



Keyscan Access Control Systems Product Guide

Smart access means
confidence

Welcome to dormakaba Electronic Access and Data (EAD)

dormakaba Electronic Access and Data (EAD) brings Keyscan networked access control products together with Kaba's E-Plex electronic, wireless and stand-alone lock products and Rutherford Controls' electric locking hardware and accessories. Creating full end-to-end solutions for security and access control, you'll benefit from more smart products, smart solutions, smart integration and smart partnerships.

The innovative Keyscan networked access control system remains best-in-class. Powered by Keyscan Aurora, a single-platform access control management software with multiple integration options, it continues to provide unmatched feature-to-price ratio as well as system scalability and flexibility.

Keyscan access control systems fit virtually any access control deployment, from an entry-level single door application to a multi-national, multi-site, enterprise with system integrations and thousands of doors to be secured.

Installing technicians and sales professionals can become highly proficient with an access control system platform, with multiple integration options, suitable for all installations. And, at the same time, integrators and dealers can be extremely competitive and maximize their opportunities and service options for all of their customers with dormakaba's complementary product portfolios:

Door Hardware	Electronic Access and Data
Entrance Systems	Interior Glass Solutions
Multi-Housing	Moveable Walls
Lodging Systems	Services
Safe Locks	Workforce Management

We now offer you full electronic access control solutions that don't end with access control. If your project expands beyond security and access control, we can offer a multitude of solutions.

Whether you are a security dealer, integrator or end-user, this guide will give you a full outline of dormakaba's Keyscan Access Control product line and supply you with information critical for your access control selection process.



Keyscan Aurora Access Control Management Software

The flagship Keyscan Aurora access control management software is an innovative high-performance software platform laden with features. It provides a single software solution with robust integration options with many third-party platforms.

Keyscan Aurora software will drive Keyscan access control systems, regardless of size or complexity, from one door in a single location, to thousands of doors and users in multiple locations around the world. Advanced functions include managing, auditing and controlling door and elevator floor access as well as seamless wireless lock integration offering a hybrid hardwired and wireless system with full control and audit capability, using the same credential throughout your facility.

Aurora delivers impressive capabilities and features such as:

- VMS Integration with Milestone, Avigilon, OnSSI, i3 International, Salient Systems, Exacq, OpenEye and more.
- Wireless lock integration
- Active Directory integration
- Aurora web client interface
- Centrally managed access control
- Upgrade to full SQL server
- Optional licensed and add-on modules for enhanced and added functionality
- Ten (10) assigned groups to a single credential holder
- Support for 45,000 credentials (up to 90,000*)
- People-centric methodology allows multiple credentials assignable to a single person
- Unlimited user-definable fields
- Impressive global communication (with CIM and CIM-Link)
- Optional licenced Software Development Kit (SDK) available
- English, French, Spanish and Portuguese language support

With no performance-limiting/system expansion governors or recurring fees, Keyscan Aurora is ideal for small and mid-size access control installations, while also comfortably supporting the demands of large, multi-faceted and corporate enterprise-caliber access control deployments.

* Hardware option available upon special order.



01 Aurora Schedules



02 People-centric interface



03 Multi-language support



04 Multiple Monitor Support



05 Active mapping with integrated floor plans



06 VMS and CCTV integration

Keyscan Door Controllers

Keyscan CA series door controllers gives you unmatched access control flexibility for new installations or revitalizing existing systems. The selection of Keyscan CA series access control units allow you to easily install new systems, regardless of size, or replace existing access control systems while, in many cases, utilizing existing infrastructure including credentials.

Distributed architecture provides superior system resiliency and optimized up time.

Keyscan door controllers feature:

- Network TCP/IP ready (with NETCOM)
- Easily configurable reader settings supporting many Wiegand protocols
- Up to 6000 transactions retained in file buffer
- Auto-transfer protocol uploads file buffer when communication is re-established after an interruption
- Dual processors
- Expanded flash memory allows for 45,000 credentials (90,000 with special order hardware)
- Lock down and global communication among multiple ACUs, server and sites (requires CIMs and CIM Link)
- Removable terminal blocks
- Accommodates 512 time schedules and 511 group levels
- Multiple inputs and outputs for expansion capability



CA8500 8-reader access control unit

- Includes:
- CA8500B ACU board
 - 2- OCB8 relay boards
 - 1 - DPS-15 power supply
 - 1 - black metal enclosure with lock and tamper switch



CA4500 4-reader access control unit

- Includes:
- CA4500B ACU board
 - OCB8 relay board
 - 1 - DPS-15 power supply
 - 1 - black metal enclosure with lock and tamper switch



CA250 2-reader access control unit

- Includes:
- CA250B ACU board
 - OCB8 relay board
 - 1 - DPS-15 power supply
 - 1 - black metal enclosure with lock and tamper switch

CA150 – Single Door PoE Equipped Controller

When it comes to performance, capacities and overall capability, the CA150 is comparable with our full line of access control units.

- Innovative IP "At-The-Edge" solution
- Network connectivity with built-in PoE ready TCP/IP module
- PoE mode powers reader, strike, and other auxiliary devices, up to 680mA.
- DHCP supported
- Dual Processors
- Flash Memory
- Two reader ports



Keyscan Elevator Floor Controllers

The Keyscan EC series elevator floor controllers are designed to secure office or residential floors by prompting credential holders to present their assigned credential when using an elevator. The Keyscan EC series elevator floor controllers leverage the same architecture and software as the CA series door controller counterparts.

Keyscan EC series door controllers feature:

- Network TCP/IP ready (with NETCOM)
- Easily configurable reader settings supporting many Wiegand protocols
- Up to 6000 transactions retained in file buffer
- Auto-transfer protocol uploads file buffer when communication is re-established after an interruption
- Dual processors
- Expanded flash memory allows for 45,000 credentials (90,000 with special order hardware)
- Global communication among multiple ACU/ECUs, server and sites (requires CIMs and CIM Link)
- Removable terminal blocks
- Accommodates 512 time schedules and 511 group levels
- Multiple inputs and outputs for expansion capability



**EC2500
2 Cab Elevator Floor
Access Control Unit**

Supports 2 Cabs with 2 readers.
(8-floor control, expandable to 16 with optional OCB8 relay boards)

Includes:

- EC2500B ACU board
- 2 - OCB8 relay boards
- 1 - DPS-15 power supply
- 1 - black metal enclosure with lock and tamper switch

Best suited for two elevators servicing all floors and does not require individual unique control (eg: service elevator)



**EC1500
1 Cab Elevator Floor
Access Control Unit**

(8-floor control, expandable to 40 with optional OCB8 relay boards)

Includes:

- EC1500B ACU board
- 1 - OCB8 relay board
- 1 - DPS-15 power supply
- 1 - black metal enclosure

Best suited for elevator banks that require unique floor control such as service elevators.

The Keyscan door and elevator floor access control units can all be mixed and matched to suit any installation requirement.

Keyscan

High Frequency Readers – 13.56 MHz



K-SMART - Contactless smartcard reader

This Keyscan contactless smartcard reader offers users the convenience of a contactless credential with the enhanced security that only a smartcard reader and credential combination can offer.

- Built-in support for smartcard security and encryption
- A built-in "heartbeat" monitors reader communication advising end-users if any type of tamper or malfunction is detected
- Designed to function with Keyscan K-SECURE 1K and 4K, K-SF-1K, K-TX2-1K or ISO 14443 type credentials.

K-SKPR – contactless smartcard reader and keypad

The new Keyscan smartcard reader and keypad offers users the convenience of a contactless credential with the enhanced security that only a smartcard reader, keypad and credential combination can offer.

- Built-in support for smartcard security and encryption
- Keypad offers dual verification security
- A built-in "heartbeat" monitors reader communication advising end-users if any type of tamper or malfunction is detected
- Designed to function with Keyscan K-SECURE 1K and 4K, K-SF-1K, K-TX2-1K or ISO 14443 (CSN) type credentials.

iCLASS SE and SE Legacy High Frequency Readers – 13.56 MHz



iCLASS® SE Readers (for new installations)

Keyscan iCLASS SE goes beyond the traditional smartcard model to offer a secure identity data structure based on Secure Identity Object (SIO), a new portable credential methodology.

- Multi-layered security ensures data authenticity and privacy
- Stellar performance with SIO media mapping, field programmable and status LEDs
- Will function only with iCLASS SE credentials
- Supports Keyscan elite key for extended security

KR10SE reader
KR15SE mullion mount (special order only)
KR40SE reader
KRK40SE reader and keypad

iCLASS® SE Legacy Readers (for use with existing installations)

iCLASS readers and credentials make access control more versatile and provide security through encryption and mutual authentication between the card and reader. iCLASS SE legacy readers are user-friendly and deliver the convenience and reliability of proximity technology.

- Designed to be 'backwards compatible' to work in conjunction with environments using previously installed iCLASS security technology
- Functions with both iCLASS SE and iCLASS SR Legacy credentials

KR10L reader
KR15L mullion mount (special order only)
KR40L reader
KR90L long range reader

The iCLASS "SE Legacy" reader series is designed to work with iCLASS "SR" backwards-compatible credentials and will work in conjunction with previously installed iCLASS environments.

Keyscan

High Frequency Credentials – 13.56 MHz



K-SECURE Series - 13.56 MHz Smartcard Credentials

The Keyscan K-SECURE Contactless Smartcard is equipped with numerous anti-counterfeiting and card anti-duplication technologies and a robust AES multilayer encryption technology offering greater security.

- Complies with international interoperability (ISO14443) standards for 3rd party applications*
- ISO printable
- Keyscan 36-bit format for even more security over standard 26-bit 125kHz credentials
- Available in 1K and 4K formats, designed to function with Keyscan K-SMART and K-SKPR readers
- Also available in a 1K smart FoB (K-SF-1K) and 4-button RF Transmitter (K-TX2-1K)

* Contact Keyscan for using data sectors

iCLASS SE and SR Legacy High Frequency Credentials – 13.56 MHz



iCLASS® SE Credentials (New Installations)

iCLASS SE credentials are part of the access control platform and open ecosystem based on a Trusted Identity Platform (TIP) architecture for advanced applications, mobility and heightened security. These credentials have the exclusive Keyscan Elite Key feature and are specifically designed to function only within Keyscan iCLASS SE environments.

Available Keyscan iCLASS SE Card, FOB and Tag Credentials:

- KC2K2SE Clamshell Card
- KI2K2SE ISO Smart Card
- KI2K2MSE ISO Smart Card Magstripe
- KI16K16SE ISO Smart Card
- KF2K2SE Smart FOB
- KT2K2SE Smart Tag

iCLASS® SR Legacy Credentials (supports existing Installations)

iCLASS offers customers a multiple layer of card-to-reader security. These credentials have the exclusive Keyscan Elite Key feature and are specifically designed to function only within Keyscan iCLASS SE Legacy environments.

Available Keyscan iCLASS Legacy Card, FOB and Tag Credentials:

- KC2K2SR Clamshell Card
- KI2K2SR ISO Smart Card
- KI2K2MSR ISO Smart Card Magstripe
- KI16K16SR ISO Smart Card
- KF2K2SR Smart FOB
- KT2K2SR Smart Tag

Contact your Electronic Access and Data (EAD) Regional Sales Manager for more information on Keyscan and iCLASS 13.56 MHz high frequency readers and credentials.

Keyscan and HID Compatible Low Frequency Readers – 125 kHz



Keyscan K-PROX3 Proximity Reader

The sleek K-PROX3 proximity reader features a new look and dedicated functions such as auxiliary LED indicators designed to provide visual confirmation of our exclusive Present3 and facility lockdown function (with firmware 9.39 or higher).

- On board beeper to generate audible tones or sound a local "door-held-open" alert
- Convenient, all-in-one, single gang and mullion mounting options
- Anti-tamper "heartbeat" intelligence triggers alarm conditions when the signal is interrupted
- Will function with all access control systems including Keyscan, even without firmware enabling the exclusive functions



Keyscan K-KPR- Proximity Reader/Keypad

The Keyscan K-KPR reader and keypad provides a sleek finish with clear LED illumination for access granted and denial indications with the additional layer of security with a keypad.

- On board beeper to generate audible tones or sound a local "door-held-open" alert
- Versatile mounting options
- Epoxy encased and well-suited for both interior or exterior use
- Impressive read range
- Ideal for dual verification security by prompting both a credential and/or PIN



Keyscan K-VAN - Vandal Resistant Proximity Reader

K-VAN is constructed of a solid stainless steel body and fibertex. It's an ideal proximity reader for indoor or outdoor applications where aggressive behavior, crime or high-threat environments could be expected.

- Proximity RFID technology
- Vandal and bullet resistant insert
- Compact size with optional tamper-proof blind mounting



HID Compatible Readers

HID readers and credentials seamlessly integrate with Keyscan access control systems. HID readers are robust, affordable and have a host of features plus a range of stylish cover designs.



- High reliability, consistent read range, and easy-to-install package
- Features multicolor LED, internal or host control of the LED, and/or beeper and a beeper "off" switch for silent operation
- Provides Wiegand protocol interface and is compatible with Keyscan access control systems

K-RX RF Receiver and FOBs deliver a secure wireless solution



Keyscan K-RX - Wireless Receiver

- The Keyscan K-RX wireless receiver is a good selection for parking garage, gate and many other long-range applications.
- Transmits a signal via hardwired Wiegand for access control panel authentication
- Works with the K-TX2, K-INTX2 or K-TX2-1K transmitter FOBs from up to 200 feet
- K-TX2 or K-INTX2 both act as a regular FOB when used within your facility

Contact your Electronic Access and Data Regional Sales Manager for more information on HID compatible 125 kHz low frequency readers and Keyscan wireless receivers.



Keyscan and HID Compatible Low Frequency Credentials – 125 kHz



Keyscan CS125-36 - Proximity Card Credentials

The Keyscan CS125 standard proximity clamshell cards are designed to be used with Keyscan proximity readers K-PROX2, K-KPR, K-VAN as well as HID 125 kHz compatible readers.

- Available in Keyscan 36 bit and standard 26 bit formats
- Up to a 4" read range
- An affordable alternative to other compatible card credentials
- Will function with Keyscan and HID 125 kHz compatible low frequency readers



HID Compatible Card, FOB and Tag Credentials

HID compatible proximity access control card credential offers universal compatibility for any Keyscan reader or other 125 kHz proximity readers.

- Functions with Keyscan K-PROX, K-KPR, K-VAN readers as well as HID 125 kHz compatible readers
- Available in Keyscan 36 bit and standard 26 bit formats
- ISO version with graphics quality surface
- Also available in FOB and Tag formats



Keyscan RF Transmitters

The Keyscan selection of RF transmitters is a simple way to grant access in parking gate, garage and other long-range read access control environments. They can also function within your facility.

Available Keyscan RF transmitters for proximity and long-range access control environments:

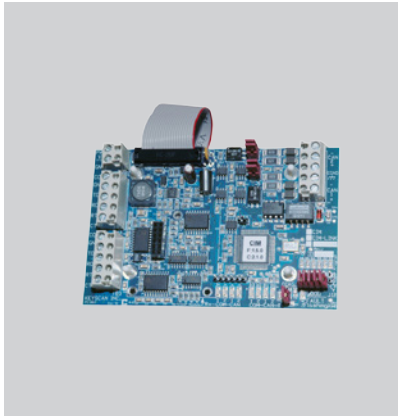
K-TX2 – RF transmitter HID coil (26 bit version K-TX2-26 available by special order)

K-INTX2 – RF transmitter Indala coil (26 bit version K-INTX2-26 available by special order)

Keyscan also offers K-TX2-1K, a smart RF transmitter. It functions with Keyscan K-RX, K-SMART, and K-SKPR high-frequency readers. A simple way to grant access in parking gate, garage and other long-range read access control environments.

Contact your dormakaba Electronic Access and Data Regional Sales Manager for more information on HID compatible 125 kHz low frequency credentials and Keyscan RF Transmitters.

Keyscan Network and Communication Modules

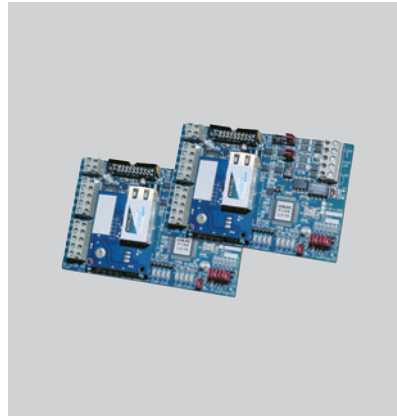


CIM (Communications Interlink Module)

A new communication control module designed to use a CAN Bus communication network.

- Provide optimized server to Access Control Unit (ACU) communication
- Gives users an all new ACU to ACU network providing inter-panel communication for global functions

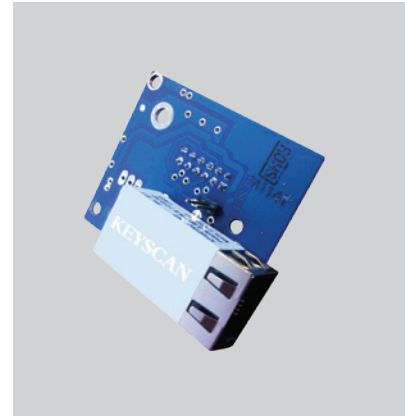
The CIM also includes enhanced device-based diagnostics and improved communication speeds.



CIM-Link (Global Network Connectivity Module)

The Keyscan CIM-Link is a TCP/IP companion module, which incorporates multiple CIM CAN Bus communication loops into a single global infrastructure via LAN/WAN network.

- Maximizes system design options
- Promotes greater global communication flexibility across your facility
- Expands ACU to ACU functionality to multiple independent CAN Bus global networks



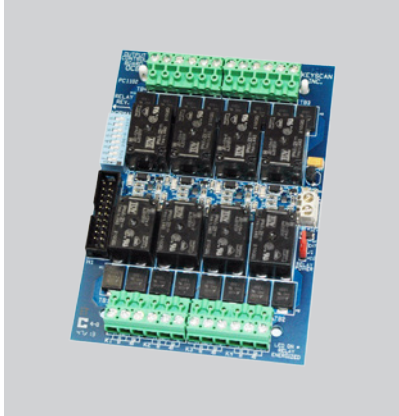
NETCOM2P - TCP/IP Plug-on Communication Adaptor

Networking a Keyscan access control unit is made easy by using the Keyscan NETCOM2P plug-on adaptor.

- Allows for maximum system design options
- Designed to plug directly onto the CIM to establish network connection OR can plug directly onto ACU board for direct network connectivity
- Also available as off-board module with DIP switch settings (NETCOM2)

Encrypted version also available AES Rijndael 256 bit (NETCOM6P).

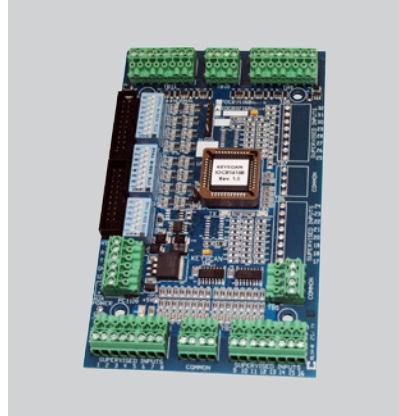
Keyscan Peripheral Products



OCB8 - Relay Board

The Keyscan OCB8 is a Form-C relay output board with durable and reliable construction for long-term use. For use with Keyscan door and elevator floor controllers wherever you need a dry contact closure for auxiliary equipment.

- Expand floor control for Keyscan EC1500 and EC2500 elevator floor controllers
- Add auxiliary outputs to Keyscan CA4500 and CA8500 door controllers to trigger response such as sirens, alarms, strobe lights or further restrict access
- Time programmable (via software)
- DIP switch bank allowing easy changes to state of relays



IOCB1616B - Input and Output Expansion Board

When high-level system design calls for additional input and output capabilities, look to the Keyscan IOCB1616 expansion board.

- Provides 16 additional inputs with 16 additional open collector outputs
- Easy to add relay output option if desired
- Connect up to four (4) IOCB1616 boards to CA4500 and CA8500
- May be remote mounted up to 4000 ft from its control panel
- Also available with a separate metal enclosure and power supply board Part no. IOCB1616

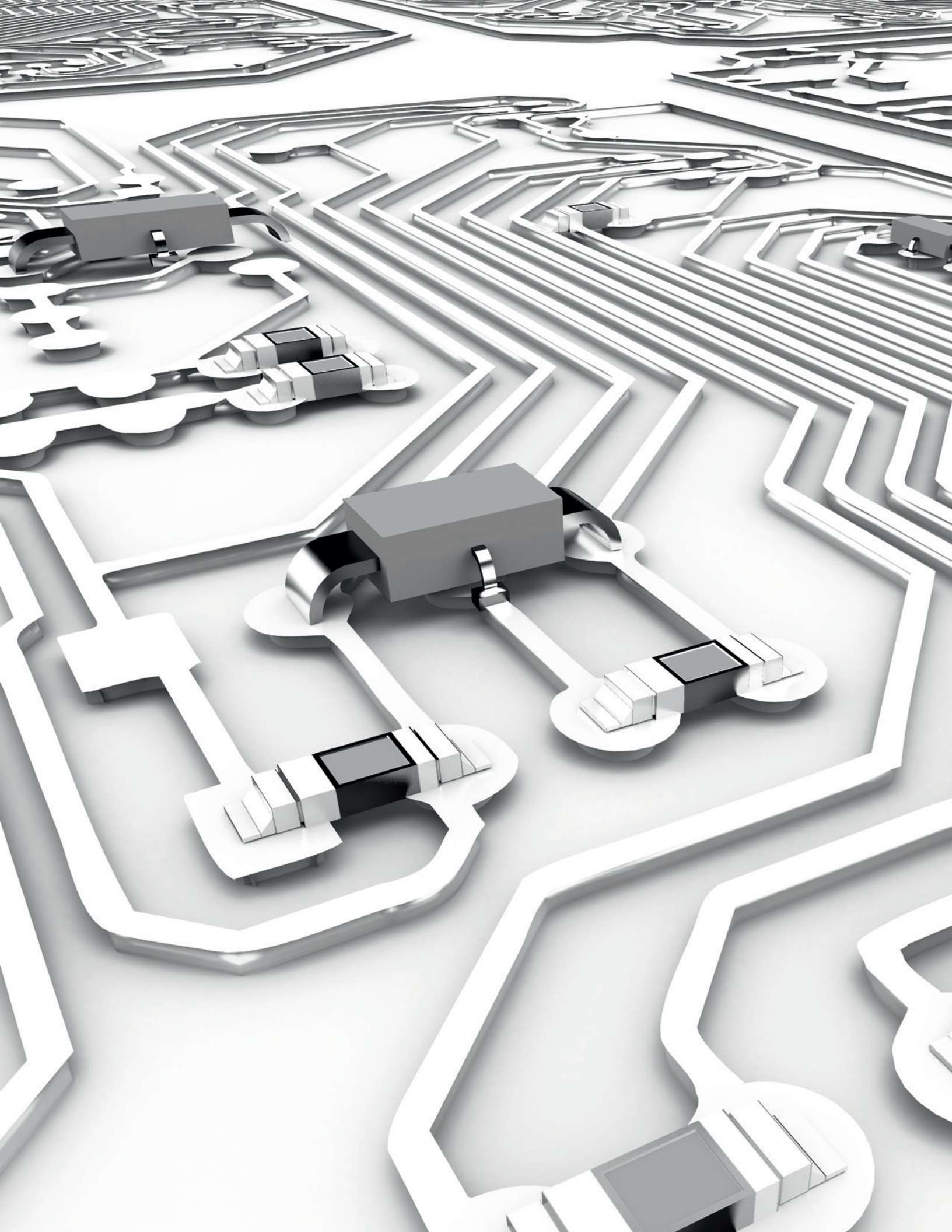
Ideal for monitoring exit only doors, glass breaks, motion detectors and any other sensing device throughout your Keyscan system.



WIEEX2 - Wiegand Extender Board

When circumstances dictate a long cable run between control panel and reader, exceeding 500 feet, rely on the Keyscan WIEEX2 Wiegand Extender.

- Converts the Wiegand signal to standard RS485
- Provides a communication range of up to 4000 feet between WIEEX2 receiver and WIEEX2 transmitter while using standard CAT5 cable between units



Keyscan Access Control Unit Features

Access Control Unit	CA150	CA250	CA4500	CA8500	EC1500	EC2500
Doors/Elevator Floors Supported	1 door	2 doors	4 doors	8 doors	1 cab (up to 40 flrs)	2 cabs (up to 16 flrs)
Reader Ports	2 (in/out)	2	4	8	1	2
Multi ACU Compatibility	Yes (Ethernet)	Yes	Yes	Yes	Yes	Yes
System Status LEDs	Yes	Yes	Yes	Yes	Yes	Yes
Dual Processors	Yes	Yes	Yes	Yes	Yes	Yes
Flash Memory	Yes	Yes	Yes	Yes	Yes	Yes
Power Fail Output	NA	Yes	Yes	Yes	Yes	Yes
Floor Monitor Inputs (supervised)	NA	NA	NA	NA	Yes	Yes
Inputs						
Request to Exit (RTE) Inputs (supervised)	1	2	4	8	NA	NA
Door Contact Inputs	1	2	4	8	NA	NA
Auxiliary Inputs (supervised)	2	8	16	16	NA	NA
I/O Input Expansion (with IOCB1616)	NA	NA	64	64	NA	NA
Outputs						
Auxiliary Output Relays	1	2	4	8	NA	NA
Expansion Auxiliary Output Relays	NA	NA	8	8	NA	NA
I/O Outputs (with IOCB1616)	NA	NA	64	64	NA	NA
Door Output Relays	1	2	4	8	NA	NA
Capacity						
No. of Credential-holders	45,000 (90,000*)	45,000 (90,000*)	45,000 (90,000*)	45,000 (90,000*)	45,000 (90,000*)	45,000 (90,000*)
Transaction File Buffer	6000	6000	6000	6000	6000	6000
Schedules	256	256	256	256	256	256
Blocks	512	512	512	512	512	512
Group Levels	511	511	511	511	511	511
Holiday Dates	64	64	64	64	64	64
Connectivity						
Ethernet Ready	Equipped	Optional	Optional	Optional	Optional	Optional
PoE - Power over Ethernet* (IEEE 802.3af)	Equipped	NA	NA	NA	NA	NA
Global Integration ((CIM Required)	Network/ Server Dependent	Capable	Capable	Capable	Capable	Capable
CMAC Reverse IP	Equipped	Optional	Optional	Optional	Optional	Optional
Serial Communication	Yes	Yes	Yes	Yes	Yes	Yes



PowerPlex 2000

PowerPlex is a self-powered, eco-friendly electronic lock with NEW PowerStar "no-pump technology"—wake the lock up by pressing the first button of the code. PowerPlex is easy to install, use, and maintain. It requires no wires or batteries. The lock is BHMA Grade 1 certified and ADA compliant. PowerPlex is as reliable as a mechanical pushbutton lock with all the features and benefits of an electronic lock.



E-Plex® Wireless Access Control System

E-Plex wireless locks now integrate with Keyscan Aurora software, offering two-way communication from E-Plex wireless locks to your Keyscan Aurora software using gateways. It provides a flexible and scalable path to true hybrid access control.

You can also use E-Plex locks as a simple stand-alone solution. The easy-to-install USB option allows users to quickly install up to 100 locks without wires, conduit runs, or network drops. This system also scales thousands of locks using a TCP/IP connection. Kaba's Wireless System eliminates visiting doors for updates, provides real-time functionality of events, and allows the management of both online and stand-alone locks. Fast data transfer and long battery life make E-Plex and E-Plex wireless systems an efficient, low cost access control solution.

dormakaba EAD's commitment to provide customers with best-in-class electronic access control systems remains steadfast.

Security

Our leading-edge Keyscan access control system is actively used in over sixty-five thousand applications around the world securing colleges and universities, K-12 schools, embassies, military bases, hospitals, power generating facilities, automobile dealerships, banks, multi-national organizations, retail establishments, residential facilities as well as many other small, medium and large scale businesses.

Reliability

Each and every Keyscan control panel is functionally tested and run for a 24 hour period to ensure only the highest level of product is delivered to our customers. We do not employ sample test plans and rely on statistics to gauge quality. Keyscan access control systems are all tested!

Integration

Our Keyscan Aurora software is industry-leading. With no recurring fees or governing delimiters, you can rely on Keyscan Aurora no matter what size your access control system. Plus, Keyscan Aurora features robust integration options for wireless locks, photobadging, visitor management, multiple video management system (VMS) platforms, DSC and DMP® intrusion panels, Active Directory and much more.

Confidence

No matter how simple or complex your system needs to be, Keyscan Access Control systems and Keyscan Aurora software offers an end-to-end solution for electronic access control from a single-door, single location solution to several thousands of doors and wireless locks in offices, industrial facilities, healthcare and multi-housing applications in locations around the world.

Partnership

Keyscan products are trusted. The level of flexibility, product quality and reliability are just a few of the many reasons security dealers, integrators, and end-user customers alike choose Keyscan systems.

Contact your Electronic Access and Data (EAD) representative today!

Keyscan products provide end-to-end access control solutions



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