KABA®

Kaba Electronic Access Control
Keyscan Product Guide

Access control systems without limits. Access control innovation without boundaries.

Welcome to Kaba Electronic Access Control (EAC)

Kaba EAC brings Keyscan access control innovation together with Kaba's standalone and wireless product line up including PowerPlex and E-Plex creating full end-to-end solutions for security and access control. Kaba EAC is your gateway to access and benefit from more product lines, more access control solutions, and more integration.

The innovative network appliance-based Keyscan access control system remains best-in-class. With its multiple integration options it continues to provide unmatched feature-to-price ratio as well as system scalability and flexibility.

Powered by our industry renowned single-platform access control management software, the Keyscan system provides maximum access control management efficiency regardless of project size, integration and complexity.

From a single-door entry level application all the way to a multi-national, multi-site, enterprise with system integrations and thousands of doors to be secured, Keyscan access control management software is optimized to outperform expectations.

Installing technicians and sales professionals can become highly proficient with an access control system platform suitable for all installations. And, at the same time, integrators and dealers can be extremely competitive and maximize their opportunities and service options for their customers.

With our expanded electronic access control sales team, Kaba EAC now offers you full, end-to-end, electronic access control solutions. Whether you are a security dealer, integrator or end-user, this guide will give you a full outline of Kaba EAC's expansive product line and supply you with information critical for your access control selection process.

PowerPlex 2000

PowerPlex is a self-powered, eco-friendly electronic lock with NEW "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, just pure Kaba power. 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® Enterprise Wireless Access Control System

The flexible and scalable Wireless Access Control System provides two-way communication from an E-Plex Lock or Stand-Alone Controller to a centrally located computer. A simple, easy-to-install USB Option allows users to quickly install up to 100 locks without wires, conduit runs, access panels, or network drops. This system also scales up to 10,000 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, long battery life, and mesh redundancy make this system an efficient, low cost access control solution.

Keyscan Aurora Access Control Management Software
Powering the future of access control

Keyscan Aurora access control management software is the culmination of over 25 years of dedication to the access control marketplace. The unwavering dedication and effort thrusts Aurora well past the competition. Aurora is the new benchmark software platform that truly eclipses the supremacy established by its Keyscan predecessors.

Keyscan Aurora unleashes the expanded processing power and capabilities of the Keyscan line of access control units. With a completely redesigned interface, Aurora delivers a new experience that entrenches Kaba EAC's commitment to innovation and forward-thinking.

Aurora delivers impressive capabilities and features such as:
* Support for 45,000 credentials (up to 90,000*)
* VMS Integration
* Optional licensed and add-on modules for enhanced functionality
* Support for French and Spanish languages
* Ten (10) assigned groups to a single credential holder
* Upgrade to full SQL server
* Multiple credentials assignable to a single person
* Unlimited optional user-definable fields
* Impressive panel-to-panel global communication
* New multi-threaded communication structure
* Aurora web interface

Keyscan Aurora access control management software is a solution that comfortably supports small and mid-size access control installations while also exceeding the demands of truly large access control deployments.

*Hardware option available upon special order

For a full outline of Keyscan Aurora features and benefits, refer to the Keyscan Aurora Software Guide.

Kaba Electronic Access Control
Keyscan Aurora Software Guide
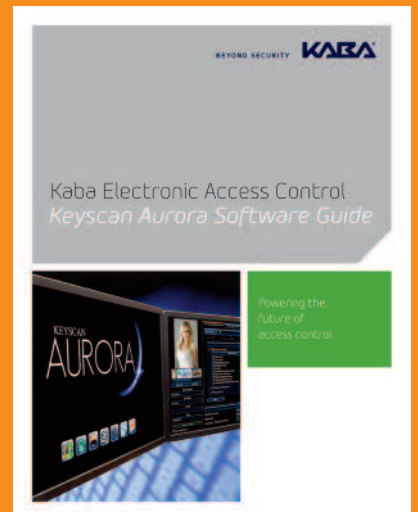
People-centric interface
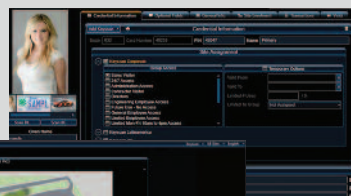
Multi-language support

Aurora Schedules

Active mapping with integrated floor plans

Multiple Monitor Support

VMS and CCTV integration

Keyscan Door Controllers

The Keyscan CA series network appliance-based access control architecture gives you unmatched flexibility for new installations or revitalizing aged or failing access control systems. The full line of Keyscan access control units allows you to easily install new systems, regardless of size, or replace existing access control infrastructure while, in many cases, utilizing existing cabling, readers and even credentials.

Keyscan CA 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 (expandable to 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
- 1- 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
- 1- 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 appliance-based connectivity with built-in PoE ready TCP/IP module
- PoE mode powers reader, strike, and other auxiliary devices
- DHCP supported
- Dual Processors
- Flash Memory
- Two reader ports

The CA150 easily accommodates securing isolated but critical single door applications.

Keyscan Elevator Floor Access Control Units

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 EC1500 and EC2500 elevator floor control units leverage the same hybrid network appliance-based architecture as the CA series door controller counterparts.

Keyscan EC series elevator floor controllers feature:

- Restrict floor access selection for credential holders/groups

- Integrates with telephone entry systems

- Expand floor control with optional off-board relays

- 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

- Robust 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

- Expanded flash memory allows for 45,000 credentials (expandable to 90,000 with special order hardware)

EC2500
2 Cab Elevator Floor Access Control Unit

Supports 2 Cabs with 2 readers and up to 16 floors
(Out of the box 8-floor control, expandable 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

EC1500
## 1 Cab Elevator Floor Access Control Unit

Supports 1 Cab with 1 reader and up to 40 floors
(Out of the box 8-floor control, expandable with optional OCB8 relay boards)
Includes:
- EC1500B ACU board
- 1 - OCB8 relay board
- 1 - DPS-15 power supply
- 1 - black metal enclosure with lock and tamper switch

The Keyscan door and elevator floor access control units can all be mixed and matched to suit any installation requirement.
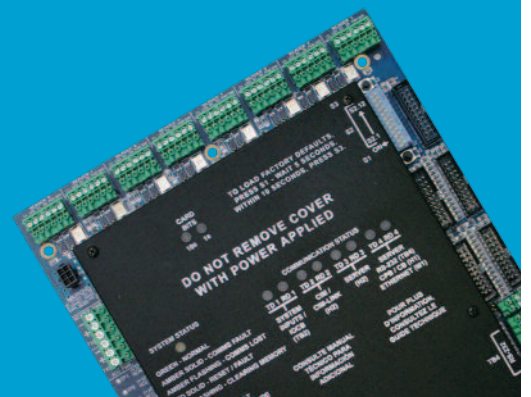
Keyscan and iCLASS High Frequency Readers
13.56 MHz

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 or ISO 14443 type credentials

KR15SE   *KR40SE*

iCLASS® SE Readers (New Installations)

iCLASS SE is a new access control platform 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

KRK40SE   *KR10SE*

iCLASS SE platform is based on the Trusted Identity Platform (TIP) for advanced applications, mobility and heightened security. It enables a new class of portable identity credentials that can be securely provisioned and safely embedded into both fixed and mobile devices, providing advanced security and performance.

iCLASS® SE Legacy Readers

(supports 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
- Provide the same wiring connections, low-current consumption and operation as proximity readers
- Functions with both iCLASS SE and iCLASS Legacy credentials

If you purchased any iCLASS readers and credentials between June 2005 and November 2013 this legacy product will function with those existing iCLASS Keyscan Elite Key readers and credentials.

KR15L   *KR10L*

KRK40L

KR40L

PLATINUM
HID
Physical Access

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

Keyscan and iCLASS High Frequency Credentials
13.56 MHz

K-SECURE - 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 which can be duplicated
- Designed to function with Keyscan K-SMART readers.

Available in 1K
& 4K formats

iCLASS® SE Credentials (New Installations)

iCLASS SE credentials are part of the next-generation iCLASS SE access control platform and open ecosystem based on a Trusted Identity Platform (TIP) architecture for advanced applications, mobility and heightened security. iCLASS SE makes access control more powerful, more versatile, and more secure by providing additional key diversification, authentication, encryption and portability for advanced security and performance.

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

Images may not accurately reflect current credential

iCLASS® SE Legacy Credentials

(supports existing Installations)

iCLASS offers customers a multiple layer of card-to-reader security. End users receive a high-security credential that is exclusive to the Keyscan Access Control System and backward compatible with legacy iCLASS SE readers. Keyscan iCLASS credentials and readers are 'factory programmed' to match. As a result, only matching cards and readers will work together, further prohibiting other cards and readers from inadvertently functioning within your company's secured areas.

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

Images may not accurately reflect current credential

PLATINUM
HID
Physical
Access

Contact your Kaba Electronic Access Control Regional Sales Manager for more information on Keyscan and iCLASS 13.56 MHz high frequency readers and credentials.

Keyscan & HID Compatible Low Frequency Readers
125 kHz

Keyscan K-PROX2 & K-KPR- Proximity Readers

The Keyscan K-PROX2 proximity reader provides a sleek finish with clear LED illumination for access granted and denial indications. K-KPR offers same with an additional layer of security with a keypad.

K-PROX2

K-KPR

- 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
- UL294 listed (K-PROX2)
- K-KPR is ideal for dual verification security by prompting both an access credential and/or personal ID number

Keyscan K-VAN - Vandal Resistant Proximity Reader

When planning access control into rough environments rely on the Keyscan K-VAN vandal resistant proximity reader. This reader is constructed of a solid stainless steel body and fibertex. Its features include:

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

K-VAN is an ideal proximity reader for all indoor or outdoor applications where aggressive behavior, crime or high-threat environments could be expected.

HID Compatible Readers

HID 5355KP

HID 5455

HID 5365

HID 5395

HID 5375

HID6005B

For dealers, integrators and end-users we are an HID Platinum Partner. 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 all Keyscan access control systems

PLATINUM HID Physical Access

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 or K-INTX2 transmitter FOBs from up to 200 feet
- K-TX2 or K-INTX2 both act as a regular FOB when used within your facility

With rolling security codes and Keyscan built-in authentication routine the K-RX RF Receiver and K-TX2/K-INTX2 FOBs deliver a secure wireless solution.

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

Keyscan & 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 Credentials

The C1325 clamshell proximity access control card credential offers universal compatibility for any Keyscan reader or other 125 kHz proximity readers. Also available in ISO printable version (C1386) these proximity access control cards offer durable packaging.

- Functions with Keyscan K-PROX2, K-KPR, K-VAN readers as well as HID 125 kHz compatible readers
- Available in Keyscan 36 bit and standard 26 bit formats
- Consistent read range
- Also available ISO version with graphics quality surface

HID C1386

HID C1325

HID Compatible FoB and Tag Credentials

The PROXKEYIII is a proximity FOB offering proximity technology in a convenient credential that easily attaches to a key ring, badge clip or lanyard. The PROXKEYIII is built to withstand harsh operating environments and offers durable packaging.

- Functions with Keyscan K-PROX2, K-KPR, K-VAN readers as well as HID 125 kHz compatible readers
- Available in Keyscan 36 bit and standard 26 bit formats
- Consistent read range and suited for use in applications where a Photo ID is not required
- Adhesive tag credential also available (1391)

HID 1391

PLATINUM
HID
Physical
Access

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
- K-INTX2   RF transmitter Indala coil

Contact your Kaba Electronic Access Control Regional Sales Manager for more information on Keyscan and HID compatible 125 kHz low frequency credentials.
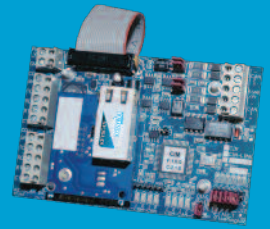
Keyscan Network & Communication Modules

## 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 shown with NETCOM2P - sold separately
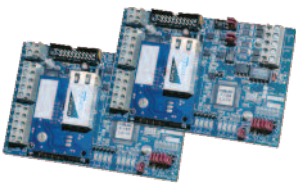
CIM-Link (Global Network Connectivity Module

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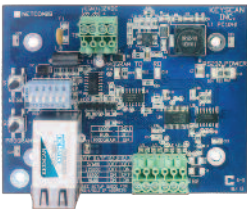
- Maximizes system design options
- Promotes greater global communication flexibility across your facility
- Expands ACU to ACU functionality to multiple independent CAN Bus global networks

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 maximum system design options
- Designed to plug directly onto the CIM to establish network communication using CAN Bus communication network
- Can also plug onto ACU board in other specific applications

Also available with AES Rijndael 256 bit encryption (NETCOM6P).

NETCOM2 - Off-board TCP/IP Communication Adaptor

Networking access control units is made easy by using the NETCOM2 TCP/IP adaptor.

- Flexible system design options
- DIP switch bank for setting default values and easier programming
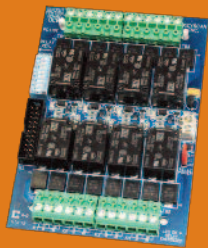
USB-SER - USB to Serial Cable

When connecting directly to a computer, the USB-SER provides a Keyscan system with compatibility.

- RS485 to USB conversion
- RS232 to USB conversion
- One compact easy-to-use device

Ideal for IT personnel, technicians and instances where the access control computer does not have a serial communication port.

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
- DIP switch bank allowing easy changes to state of relays

USB-CAM

The Keyscan USB-CAM makes photo identification easier than ever. With plug-and-play capability to Keyscan access control management software photobadge and/or visitor management features, users can capture photos directly from the software.

- Fully integrated with Keyscan software to capture photos†
- CCD sensor for optimal image quality
- Streaming video

The USB-CAM saves time and creates a simple and seamless solution for photo identification.

† may require software module or license sold separately

Requires card printer
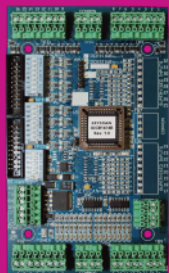
IOCB1616 - Input & Output Expansion Board

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
- New DIP switch banks for easier set up and feature configuration

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
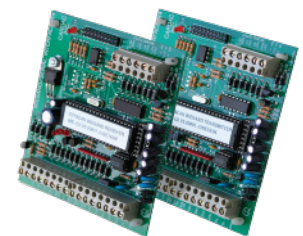
	CA150	CA250	CA4500	CA8500	EC1500	EC2500
Access Control Unit						
Doors/Elevator Floors Supported	1 door	2 doors	4 doors	8 doors	1 cab	2 cabs
Reader Ports	2 (in/out)	2	4	8	1	2
Multi ACU Compatibility	Yes (Ethernet)	Yes	Yes	Yes	Yes	Yes
System Status LEDs	Yes	Yes	Yes	Yes	Yes	Yes
Dual Processors	Yes	Yes	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	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	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
Time Zones	256	256	256	256	256	256
Time Schedules	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	Network/Server Dependant	Capable (requires CIM)	Capable (requires CIM)	Capable (requires CIM)	Capable (requires CIM)	Capable (requires CIM)
CMAC Reverse IP	Equipped	Optional	Optional	Optional	Optional	Optional
Serial Communication	Yes	Yes	Yes	Yes	Yes	Yes