PVC Plain White, Not Programmed. (order in multiples of 50)
DAT-MIF-4KS70-BL	MIFARE Classic 4K, ISO 7810 (85mm x 55mm) PVC Plain White, Not Programmed (order in multiples of 50)

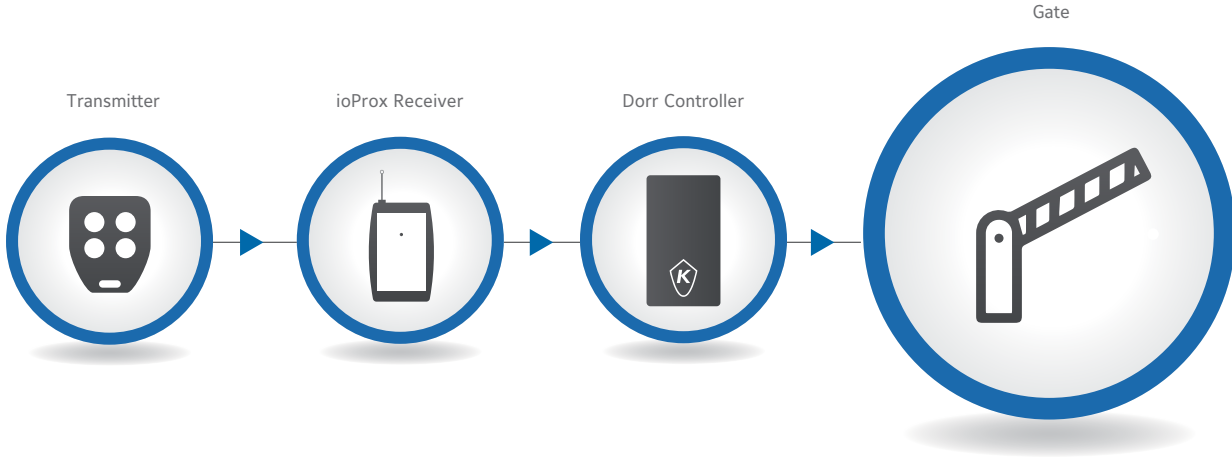
# Receiver and Wireless Transmitter

The ioProx Transmitter is ideal for long-range (up to 45 m/150 ft) applications such as 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 Extended Secure Format (XSF).

### Features

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

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



# Biometric Readers

Kantech has partnered with industry leaders to provide a high-security personnel identification system using biometrics to establish an imposter-free identity database and to verify the identity of authorized persons. Access control biometrics includes everything that requires identity authentication by scanning a person’s unique physical characteristics such as fingerprints and hand geometry. Biometrics offers a superior combination of strength, affordability, convenience and ease of use. It is used where high security is a necessity such as hospitals, police, the military as well as the financial industry

### Features

- 1. User friendly, with touchscreen terminals for task visualisation and additional communication
- 2. Flexibility of deployment scenarios, with a variety of models, turnstiles or server rack doors, mullions, aluminium doors with all kind of card technology, both indoors or outdoors.
- 3. Easy configuration and on-device enrolment using any device, PC, laptop, tablet, smartphone and the integrated web server.



Enrolment and Management software	
Model	Description
MOR-293670375	Morpho Manager Pack Pro, The pack Pro allows the enrolment, verification & management of the biometric from a central computer, for standalone and client/server application
MA Sigma Indoor and Outdoor with Colour Touchscreen	
Model	Description
MOR-293638835	WR Sigma Bio, Indoor and Outdoor, Multi-factor Bio/PIN (3K users, 10K, 50K and 100K w/ license, 1M logs storage capacity - Poe included
MOR-293638898	WR Sigma Prox, Indoor and Outdoor, Multi-factor Bio/Card/PIN/BioPIN (3K users, 10K, 50K and 100K w/ license) , 1M logs storage capacity - HID Prox - Poe included
MOR-293638877	WR Sigma Multi, Indoor and Outdoor, Multi-factor Bio/Card/PIN/BioPIN (3K users, 10K, 50K and 100K w/ license), 1M logs storage capacity - MIFARE®/DESFire® Smartcard Reader - Poe included
MOR-293638856	WR Sigma iCLASS, Indoor and Outdoor, Multi-factor Bio/Card/PIN/BioPIN (3K users, 10K, 50K and 100K w/ license), 1M logs storage capacity - HID iCLASS SE- Poe included
MA Sigma Lite Indoor and Outdoor	
Model	Description
MOR-293678615	MA Sigma Lite, Mono-factor Bio (500 users, Upgradable to 3K and 10K users with license), IP65 and IK 08, Embedded web server
MOR-293678628	MA SIGMA Lite iCLASS, Multi-factor Bio/Card (500 users, Upgradable to 3K and 10K users with license), HID i-class SE Smartcard Reader, IP65 and IK 08,, Embedded web server
MOR-293673665	MA SIGMA Lite Prox , Multi-factor Bio/Card (500 users, Upgradable to 3K and 10K users with license), HID Prox Reader, IP65 and IK 08,, Embedded web server
MOR-293678636	MA SIGMA Lite Multi , Multi-factor Bio/Card (500 users, Upgradable to 3K and 10K users with license), MIFARE®/MIFARE® Plus/DESFire® Smartcard Reader, IP65 and IK 08,, Embedded web server
MA Sigma Lite Indoor and Outdoor with Colour touchscreen	
Model	Description
MOR-293678657	MA Sigma Lite +, Multi-factor Bio/PIN (500 users, Upgradable to 3K and 10K users with license), IP65 and IK 08, Embedded web server, 2.8" colour touchscreen
MOR-293673644	MA SIGMA Lite + iCLASS, Multi-factor Bio/Card (500 users, Upgradable to 3K and 10K users with license), HID i-class SE Smartcard Reader, IP65 and IK 08,, Embedded web server, 2.8" colour touchscreen
MOR-293678678	MA SIGMA Lite + Prox , Multi-factor Bio/Card/PIN (500 users, Upgradable to 3K and 10K users with license), HID Prox Reader, IP65 and IK 08,, Embedded web server, 2.8" colour touchscreen
MOR-293678660	MA SIGMA Lite + Multi , Multi-factor Bio/Card/PIN (500 users, Upgradable to 3K and 10K users with license), MIFARE®/MIFARE® Plus/DESFire® Smartcard Reader, IP65 and IK 08,, Embedded web server 2.8" colour touchscreen



# 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.

### DTC1250e

The DTC1250e provides an ideal card printing solution for small businesses, schools, and local governments that need a simple, reliable, and affordable means of printing and encoding photo ID cards.



DTC1250e	
Model	Description
FAR050020	DTC1250e Single-Sided Base Model printer, USB and Ethernet, for card Sizes CR-80, CR-79 Adhesive Back
FAR050120	DTC1250e Dual-Sided Base Model printer, USB and Ethernet ,for card Sizes CR-80, CR-79 Adhesive Back
FAR45000	YMCKO Cartridge w/Cleaning Roller: Full-colour ribbon with resin black and clear overlay panel – 250 images –compatible with Fargo DTC1000 and DTC1250e printers.

### 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 organisations.



DTC4500e	
Model	Description
FAR055000	DTC4500e Single-Sided Base Model printer, USB and Ethernet ,for card Sizes CR-80, CR-79 Adhesive Back
FAR055100	DTC4500e Dual-Sided Base Model printer, USB and Ethernet for card Sizes CR-80, CR-79 Adhesive Back
FAR45210	YMCKOK: Full-colour ribbon with two resin black panels and clear overlay panel – 500 images – compatible with Fargo DTC4500 and DTC4500e printers
FAR45201	Premium Black monochrome ribbon cartridge – 3000 Images – compatible with Fargo DTC4500 and DTC4500e printers.
FAR45202	Standard Black monochrome ribbon – 3000 Images – compatible with Fargo DTC4500 and DTC4500e printers

### Plug and Play ID Photo Capture



Plug and Play ID Photo Capture	
Model	Description
VID-24C708AF	5MP USB 2.0 ID badging camera with Synchronized Flash and Autofocus

# Request-to-Exit Detector

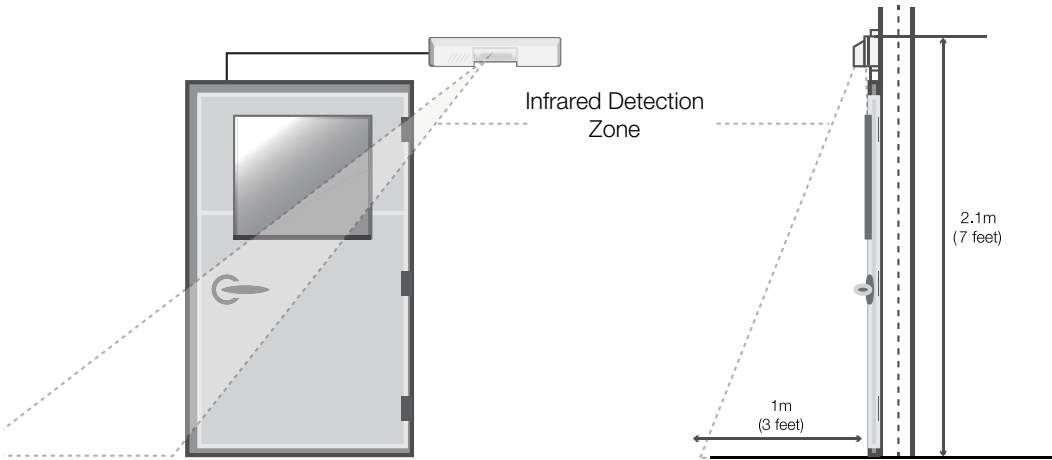
The T-Rex is a sophisticated and cost-effective request to exit device for all access control applications and an alternative to installing an exit button. Outstanding innovations such as X-Y Targeting and Digital Signal Processing (DSP) implementation make the T.Rex the fastest and most reliable exit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

### Features

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



Model	Description
T.REX-LT	T-REX Exit detector with tamper and timer
TREX-LT2	TREX with 2-relays no sounder – White colour – with tamper switch
T.REX-LT2-NL	T.Rex request to exit detector, w/ tamper, timer and 2 relays, no logo, white
T.REX-XL	T-REX Exit detector with tamper, piezo and timer (packed 12 per carton)
T.REX-XL-NL	T.Rex request to exit detector, w/ tamper, piezo and timer, no logo, white
TREX-XL2	TREX with piezo/2relays with a sounder-with tamper switch
T.REX-PLATE	Single-gang box mounting back plate, white



# Exit Control Devices

Touch Free Stainless steel Exit Buttons are rugged, touchless switch built with advanced Infrared technology. Ideal for use in sterile environments such as hospitals, food processing plants and clean rooms, the touch free exit button recessed design and stainless steel construction make it easy to clean and sanitize. They are also ideal for buildings used by disabled or elderly people

**Features**

- 1. Brushed Stainless Steel
- 2. Infra-Red
- 3. Adjustable timer
- 4. Flush and surface mount
- 5. Adjustable range
- 6. Change-over-contacts
- 7. Compatible with all access control systems



Exit Control Devices	
Model	Description
DRB-IR	Touch Free" Infra Red Switch (85x85x30) Flushmount. Stainless steel flush mounted IR unit with hand symbol.
DRB-IR-S	Touch Free" Infra Red Switch (85x85x30) Surface mount . Stainless Steel surface mounted IR unit with hand symbol
Model	Description
MCP3A-G000SF-13	Green Call Points for Access Control Systems. Single pole changeover contact in resettable operation mode. Indoor use. Ingress protection IP24D
MCP4A-G000SF-13	Green Call Points for Access Control Systems. Double pole changeover contact in resettable operation mode. Indoor use. Ingress protection IP24D
KAC-PS200	Hinged cover for the MCP3A-G000SF-13 & MCP4A-G000SF-13 Call Points

# Kantech in Action

Download our FREE Tyco app from [www.tyco-tsp.com](http://www.tyco-tsp.com) to showcase how our products and brands integrate to become a Total Solutions Provider for all your security requirements. Once downloaded scan the icons below to see Kantech products in action



**Retail**



**Sports & Leisure**









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### About Johnson Controls

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. Our 120,000 employees create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. Our commitment to sustainability dates back to our roots in 1885, with the invention of the first electric room thermostat.

For additional information, please visit [www.johnsoncontrols.com](http://www.johnsoncontrols.com) or follow us [@johnsoncontrols](https://twitter.com/johnsoncontrols) on Twitter.