

Kaba exos® sky



- Kaba exos® sky
Product catalog - 1/06

Kaba exos® Access Hub
Door manager
Accessories

Valid from 1st of March 2006
from Kaba exos® sky V2.0



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Basics

Validity

The content of this product catalog is valid for Kaba exos sky V2.0 and higher. Information on earlier versions is contained in previous issues of the product catalog.

System concept

State-of-the-art technology in a small system

Kaba exos sky is an online access control system for small to medium-sized companies, authorities and apartment blocks. Especially in these buildings the need for safety, control and flexibility has considerably increased. This applies particularly to external access and jointly used rooms. In order to meet these new requirements, an extension of the mechanical and mechatronic locking system, using an online access control system is imperative. Since these systems are considered as complex and expensive with regard to operation and maintenance, special emphasis was put on easy installation and efficient operation. The result is high acceptance of the system by the users and an functionality gain in security that is not to be underestimated. The consistent use of the proven compatible system components increases protection of investments with respect to operational changes.

Improved price/performance ratio

The system concept reduces installation and maintenance costs to a minimum while providing professional functionality. The heart of the system is an access hub, supplied in a fully functional state, requiring very little space, and with low-maintenance components. This centre saves all the data and movements and provides information about events. The door managers monitor and control the doors from the safe area using conventional locking components, Kaba Drive, Kaba online cylinders and online locks. In the outer area there is only the registration unit controlled with coded signals and with optical and acoustic signaling for the authorized person.

This concept provides the greatest possible degree of operational safety, protection against vandalism and ideal integration in the architecture of the building.

Installation with plug-and-play

The required door configuration can be set with the switches directly on the door manager, without the need for programming equipment. A door can be tested and put into operation immediately (e.g. whilst construction is going on). When the access hub is connected, it automatically recognizes the configuration. These preset values can be adapted to your individual requirements via the system interface. Kaba exos sky thus provides both a stand-alone and online access control system.

A competent Kaba partner located in your proximity, who also provides other services for your systems, installs the components.

Web-based operation

The system provides an uninterrupted flow of information on the access data. Graphic elements make operation particularly user-friendly and easy to understand, even if used fairly infrequently. The use of Microsoft[®] Internet Explorer makes installation of software on the workstation unnecessary and allows access to the system from any computer in Intranet. User management guarantees that only authorized access to the sensitive data is possible. With Kaba exos sky, the evaluation of who used which door when, or the invalidation of a badge can be performed from the workplace and with immediate effect.

Several users can work on the system, although only one system language can be used when this is done. The system is available in all important European languages. Work is done in the so-called kiosk mode of the Microsoft[®] Internet Explorer (IE). In this operating mode, all navigation elements of the IE are hidden, which allows users to concentrate fully on the work to be done on the system.

Contact-free identification also with key

The basis is formed by LEGIC, a contact-free identification system that can be used not only for access control, but also for time & attendance or as an electronic wallet. LEGIC sets safety standards for forgery-proof and manipulation-proof systems. Numerous companies in Europe have chosen LEGIC as the basis for their company badge system. LEGIC can be integrated in a Kaba or Gege key and is also available as a key ring pendant or badge. The version implemented depends on your individual requirements. In addition to identification, verification with PIN code or fingerprint (biometrics) is also possible in the case of increased security requirements.

Identification with non-LEGIC® badges

Kaba exos sky also supports contacting identification media. Contactless non-LEGIC technologies can also be used. Forgery and manipulation security depends on the badge employed. In addition to identification, verification with PIN code is also possible in the case of increased security requirements.

Investment with compatibility guarantee

Kaba exos sky is tailored to suit applications in smaller to medium-sized premises, in particular in companies without their own security department or reception. But changes within the company can also lead to growing demands on the access control system. Your company may grow, branches be added, or extra functions may be wanted. The manufacturer guarantees that Kaba exos sky can be upgraded to the next system unit at any time, without having to exchange the components, wiring or badges. Invest in a safe future with the Kaba compatibility guarantee.

Functionality

Besides state-of-the-art technology and high-quality components, Kaba exos sky also provides a wide range of functions:

- several languages available
- user management
- central master staff data updating
- time-dependent control of access with individual or group authorization
- automatic summer/winter time change
- automatic time synchronization with SNTP time server
- verification of access with PIN code or fingerprint (biometrics)
- spatial or time-related anti pass back
- access with code lock
- support of conventional locking components and isolation systems
- configurable night lock
- Elevator control
- visualization and control of doors
- monitoring of the door states and alarm bypass
- central alarm handling and alarm forwarding via e-mail and alarm printer
- triggering of a duress alarm on the registration unit
- monitoring of eight or four alarm zones (with optional PC104 I/O board)
- saving and evaluation of movements and events
- logging of user interventions (audit)
- list of barred badges
- manual or automatic data backup
- support of a LEGIC badge structure per system (Kaba Group Header, LEGIC access™ or LEGIC unique number)
- support of a non-LEGIC badge structure per system (e.g. Mifare, HID, inductive, magnetic strip etc.)
- support of various door configurations
- connection to other systems via RS-232 interfaces (support of project specific protocols)
- project specific user authorizations
- time zones which are exact to the minute
- export of personnel data (name and detailed information and/or name and access rights)

Kaba reacts promptly to changing or new market requirements and consistently develops the solutions with upward compatibility. The system can be updated quickly and safely at any time by an authorized Kaba Group partner.

Kaba exos[®] sky Access Hub



Kaba exos sky Access Hub



Kaba exos sky Access Hub
without metal cabinet

Scale 1:8

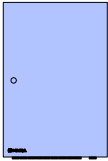
The access hub is the heart of the system on the basis of a Pentium-class computer. The system data is saved on a maintenance-free CompactFlash. The optional power supply supplies the access hub and the peripherals which are connected via a bus connection. The center is safely installed in a robust and closed metal cabinet. Up to two door managers can be additionally installed here.

Overview

Type Kaba exos sky	Article no.	Input voltage	Cabinet	In-/outputs	Access points
Access Hub 1000	162.103	24V DC	yes	4/3	16
Access Hub 1000 without metal cabinet	162.104	24V DC	no	4/3	16
Access Hub 2000	162.203	24V DC	yes	4/3	32
Access Hub 2000 without metal cabinet	162.204	24V DC	no	4/3	32

Kaba exos® sky Access Hub 1000

162.103 A Kaba exos® sky Access Hub 1000



Basic unit with following scope of supply:

- Access Hub for 24 V power supply and UPS connection installed in rugged metal cabinet (162.351)
- 3 relay outputs for alarm forwarding (technical, safety and duress alarm)
- 4 inputs for tamper contact, to monitor UPS operation, UPS failure and to release all access points
- Terminals for up to 10 access points plus additional cascading units via RS-485 2-wire
- CPU with Web-Server
- Integrated Ethernet connection to workstation via intranet or point-to-point connection
- CompactFlash including user dialogues and memory for events
- Multi-language capability
- SW license for up to 16 access points
- Contains: Kaba exos AMC II, Kaba exos sky flash 16 and metal cabinet

Options:

- Power supply 230V/24V 100VA (162.350)
- PC104 I/O board (162.408)

162.104 A Kaba exos® sky Access Hub 1000 without metal cabinet

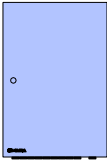
Basic unit with following scope of supply:

- Access Hub for 24 V power supply and UPS connection
- 3 relay outputs for alarm forwarding (technical, safety and duress alarm)
- 4 inputs for tamper contact, to monitor UPS operation, UPS failure and to release all access points
- Terminals for up to 10 access points plus additional cascading units via RS-485 2-wire
- CPU with Web-Server
- Integrated Ethernet connection to workstation via intranet or point-to-point connection
- CompactFlash including user dialogues and memory for events
- Multi-language capability
- SW license for up to 16 access points
- Contains: Kaba exos AMC II, Kaba exos sky flash 16, without metal cabinet

Option:

- PC104 I/O board (162.408)

162.203 A **Kaba exos® sky Access Hub 2000**



Basic unit with following scope of supply:

- Access Hub for 24 V power supply and UPS connection installed in rugged metal cabinet (162.351)
- 3 relay outputs for alarm forwarding (technical, safety and duress alarm)
- 4 inputs for tamper contact, to monitor UPS operation, UPS failure and to release all access points
- Terminals for up to 10 access points plus additional cascading units via RS-485 2-wire
- Second RS-485 partyline to connect additional cascading units
- CPU with Web-Server
- Integrated Ethernet connection to workstation via intranet or point-to-point connection
- CompactFlash including user dialogues and memory for events
- Multi-language capability
- SW license for up to 32 access points
- Contains: Kaba exos AMC II, Kaba exos sky flash 32 and metal cabinet

Options:

- Power supply 230V/24V 100VA (162.350)
- PC104 I/O board (162.408)

162.204 A **Kaba exos® sky Access Hub 2000 without metal cabinet**

Basic unit with following scope of supply:

- Access Hub for 24 V power supply and UPS connection
- 3 relay outputs for alarm forwarding (technical, safety and duress alarm)
- 4 inputs for tamper contact, to monitor UPS operation, UPS failure and to release all access points
- Terminals for up to 10 access points plus additional cascading units via RS-485 2-wire
- Second RS-485 partyline to connect additional cascading units
- CPU with Web-Server
- Integrated Ethernet connection to workstation via intranet or point-to-point connection
- CompactFlash including user dialogues and memory for events
- Multi-language capability
- SW license for up to 32 access points
- Contains: Kaba exos AMC II, Kaba exos sky flash 32, without metal cabinet

Option:

- PC104 I/O board (162.408)

Options for access hub

- 162.151 A **License to upgrade from 16 to 32 access points**
- License to upgrade the Kaba exos sky Access Hub 1000 (162.103/104) to an Access Hub 2000 (162.203/204)
 - The system key and order number have to be noted on the order
 - An installation program for the upgrade of the CompactFlash will be delivered on a CD
 - No hardware changes necessary
- 162.408 A **PC104 I/O board**
- Extension board for access hub with 8 monitored inputs and 8 relay outputs 30V/2A to monitor and control eight, resp. four alarm zones in connection with an intrusion detection system
- 162.040 A **Cascading unit**
- For 24V and UPS
 - Basic unit with base board
 - Clamps for up to 8 access points and additional Cascading units via RS-485 2-wire
- Options:**
- Power supply 230V/24V 100VA (162.350)
 - Metal cabinet (162.351)
- 162.350 A **Power supply 230V/24V 100VA**
- Option for access hub and cascading unit
 - For central power supply of up to 10 access points
 - By ordering basic unit, metal cabinet and power supply together the components will be delivered mounted
- 162.351 A **Metal cabinet**
- Option for access hub and cascading unit
 - Lockable
 - With tamper switch, DIN rail and strain relief
 - By ordering base board, metal cabinet and power supply together the components will be delivered mounted
- 162.410 A **Serial Cable**
- For connection of serial devices, e.g. alarm printer
- 162.407 A **Customer CD**
- Will be delivered with the requested SW version. If not specified in the order, the latest version will be shipped, depending on the paid license. The system key has to be noted on the order.

Door manager

Remote Reader Modules (RRM) concept

Free design

Due to the fact that the registration unit is installed remotely from the door manager, any design is possible and the system can therefore be simply adapted to suit the spatial and technical security demands of a building.

Sabotage security

The corresponding door manager can be installed in a sabotage-proof room, irrespective of the installation site of the registration unit.

Manipulation security

The opening mechanism in the cylinder or lock, the visual response (red/green LED) and the acoustic signal transmitter of the antenna are code-controlled (LEGIC signal) through a coaxial cable. Installation work is therefore also kept to a minimum.

RRM Architecture

Up to 32 devices per access hub

- RRM devices addressable from 1-16 per RS-485 bus
- Up to 2 OC8 extension modules per door manager

Interfaces

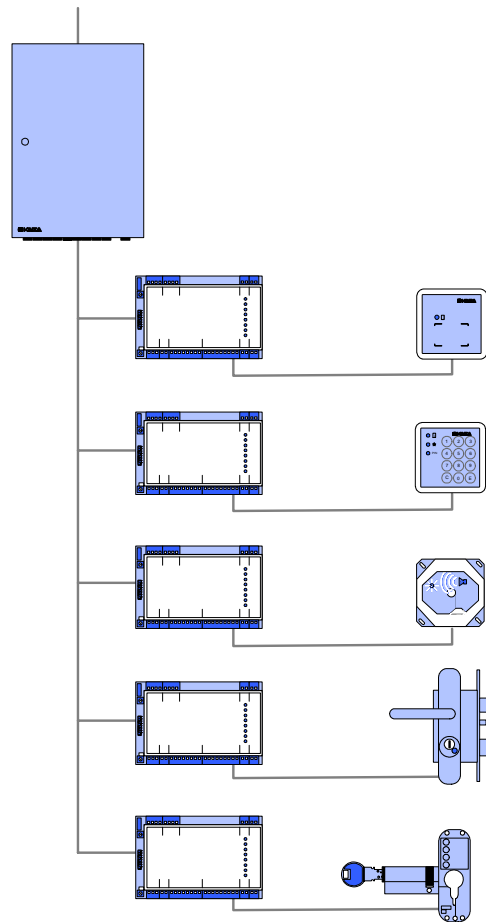
- RS-485 to the access hub
- Interface to readers:
 - HF-LEGIC to the antenna, with modulated signals
 - Wiegand/Clock Data
- RS-232 (only Kaba exos DML2) as extension to HF-LEGIC e.g. registration unit with keypad or biometry

Connectable registration units

- Registration unit Biover II (only with Kaba exos DML2)
- Registration unit with keypad LT-PN (only with Kaba exos DML2)
- LA-PG, LA-PB, LA-PP
- Kaba exos lock, Kaba exos cylinder
- Reader with Wiegand/Clock Data interface

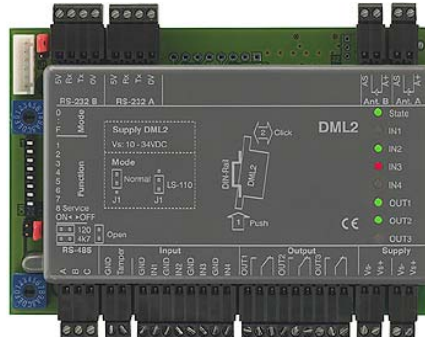
Completely off-line capabilities, without access hub

- Master record check with time authorization (Kaba exos DML2/DMU2)
- With door monitoring (Kaba exos DML2/DMU2)
- Event memory for up to 2,000 authorized access events



Kaba exos[®] DML2

Door manager for antenna, registration unit with keypad, biometric unit, cylinder and locks as access components for the Kaba exos[®] system



Scale 1:2

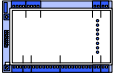
Kaba exos[®] - Door manager LEGIC[®] High-safety on a uniform platform

The door manager controls and monitors access points individually, reliably and inexpensively. For example doors, turnstiles and elevators. All parameters can be set on the unit.

Due to interior installation the device is secure. Encoded control and monitoring takes place from the secure internal area. Only the registration units are in the external non-secure area. The wide range of variants allows flexible installation – even as a hidden solution in the door leaf or in flush mounting boxes.

With its simple wiring, installation of the door manager is very inexpensive.

161.151 A **Kaba exos® DML2**



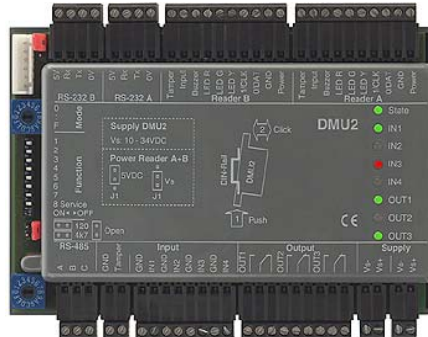
- Door manager with integrated LEGIC module for connection of 2 remote registration units (e.g. antenna), in plastic housing on hat rail mounting, 125 mm
- Supports LEGIC advant with ISO 15693 and LEGIC RF
- Optimum migration concept
 - LS-110 compatibility mode can be set with jumpers
 - Programming with SAM59 not possible
 - Both components have the same size
- The door manager can be installed in a sabotage-proof place irrespective of the location of the registration units
- For direct connection of all door components (locking and monitoring door contacts)
- 4 inputs, internally supplied for the connection of potential-free contacts, selectable via DIP switches, line-monitoring
- 1 tamper switch for door manager
- 2 tamper switches for registration units
- 3 relay outputs
- Supply: 10 ... 34VDC
- Power consumption 3.5W max., without external wiring
- Power supply 5VDC for extension modules and RS-232 interfaces
- RS-485 interface (2-wire), also for BPA/0 subset connection to an access hub
- Two serial RS-232 interfaces for extensions (e.g. wide area access solution)
- Extended offline capability:
 - Access decision based on company codes/badges and time-related authorization including verification; this means:
 - Saving of up to 10,000 badges, self-learning
 - Saving of up to 32 time profiles
 - Event memory for up to 2,000 entries
- Screw terminals, plug-in design
- When used as an elevator control can be extended with 16 outputs (two OC8 max.)

161.257 C **Programming cable for Kaba exos® DML2/DMU2**

- Cable for firmware update of door manager Kaba exos DML2/DMU2

Kaba exos[®] DMU2

Door manager for antenna with Wiegand or Clock/Data interface as access component for the Kaba exos[®] system



Scale 1:2

Kaba exos[®] - universal door manager Maximum functionality with free media selection

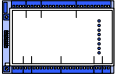
The door manager controls and monitors access points individually, reliably and inexpensively. For example doors, turnstiles and elevators. All parameters can be set on the unit.

The door manager ensures a high degree of individuality, as a wide range of readers and additional components can be connected.

Due to interior installation the device is secure. It is controlled and monitored from here. Only the readers are in the external non-secure area.

With its simple wiring, installation of the door manager is very inexpensive.

161.141 A **Kaba exos® DMU2**



- Door manager for connection of 2 remote readers with Wiegand or Clock/Data interface, in plastic housing for hat rail installation, 125 mm
- The door manager can be installed in a sabotage-proof place irrespective of the location of the readers
- For direct connection of all door components (locking and monitoring door contacts)
- 4 inputs, internally supplied for the connection of potential-free contacts, selectable via DIP switches, line-monitoring
- 1 tamper switch for door manager
- 2 tamper switches for readers
- 3 relay outputs
- Supply: 10 ... 34VDC
- Power consumption 3.5W max., without external wiring
- Power supply of readers can be adjusted with jumpers (5VDC or 10 ... 34VDC)
- RS-485 interface (2-wire), also for BPA/0 subset connection to an access hub
- Two serial RS-232 interfaces for extensions (e.g. wide area access solution)
- Extended offline capability:
 - Access decision based on company codes/badges and time-related authorization including verification; this means:
 - Saving of up to 10,000 badges/persons, self-learning
 - Saving of up to 32 time profiles
 - Event memory for up to 2,000 entries
- Screw terminals, plug-in design
- When used as an elevator control can be extended with 16 outputs (two OC8 max.)
- For connectable readers please refer to the Technical Documentation: Supported Wiegand and Clock/Data readers
- ⚠ Not all readers supported by Kaba exos 9300 are also supported by Kaba exos sky

161.257 C **Programming cable for Kaba exos® DML2/DMU2**

- Cable for firmware update of door manager Kaba exos DML2/DMU2

Kaba exos[®] LR-100

Compact door manager with integrated LEGIC antenna for indoor applications as an access component of the Kaba exos[®] system



Scale 1:2

Unit description

Kaba exos LR-100 is a compact door manager. This peripheral device is an advantageous supplement for the RRM program (remote reader modules). It is especially suitable for use indoors.

Advantages of the compact door manager are:

- Especially compact solutions which combine the registration unit with the control electronics
- Inexpensive solution for access control
- If the access hub breaks down, operation can still be guaranteed (emergency operation)

The Kaba exos LR-100 door manager with integrated LEGIC antenna organizes access to building interiors. This component is an efficient supplement to our RRM range (Remote Reader Modules), which is particularly suitable for outdoor use and for control of complex access points.

The properties and functional scope of Kaba exos LR-100 have been especially optimized for interior applications. With the highly integrated electronic components for access point control and monitoring, it is a particularly compact and inexpensive solution for access control.

The robust reading properties of the integrated LEGIC antenna even permit direct mounting on metal surfaces while maintaining excellent function and convenient user identification. The integrated display elements signal both the operating mode and access decision visually as well as acoustically.

Kaba exos LR-100 can be installed and taken into operation immediately. It is directly connected by screw/plug terminals to the higher-level system via an RS-485 bus cable and is configured with DIP-switches.

All access point components are wired directly on the door manager at the installation point. This saves complex wiring of the door contacts to the higher-level system, especially when existing systems are retrofitted.

Not only a frame contact, but also a door opener key or door handle contact can be connected for monitoring of the access point. The door opener is activated by the fitted relay.

Even if the connection to the higher-level system is interrupted, Kaba exos LR-100 reliably monitors the access point and is therefore fully operational when off-line. This ensures maximum availability of the access control system.

161.130 A **Kaba exos® LR-100**



- Off-line capable door manager with integrated LEGIC antenna for organizational doors in the internal area
- Two color LED red-green for signaling operating state and access signal, buzzer for acoustic signaling of access decision
- 2 inputs for door opener key/door handle contact and frame contact
- 1 relay with changeover contact AC/DC 30V 2A to drive electric strike
- Tamper switch
- Power supply DC 12...32V, AC 12...27V
- Extended off-line operation: 32 authorized badges
- Insulated RS-485 2-wire interface for connection to an access hub with screw/plug terminals
- Light grey two-part surface mount case (87.5 x 87.5 x 18.0mm) for inside applications (IP40) with Kaba logo
- **Packing units: 2 pieces**

Accessories for door managers

Extension module OC8

Relay outputs for door manager Kaba exos[®] DMU2/DML2



Scale 1:2

161.160 B

Extension module OC8



- Extension module with 8 relay outputs for elevator control use
- Option for door manager Kaba exos DMU2/DML2
- Fast installation due to simple plug connection
- Two-way switch 30V / 2A AC/DC
- LED status indication
- Power supply from door manager
- Power consumption 3.5W max.
- Up to 2 extension module per door manager

Registration unit LT-PN

Registration unit with integrated LEGIC antenna and keypad as an option to the door manager Kaba exos[®] DML2



Scale 1:2

Unit description

The registration unit LT-PN with integrated LEGIC antenna and keypad combined with the door manager Kaba exos DML2 provides a fully integrated solution in access control with a simultaneously convenient user identification.

The combination of the registration unit and the higher-level system ensures maximum access control security. In addition to identification, the user can also be verified of his PIN code.

The robust reading properties of the registration unit permit direct mounting on metal or glass surfaces while maintaining a constant high level of functionality.

The two-section plastic housing was especially developed for simple adhesive or screw mounting and it is compatible to the installation of the Biover II.

With the encapsulated electronic components this registration unit is suitable for both indoor and outdoor applications (IP 55).

A coaxial cable and an RS-232 interface connect the registration unit with the door manager via the screw terminals.

161.210 A **Registration unit LT-PN**



- Registration unit with integrated LEGIC antenna and keypad designed to use either under normal conditions or in metal environment
- Two color LED red-green for signaling operating state and access signal, LED yellow for PIN code, two color LED red-yellow for special functions, buzzer for acoustic signaling of access decision
- Connection to Kaba exos DML2 over serial interface RS-232 and coaxial cable with screw terminals
- Light grey two-part surface mount case (87.5 x 87.5 x 18.0mm) for outside applications (IP55) with Kaba logo

Registration unit Biover II

Fingerprint registration unit for biometric verification as a option to the door manager
Kaba exos[®] DML2



Scale 1:2

Unit description

With Biover II an additional component is added to our RRM products. It is small and can be integrated in sluices or person isolation systems, thus saving space.

Biover II can be operated either off-line or in an interconnected system. Integration in a Kaba exos access control system is possible without any problems, as is its use with decentralized solutions.

As opposed to established methods, Biover II strictly separates the one-time registration of the templates from their daily verification by the registration unit. The fingerprint data are recorded using a computer at a workplace. The sensitive and abstract reading process is visualized on the screen. The user learns about the quality and structure of the templates. This transparency creates commitment and trust.

The templates recorded are stored on the user card only and not in any data-base. This gives the users exclusive control over their biometric data, further contributing to the high level of user acceptance.

Database-free verification ensures fast access to the biometric data on the LEGIC chips. Each time the LEGIC chip is read, the card holder creates the virtual network without requiring verification with a database. A direct 1:1 comparison of the stored templates is made.

The templates of two different fingers are stored on the chip, e.g. the right and the left index finger. As a result, the user always has two options to choose from for direct verification at the door.

The robust reading properties of the registration unit permit direct mounting on metal or glass surfaces while maintaining a constant high level of functionality. The two-section plastic housing was especially developed for simple adhesive or screw mounting and it is compatible to the installation of the LT-PN.

This registration unit is suitable for both indoor and outdoor applications.

161.212 B **Registration unit Biover II**



- Fingerprint registration unit with integrated LEGIC antenna designed to use either under normal conditions or in metal environment
- Three color LED green/orange/red for signaling operating state and access signal two color LED orange/red for requesting biometry, buzzer for acoustic signaling of access decision
- Connection to Kaba exos DML2 over serial interface RS-232 and coaxial cable with screw/plug terminals
- Light grey two-part surface mount case (88.5 x 88.5 x 35.2mm) for outside applications (IP54) with Kaba logo

161.605 B **USB Fingerprint scanner**

- Device for scanning biometric data in accordance with LEGIC Biometric™
- Thermo line sensor
- USB interface
- Includes enrollment software
- The dialog reader (161.600, discontinued) or the desktop reader B-Net 91 07 (order directly from Kaba Benzing) is required for entering templates



For recording biometric data the following components are required:

- Dialog reader (161.600, discontinued) or desktop reader B-Net 91 07 (order directly from Kaba Benzing)
- USB fingerprint scanner including Enrollment software (161.605)
- LEGIC launching media SAM 63 for the dialog reader or desktop reader (is not sold by Kaba AG, Systems Development)

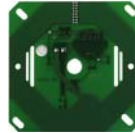
For detailed information on the individual components refer to chapter Miscellaneous on page 25.

Registration units LA-xx

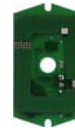
Registration units as an option to the door manager Kaba exos[®] DML2



LA-PG



LA-PB



LA-PP

Scale 1:4

Unit description

Separating the antenna from the door manager makes various antenna designs possible. Using suitable housing the antenna can be easily adapted to the spatial and security requirements of the building. The registration units are available in different heights and shapes and enable flexible integration. Combinations for installing in flush-mounted boxes, door panels or visible glass installation etc., can be put together according to requirements. They offer protection against vandalism and sabotage through hidden installation, for example.

The various antenna variants mean that different LEGIC ranges can be attained (strength of the electromagnetic field). The reader characteristics are established by the different local installation conditions and the identification media in use.

The robust reading characteristics of the LA-PG allow direct installation on metal or glass surfaces while retaining the same level of function. The two-part plastic housing has been specially developed for simple adhesive or screw-on installation. Thanks to the cast electronic components, the LA-PG registration unit is suitable for both indoor and outdoor use (IP 55).

161.211 A **Registration unit LA-PG**



- Registration unit with integrated LEGIC antenna designed to use either under normal conditions or in metal environment
- Two color LED red-green for signaling operating state and access signal, buzzer for acoustic signaling of access decision
- Easy installation and connection to door manager with coaxial cable (incl. controlling LED and buzzer) with screw terminals
- Light grey two-part surface mount case (87.5 x 87.5 x 18.0mm) for outside applications (IP55) with Kaba logo

161.202 A **Registration unit LA-PB**



- LEGIC print antenna 70 x 70mm for flush mounting (various brands and shapes) or back fade mounting
- Two color LED red-green for signaling operating state and access signal, buzzer for acoustic signaling of access decision
- Easy installation and connection to door manager with coaxial cable (incl. controlling LED and buzzer) with screw terminals

Option:

- Screw adapter (article no. 161.255) to reduce M9 to M3 for central mounting

161.206 A **Registration unit LA-PP**



- LEGIC print antenna 36 x 66mm special suitable for installation within 'metallic environment' (functionality has to be checked at place of installation with the used LEGIC media)
- Two color LED red-green for signaling operating state and access signal, buzzer for acoustic signaling of access decision
- Easy installation and connection to door manager with coaxial cable (incl. controlling LED and buzzer) with screw terminals

Option:

- Screw adapter (article no. 161.255) to reduce M9 to M3 for central mounting

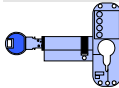
Cylinder Interface LI-EL

Online interface for Elogic cylinder as a registration unit for the door manager Kaba exos[®] DML2



Scale 1:2

161.303 B Cylinder Interface LI-EL



- Interface print mounted in plastic case for fitting assembly, to connect to the mechatronic Kaba elologic cylinder to a Kaba exos control unit
- Buzzer for acoustic signaling of access decision
- Jumper to set the operation on power failure (cylinder released or blocked)
- Pre-formed 5m coaxial cable RG 178 with connectors

Miscellaneous

161.250 B Coaxial cable 50Ω RG 178

- Coaxial cable 50Ω suitable to all registration units and LEGIC cylinders
- Cable not pre-formed
- **Packing units: 50 meters**

161.254 B Preformed coaxial cable RG 178

- For Kaba exos LI-EL or Kaba exos lock
- 5m, 50Ω
- Preformed

161.256 C Preformed coaxial cable RG 178

- For Kaba exos LI-EL or Kaba exos lock
- 10m, 50Ω
- Preformed

161.255 B Screw plug-in for LA-PB/LA-PP

- Thread M9 and drill hole \varnothing 2.4mm (M3)
- Suitable to mount various European covers with a central screw

161.270 C Cover for LA-PB/LA-PP, white



- Cover (88 x 88mm) for flush mounting
- Cover with Kaba Logo
- Type: Feller EDIZIOdue, Switzerland

161.271 C Cover for LA-PB/LA-PP, pale grey



- Cover (88 x 88mm) for flush mounting
- Cover with Kaba logo
- Type: Feller EDIZIOdue, Switzerland

161.272 C Cover for LA-PB/LA-PP, anthracite



- Cover (88 x 88mm) for flush mounting
- Cover with Kaba logo
- Type: Feller EDIZIOdue, Switzerland

161.273 C Surface mount cover for LA-PB, white

- Cover (88 x 88mm) for surface mounting
- Cover with Kaba logo
- Frame incl. sealing
- Suitable for outside use (IP55)
- Type: Feller, Switzerland

Spare parts

Kaba exos[®] sky Access Hub

162.401 A Base board for Kaba exos[®] AMC II

- Base board with 4 inputs, 3 outputs and 2 RS-485 interfaces to connect BPA/9 Subset devices (2 wire party-line)
- Supplied without installation material

162.411 A CPU for Kaba exos[®] AMC II

- PC104 Controller (CPU) with integrated Ethernet connection (10/100 MBit), without CompactFlash
- Supplied without installation material
- Does not support any earlier Kaba exos sky software versions (e.g. V1.3)

162.412 A Kaba exos[®] sky Flash 16

162.413 A Kaba exos[®] sky Flash 32

Repair-/replaceable items

940.013 B CPU for Kaba exos[®] AMC II

- PC104 Controller (CPU) with integrated Ethernet connection (10/100 MBit), without CompactFlash
- Supplied without installation material

162.414 B Kaba exos[®] sky Flash

- For damaged or wrongly deleted/formatted CompactFlash
- Only in exchange with the original CompactFlash and CD

Annex

Classification of articles (A, B, C and NR)

The classification of the items can be seen by looking at the letter at the end of the item number (e.g. 162.203 A). An inquiry regarding the delivery date must be made for order quantities of more than 10 units.

Classification	Availability	Term of delivery
A	On stock up to 10 pc. available and standard software	Delivery normally within 5 working days, maximum 10 working days, ex works
B	On stock in single pieces (1-10 pc.) available	Delivery normally within 10 working days, maximum 15 working days, ex works
C	Customer specific order	Delivery time on request
NR	Product not released at time of issue of this document	Will be handled as C-product until released. Release and possible limitations of this product will be announced in the corresponding Release Note.