



Our Solutions at a Glance



"Customized Solutions for State-of-the-Art Access Control and Time Recording"

You want to move your business forward

Your goal is to increase the security of your company's access points and efficiently manage working time as a resource. To do so, you need a partner you can completely trust. You are not looking for a product - you are looking for the right solution. What you need is a complete, carefree service that will steer you through the entire process, from consultation right through to system maintenance. One of our strengths is our ability to identify your requirements and work with you to develop a customized solution.

You require flexibility and efficiency

Would you like to integrate existing components while simultaneously meeting multiple time management and access security requirements? If you do not want to replace existing hardware for access to your business or for recording working times, our interfaces offer a range of options for fast and easy integration. We also include a large number of modules in your solution, such as visitor management, or a security control center.

You demand high standards of a modern system In line with the trend for digitalization, you are aiming for total simplicity and convenience for your internal processes. Solutions for smartphones, employee self-service, or smart visitor management will help you to take the workload off your employees and give them more time for other tasks.

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You insist on quality

We use a quality management system certified by TÜV Rhineland and are ISO 9001:2008-compliant. Furthermore, we are ISO 27001:2013 certified in the area of IT security. Whether you have 50 or 100,000 employees, we have been leaders in the field of access control and time management for more than forty years and will continue to rise to your challenges in the future.

Bernhard Sommer General Manager Interflex

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Integrated Solutions from Interflex: Customized and from a Single Source



We believe in long-term partnerships, not in short-term success.

Our service offerings include consultation, project management, implementation, installation, maintenance, training, and support.

Hardware from Interflex – Your Guarantee for High Security

Why Customers Choose Our Hardware Solutions

- Robust and durable components
- High-quality workmanship
- Easy to use
- Interactive user interfaces
- Color touchscreen displays
- Contactless reading technologies
- Multi-functional credentials (T&A, access, canteen, etc.)

- Solutions for indoor and outdoor use
- Interface compatibility
- Flexibility due to open system parameters
- Modern and timeless designs
- Made in Germany

High Access Security with Card, Key Tag, or Smartphone

Multi-Functional Credentials

- Various applications on one credential:
- Access control/access to parking lots
- Time recording
- Access control (hardware, software, depot systems)
- NetworkOnCard
- Company gas station
- Canteen and vending machines (debiting procedure or settlement via payroll accounting)
- Visitor management

Access via Smartphone and BLE

- Smartphone as access credential
- $\cdot\,$ Door opening via BLE (Bluetooth Low Energy)
- Use of all standard smartphones
- + Simple adjustment of the BLE read range

How the App Works

- The app is downloaded from the Google Play Store or the Apple Store
- The smartphone is connected to the access control system through a secure registration process
- Once the registration process is concluded, the encrypted, virtual credential is transferred to the smartphone where it is renewed on a cyclical basis
- The virtual credential only works with the registered smartphone
- The keys are securely stored (iOS Key Chain or Android Key Store)

BLE Terminals for Access Control

- IF-800
- IF-800 Siedle
- IF-800 Outdoor
- IF-801
- IF-800VP
- IF-5735







IF-800 (BLE) IF-800 Outdoor (BLE) IF-801 (BLE)



Slave terminals of the eVAYO series have been specifically designed to meet the requirements of access control and person identification.

Features Overview

- Access control
- Door monitoring
- Monitoring of sensors (locking devices, barriers, and doors)

The light concept is especially intuitive and user friendly. The coloring can be adjusted to the environment by means of DIP switches. In power-saving mode, the devices use more than 50 % less energy than other models.

Interface

These slave terminals can be connected to a controller or a master terminal. They allow for flexible integration into new and existing environments.

Reader

The devices are used for identification with RFID credentials and smartphones via BLE for controlling doors. The outdoor devices IF-800 and IF-801 also feature SimonsVoss "Active Technology". In conjunction with a controller or a master terminal, they are capable of writing NetworkOnCard permissions for offline terminals onto credentials (e.g. cards and key tags) with MIFARE or LEGIC technology.

Usage/Installation

The reader electronics is preferably installed in an unsecured area, directly next to a locking device, and connected to the I/O controller board (included in delivery) via a cable of up to 100 meters in length. Thus, unauthorized access can be prevented even if the reader has been damaged, e.g., due to a short-circuit.



IF-800 Terminal

Special Features

IF-800 terminals are installed into 55 mm flush boxes. The cover panels are available in black and white. Further design kits from switch manufacturers, such as Siedle and Behnke, are also available. IF-800 outdoor terminals are surface mounted. The coated electronics allows for trouble-free use in outdoor areas. Cables can be surface or flush mounted. For areas with higher security requirements, we recommend the use of an IF-801 outdoor model, which allows for the entry of an additional PIN code. IF-800, IF-800 Outdoor and IF-801 terminals are available with BLE (see page 7).





IF-800 Outdoor Terminal

IF-801 Outdoor Terminal

Access Control

IF-810 IF-811 IF-812



IF-810 Terminal

Terminals of the series IF-810, IF-811 and IF-812 have been specifically designed to meet the requirements of access control and person identification.

Features Overview

- Access control
- Door monitoring
- Monitoring of sensors (locking devices, barriers, and doors)

Interface

These slave terminals can be connected to a controller or a master terminal. They allow for flexible integration into new and existing environments.

Reader

The devices are used for identification via RFID credentials and for controlling doors. In conjunction with a controller or a master terminal, they are capable of writing NetworkOnCard permissions for offline terminals onto credentials (e.g. cards and key tags) with MIFARE or LEGIC technology.

Usage/Installation

Usage and installation comply with IF-800 products (see page 8). In addition, the use of impact-resistant materials allows for both indoor and outdoor installation.

Special Features

In order to meet higher security requirements, personal identification numbers (PINs) can be entered via the keypad on terminals of the series IF-811 and, in addition, individual alarm or error messages can be generated. Due to the 2x 20-digit, illuminated OLED display of the IF-812 model, feedback can be provided to the user directly. This procedure is controlled by the host software.

IF-800/W01 IF-800/W02





IF-800/W01 Terminal

IF-800/W02 Terminal

Slave terminals of the series IF-800/W01 and IF-800/W02 have been specifically designed to meet the requirements of access control and person identification.

Features Overview

- Access control
- Door monitoring
- Monitoring of sensors (locking devices, barriers, and doors)

Interface

These slave terminals can be connected to a controller or a master terminal. They allow for flexible integration into new and existing environments.

Reader

The devices are used for identification via RFID credentials and for controlling doors. In conjunction with a controller or a master terminal, they are capable of writing NetworkOnCard permissions for offline terminals onto credentials (e.g. cards and key tags) with MIFARE or LEGIC technology.

Usage/Installation

The reader electronics is preferably installed in an unsecured area, directly next to a locking device, and connected to the I/O controller board (included in delivery) via a cable of up to 100 meters in length. Thus, unauthorized access can be prevented even if the reader has been damaged, e.g., due to a short-circuit.

Special Features

Both devices are designed for outdoor operation (IP65). IF-800/W01 and IF-800/W02 models are equipped with an encapsulated reader electronics as well as an encapsulated power supply cable (5 m) which allows them to also be used in rough environments.

Due to their small dimensions, devices of the IF-800/W01 series are suitable for wall mounting and mounting onto door frames.

The IF-800/W02 is available in an anthracite housing. Terminals of the W01 series are available in anthracite and light gray.

IF-830 Card Retract Terminal



The IF-830 card retract terminal convinces with its multi-functional, powerful and user-friendly features for collecting data. Thus, cards with limited duration can be handed out to visitors allowing them to access permitted areas. At the end of the visit, these cards can then automatically be retracted.

Features Overview

- Card retraction
- Card-catching-container

Usage/Installation

This terminal is mainly used at turnstiles and gates for retracting cards that were previously handed out. The card retract terminal is equipped with a heating and can therefore also be used in rough environments. The card retraction device is available in four variants.

Special Features

A card-catching-container is used to collect the cards. When a booking is performed, the card is automatically retracted and read. After that, the card data is transferred to the parent system. The control electronics of the system then waits for the booking decision of the T&A / access control program. Depending on the decision, the card is either returned or retracted. In the latter case, the card drops into a card-catching-container. The cardcatching-container is already installed.

Access Control

IF-800/W11



Slave terminals of the IF-800/W11 series are designed specifically to meet the requirements of access control and person identification. Suitable for indoor and outdoor use.

Features Overview

- Access is only granted to authorized individuals
- Door status monitoring
- Monitoring of sensors (locking devices, barriers, and doors).
- Indoor and outdoor use due to impact-proof housing material

Interface

These slave terminals can be connected to a controller or a master terminal. They allow for flexible integration into new and existing environments.

Reader

The devices are used for identification via RFID credentials and for controlling doors. In conjunction with a controller or a master terminal, they are capable of writing NetworkOnCard permissions for offline terminals onto credentials (e.g. cards and key tags) with MIFARE or LEGIC technology.

Usage/Installation

The reader electronics is preferably installed in an unsecured area, directly next to a locking device or door, and connected to the I/O controller board included in delivery via a cable of up to 100 meters length. Thus, unauthorized access can be prevented even if the reader has been damaged, e.g., due to a short-circuit.

Access Control

IF-0-610 Door Manager



Door managers of the series IF-0-610 are an integral part of a time recording/access control system from Interflex. The devices can optionally be equipped with a Wiegand or serial interface. This allows for the connection of thirdparty products, such as Wiegand or biometric readers. Wiegand readers are installed in a secured or unsecured area and connected to the IF-0-610 door manager via a data cable. Thus, unauthorized access can be prevented even if the cable has been damaged, e.g. due to a shortcircuit.

Features Overview

- Access is only granted to authorized individuals
- Door status monitoring
- Monitoring of sensors (locking devices, barriers, and doors)
- Indoor and outdoor use
- Support of RF 61-1/RF 61-4/RF B-21/RF B-23 credentials; the credential data is transmitted over a large distance via radio waves.

Usage/Installation

IF-0-610 devices are usually surface-mounted. They can be flexibly integrated into new or existing environments and are preferably installed in secured areas directly next to barriers or doors. Using a cable of up to 1,200 meters length, they can be connected to Interflex controllers via the RS485 bus.

Special Features

The devices usually serve as a link between an Interflex controller and third-party products. They control the door management and are fully integrated into the Interflex world.

IF-0-610 devices can be used in conjunction with RF credentials or mobile RF readers to record identification data and control and monitor locking devices and gates.

IF-73



IF-73 supports current technologies, such as USB-C, and sends audible and visual signals (red/blue/green) as soon as the reader has read the data of the medium placed on it. The desktop version is available with either MIFARE or LEGIC RFID technology.

 $\operatorname{IF-73}$ is used for reading data from and writing data to RFID credentials.

Features Overview

- Reader (e.g. machine control)
- Encoder (e.g. visitor management)
- Credential issuing point
- Controls access to applications on a stationary computer.

Reader

MIFARE or LEGIC

Usage/Installation

The device is configured for the respective application using the software included in delivery. Depending on the version, the reader/writer is equipped with a USB and an RS232 interface.

Its slim, state-of-the-art design is particularly suitable for representative applications at gates and reception areas, for example, for visitor management. The desktop reader can also be used to identify employees, who are authorized to work machines or use applications on workstations.

IF-5725 IF-5835 IF-5735 (BLE)



The IF-5xxx terminal family of the eVAYO design series is outstanding due to its multi-functional, powerful and user-friendly handling for contactless identification and data recording.

Features Overview

- Time Recording
- Cost center recording
- Access control (optional)
- Barcode scanning (optional)

The large, intuitive touch screen of the device stands out due to its user-friendly and clearly structured menu.

Optionally, IF-5735 can also control and monitor doors, for example. Furthermore, up to three slave terminals can be connected.

Reader

These devices are used for identification with RFID readers or smartphones via BLE and SimonsVoss "Active Technology". In addition, IF-5735 can write NetworkOnCard permissions for offline terminals onto credentials (e.g. cards or key tags) with MIFARE or LEGIC technology.

Usage/Installation

The IF-5xxx terminal family can be surface mounted onto walls or pillars in dry rooms.

Special Features

These master terminals are equipped with the latest technology and are integrated into Ethernet networks. Power can be supplied via PoE (Power over Ethernet) hub without any problems. This saves the costs of a separate power supply. As an alternative or supplement, 24 V low voltage can also be used.

The IF-5835 terminal is secured by asymmetric encryption (PKI registration and certificate generation) which allows operation via the Internet.

Depending on the model, the terminals are available with a WLAN module. This enables time recording even under difficult structural conditions, as it eliminates the need for data cabling to the controller.

The IF-5735 terminal is available with BLE (see page 7).



IF-5725/IF-5835/IF-5735 (BLE) Terminals



IF-5735 Terminal (optional with WLAN)

IF-4735 IF-4735 AT3



The IF-4735 terminal series is outstanding due to its multi-functional, powerful and user-friendly handling for contactless identification and the recording of data.

Features Overview

- Time recording
- Cost center recording
- Access control (optional)
- Barcode scanning (optional)

These terminals, which are equipped with the latest technology, are integrated into Ethernet networks. Both devices are equipped with a 4-line display and configurable function keys. All the bookings are transferred to the host system in real-time. Optionally, it is also possible to control and monitor doors, for example. These terminals can control up to seven slave terminals.

Reader

These devices are used for identification via RFID credentials and can write NetworkOnCard permissions for offline terminals onto credentials (e.g. cards or key tags) with MIFARE or LEGIC technology.

Usage/Installation

The IF-4735 terminal can be surface mounted on walls or pillars in dry rooms. The IF-4735 AT3 terminal is suitable for outdoor operation and can be mounted onto walls and pillars. It is designed with IP65 protection. An internal, self-regulated heating system heats the device until it reaches operating temperature.

Special Features

For the IF-4735 model, power can be supplied via PoE (Power over Ethernet) hub without any problems. This saves the costs of a separate power supply. Due to the integrated heating, power must be supplied to the IF-4735 AT3 model directly.

Time Recording

IF-815 IF-835



IF-815 Terminal

Slave terminals of the series IF-815 and IF-835 (identical in design to IF-4735) have been specifically designed to meet the requirements of time recording, access control and person identification.

Features Overview

- Time recording
- Cost center recording
- Access control
- Door monitoring
- · Monitoring of sensors (locking devices, barriers, and doors)

Reader

These devices are used for identification via RFID credentials and for controlling doors. In conjunction with a controller or a master terminal, they are capable of writing NetworkOnCard permissions for offline terminals onto credentials (e.g. cards and key tags) with MIFARE or LEGIC technology.

Usage/Installation

The use of impact-proof materials for the IF-815 model allows for indoor and outdoor application. IF-835 is a surface-mounted device that is designed for indoor use. Cables can be surface or flush mounted.

Special Features

The ergonomic design of the control and information elements supports intuitive user guidance. To meet higher security requirements, personal identification numbers (PINs) can be entered via the keypad at IF-815 and IF-835 terminals. In addition, individual alarm or error messages can be generated.

The IF-835 terminal is optionally available with an integrated power supply. Moreover, further devices can be connected via an additional RS232 interface.





IF-835 Terminal

PegaSys 2.1



PegaSys door fittings are the perfect addition to an online access control system for comprehensive electronic locking. Areas, which so far have been excluded from access control for technical or financial reasons, can thus be integrated into the security architecture in a cost-effective and flexible way.

Features Overview

Offline access control

Reading of NetworkOnCard permissions

Reader

Offline data (NetworkOnCard) can be read using current RFID credentials. MIFARE and LEGIC are available as reading technologies. The opening mechanism is triggered in the case of a valid permission.

Usage/Installation

These door fittings are suitable for a wide range of doors. Various designs (dimensions, hinges, handles, etc.) are available for project planning.

Even without the installation of cables or other structural measures, they provide the security and convenience of an electronic access control solution based on an RFID credential. Electronic door fittings can easily be mounted onto existing doors.

PegaSys fittings are available as narrow and wide versions with various handles for indoor and outdoor use. The housings are made of robust stainless steel. The scope of delivery includes an escutcheon, a handle, an electronics module incl. battery compartment and a reading unit. A suitable mechanical lock cylinder can be mounted in parallel.



Special Features

Data is transferred via NetworkOnCard: Offline devices write access permissions onto credentials. These permissions are then checked when a booking is performed on a PegaSys door fitting. At the same time, status data (e.g. low battery status) is written onto the credential and transferred to the higher-ranking system via an online terminal when the next booking is performed. NetworkOnCard thus combines online components and offline access control.

Each PegaSys door fitting can be configured individually. Thus, for example, one door fitting can be automatically switched open from 8 a.m. to 4 p.m. for public business, and another can be configured to open only via a booking with an authorized credential. The PegaSys Mobile software supports the management of the fittings. It allows you to upload permissions to the door fittings and to retrieve diagnostic data.

Offline Solutions

IF-171 Door Handle/Fitting





The electronic door handle and the door fitting of the IF-171 series are convincing due to their efficient and user-friendly handling. Whether in universities, hospitals, caring facilities, banks, insurance companies, municipal buildings, industrial buildings, airports, etc., electronic locking systems are the ideal solution to implement the desired security standard cost-effectively and without much effort.

Features Overview

- Offline access control
- Reading of NetworkOnCard permissions

Reader

Offline data (NetworkOnCard) can be read using current RFID credentials. MIFARE and LEGIC are supported reading technologies. The opening mechanism is triggered in the case of a valid permission.

Usage/Installation

The electronic door handle and the door fitting of the IF-171 series are easy to install and compatible with numerous European lock standards. This provides a cost-effective and integrable solution. The different variants allow installation into all standard doors made of wood, steel and aluminum as well as in narrow door frames with a backset of 25 mm. The sleek stainless steel design blends harmoniously into any architectural style.

Special Features

Door handles from Interflex "communicate" with the access control systems IF-6020 and IF-6040, which allows the use of existing user permissions and databases. Bookings recorded in the door handle can be conveniently evaluated in the respective access control system.

IF-151 Lock Cylinder



The IF-151 lock cylinder convinces with its powerful and user-friendly features. Whether at universities, hospitals, banks, industrial premises or airports, etc. – electronic lock cylinders are the ideal solution for implementing the desired level of security cost-effectively and with minimal effort.

Features Overview

- Offline access control
- Reading of NetworkOnCard permissions

Reader

Offline data (NetworkOnCard) can be read using current RFID credentials. MIFARE and LEGIC are supported reading technologies. The opening mechanism is triggered in the case of a valid permission.

Usage/Installation

The IF-151 series is a cost-effective and integratable solution. The electronic lock cylinder consists of an electronic knob and a profile cylinder. The IF-151 e-cylinder replaces mechanical keys by evaluating access permissions and only granting access to authorized individuals.

The IF-151 lock cylinder can be used for all conventional locks. Thus, the system can be installed in both new and existing buildings. The cylinders can easily be mounted or exchanged - no complex installation work required. Doors are opened by means of RFID credentials in credit card format or in the form of convenient key tags.

Special Features

The lock cylinder "communicates" with the access control systems IF-6020 and IF-6040, which allows the use of existing user permissions and databases. Bookings stored in the lock cylinder can be conveniently evaluated in the respective access control system.

IF-181 Lock Cylinder



The IF-181 e-cylinder convinces with its powerful and user-friendly features. Whether at universities, hospitals, banks, industrial premises or airports, etc. – electronic locking systems are the ideal solution for implementing the desired level of security cost-effectively and without much effort. Its intelligent interior features and the wide variety of different versions, e.g., anti-panic and half cylinders as well as a variant for fire doors, provide a solution for almost any application.

Features Overview

Offline access controlReading of NetworkOnCard permissions

Reader

Offline data (NetworkOnCard) can be read using current RFID credentials. MIFARE and LEGIC are supported reading technologies. The opening mechanism is triggered in the case of a valid permission.

Usage/Installation

The electronic IF-181 cylinder is easy to install and compatible with numerous European lock standards. The IF-181 series is a cost-effective and integratable solution. Its sleek design also allows for installation on doors in architecturally significant buildings. The IF-181 e-cylinder replaces mechanical keys by evaluating access permissions and only granting access to authorized individuals with RFID credentials. Doors are opened by means of RFID credentials in credit card format or in the form of convenient key tags. It can easily be mounted or replaced - no complex installation work required. Usually, a mechanical cylinder is simply replaced by an IF-181 e-cylinder.

Special Features

The IF-181 lock cylinder "communicates" with the access control systems IF-6020 and IF-6040, which allows the use of credentials and databases of the existing access control system.

Defined access permissions are transferred to the e-cylinders via NetworkOnCard technology. Bookings recorded in the e-cylinder can be conveniently evaluated in the respective access control system.

Offline Solutions

IF-161 Electronic Locker Lock



The IF-161 locker lock convinces with its powerful and user-friendly features. Whether at universities, hospitals, banks, industrial premises or airports, etc. – electronic locker locks are the ideal solution for implementing the desired level of security cost-effectively and without much effort.

Features Overview

- Offline access control
- Reading of NetworkOnCard permissions

Reader

Offline data (NetworkOnCard) can be read using current RFID credentials. MIFARE and LEGIC are supported reading technologies. The opening mechanism is triggered in the case of a valid permission.

Usage/Installation

The IF-161 series is a cost-effective and integratable solution. The electronic locker lock can be used to secure lockers and cabinets. Doors can be opened using a credential instead of a conventional key. The electronic locker lock checks the permissions and thus, only authorized users are allowed to access their lockers or cabinets. If a booking is positive, a motor is activated that allows for the locker to be opened. If the lever is moved to another position or if its position is not changed during the specified closing time, the motor is deactivated. The batteries are secured mechanically and can only be removed by means of a special tool. The housing is completely made of plastic. The IF-161 locker lock can be used in all conventional cabinet systems. Thus, it can be installed both in new and existing cabinet systems. When an RFID credential (credit card or key tag format) with the respective permission is presented to the e-cylinder, the cylinder can be turned and thus, the door can be opened.

Special Features

The IF-161 locker lock "communicates" with the access control systems IF-6020 and IF-6040 so that existing user permissions and databases can be used. Bookings recorded in the locker lock can be evaluated in the respective access control system.

Wireless Online Solutions

Digital Lock Cylinder SmartHandle Digital Padlock



The digital door fittings and padlocks from SimonsVoss are among the leading solutions in terms of technology and appearance. Their sophisticated design language convinces even the most demanding users around the globe.

During the development of the wireless SmartIntego products, great importance was attached to ensuring that their special advantages were also accentuated in buildings with many users.

SmartIntego products communicate contactlessly with identification media via the card reader integrated in the fitting.

Features Overview

- Access control
- Padlock
- Door monitoring without wiring

Reader

 $\ensuremath{\mathsf{MIFARE}}$ DESFire/EV1/EV2 with standard Interflex encoding

Usage/Installation

The wireless cylinder can be installed within a few minutes. Commercially available button cells allow for up to 80,000 actuations with online connectivity. In stand-by mode, an average battery life of five years can be expected. Furthermore, lock cylinders - just like the other SmartIntego components - are maintenance-free.

Special Features

The fittings communicate wirelessly via a gateway with the Interflex IF-6040 software and can therefore be seamlessly integrated into existing solutions. In conjunction with the SmartHandle, door monitoring is available as an option. The padlock is available with different shackle diameters in self-locking or non-self-locking versions.







Digital Padlock

IF-4070



The IF-4070 controller family convinces with its multi-functional, powerful and user-friendly features for recording data via Interflex hardware.

Features Overview

- Transfer of bookings from slave terminals to the time recording or access control program
- Control of slave terminals
- $\cdot\,$ Return of booking decisions to slave terminals
- Storage of data
- Switching of external devices to offline mode
- Recording of sensor statuses

Special Features

The IF-4070 controller is equipped with the latest technology and can be integrated into an Ethernet network. All the bookings are transferred to the Interflex host systems in real-time.

Eight integrated relays and eight input contacts allow for the control and monitoring of doors, for example. The controller is available in four different versions which support 2, 4, 8 or 16 terminals.

Controller

IF-4072



The IF-4072 controller family convinces with its multi-functional, powerful and user-friendly features for recording data via Interflex hardware.

Features Overview

- Transfer of bookings from slave terminals to the
- time recording or access control program
- Control of slave terminals
 Return of booking decisions to slave terminals
- Storage of data
- Switching of external devices to offline mode
- Recording of sensor statuses

Special Features

The IF-4072 controller is equipped with the latest technology and can be integrated into an Ethernet network. Power can be supplied via PoE (Power over Ethernet) hub without any problems. This saves the costs of a separate power supply. All the bookings are transferred to the Interflex host systems in real-time. Two integrated relays and four input contacts allow for the control and monitoring of doors, for example. The controller is available in four different versions which support 2, 4, 8 or 16 terminals. Controller

IF-4076



The IF-4076 controller family delivers a convincing performance with its multi-functional, powerful and user-friendly features for collecting data via connected Interflex hardware.

Features Overview

- Transfer of booking data from slave terminals to
 the time recording or access control program
- Control of slave terminals
- Door control
- Return of booking decisions to slave terminals
 Storage of data
- Switching of external devices to offline mode
- Recording of sensor statuses

Special Features

The IF-4076 controller is equipped with the latest technology and can be integrated into an Ethernet network. Depending on the version, the controller comes equipped with up to eight IF-0610 door managers for the direct connection of remote readers. Wiring is done in the IF-4076 controller.

All the bookings are transferred to the Interflex host systems in real-time. Control and monitoring, e.g. of doors, can be implemented without difficulty.

Depending on the version, the IF-4076 controller has up to 32 sensors and 32 output relays at its disposal.

IF-4077



The IF-4077 controller family delivers a convincing performance with its multi-functional, powerful and user-friendly features for collecting data via connected Interflex hardware.

Features Overview

- Transfer of booking data from slave terminals to the time recording or access control program
- Control of slave terminals
- Door control
- Return of booking decisions to slave terminals
- Storage of data
- Switching of external devices to offline mode
- Recording of sensor statuses

Special Features

The IF-4077 controller is equipped with the latest technology and can be integrated into an Ethernet network. Power can be supplied via low voltage or a separate power supply unit. Thus, technicians specialized in low voltage installations can also put into operation and maintain the device without any difficulty.

Depending on the version, the controller is equipped with up to eight I/O controller boards for controlling connected slave terminals.

Furthermore, the IF-4077 controller has two terminal blocks, each with 500 mA fuses, to protect the terminals and the connected door openers separately. All the bookings are transferred to the Interflex host systems in real-time.

IF-4078



The IF-4078 controller family convinces with its multi-functional, powerful and user-friendly features for recording data via Interflex hardware or Wiegand readers.

Features Overview

- Transfer of bookings from slave terminals to the time recording or access control program
- Control of slave terminals and Wiegand readers
- Return of booking decisions to slave terminals and Wiegand readers
- Storage of data
- + Switching of external devices to offline mode
- Recording of sensor statuses

Special Features

The IF-4078 controller is used as the connecting link between max. 16 slave terminals and the higher-ranking host system.

It can address four Wiegand readers as well as twelve further terminals. In addition, subordinate time, access or contact terminals of the IF-8xx series can be controlled. The IF-4078-4 controller is equipped with various standard interfaces as well as three bus interfaces. The IF-4078-2 controller differs with regard to the number of readers that can be connected (two Wiegand readers). A lead battery for emergency power supply is available as an accessory.

Terminal Accessories

DIN Rail I/O Controller Board IF-79 I/O Panel



Each Interflex slave terminal requires an I/O controller board for operation. The I/O controller board is included in the terminal's scope of delivery and is usually installed in a secured area. For DIN rail mounting, Interflex offers a corresponding DIN rail I/O controller board as an accessory. Alternatively, the IF-79 I/O panel can be mounted into 19" racks and connected via a data cable to higher-ranking devices, such as controllers, master terminals or access managers.

Features of the DIN Rail I/O Controller Board

The DIN rail I/O controller board is equipped with the following:

- 3-way DIP switch for setting the device address
- Jumper for specifying the use of one or two
- I/O controller boards
- Dummy terminal (under the housing cover)

IF-79 I/O Panel Features

- Installation aid for up to eight slave terminals of the IF-8xx series
- Control of turnstiles secured by electric door openers and monitored by floating sensors
- Control of external devices and recording of sensor statuses

Special Features

By combining the I/O connector board or the IF-79 I/O panel with the appropriate housing and the required power supply for the reader and the door opener, you get a compact unit that is easy to install and maintain. An anti-tamper switch (reed switch) can also be connected.

IF Distributors



Distributor with the Dimensions 300 x 300 mm

IF distributors in wall-mounted housings are the connecting link between Interflex host systems (IF-6020/IF-6040) and Interflex terminals. Depending on the version, the possible applications differ.

To prevent sabotage or manipulation, distributors are installed in a secured area.

The distributors are equipped with an anti-tamper switch that sends an alarm to the host system in case the housing is opened without authorization.

To use the distributors, an additional Interflex controller is required which is connected to the host system via Ethernet (10/100 Mbps). Like all IF controllers, it stores the data downloaded from the host as well as the recorded bookings, thus ensuring the offline capability of the installation.

The integrated I/O controller boards, which minimize the wiring effort on site, are a special feature of the IF distributor. Each I/O controller board is connected to an IF terminal and an actuator (door opener, turnstile, etc.). In addition, each I/O controller board has an output contact (switching capacity of up to 30 V/2 A).



Distributor with the Dimensions 600 x 300 mm

Benefits at a Glance (Depending on the Version)

- Quick and easy installation
- Central wiring
- Uniform installation
- Sturdy metal housing
- Long product life cycle guarantees high level of investment protection
- Mains filter for compensating disturbances in a 230 V network
- Clear separation of extra-low and low voltages
- Integrated transformer and PSU
- Integrated IF-4072 controller

Usage/Installation

The IF distributor is used to connect various components, such as slave terminals, I/O controller boards, IF-40xx controllers, door openers, and door monitoring systems, conveniently and with the same electrical connection.

Special Features

Combining the distributor with the appropriate power supplies for the reader and the door opener results in a compact unit that is easy to install and maintain.

Biometrics

	Biometrics*						
	TBS Enroll	TBS 2D multispectral	TBS 3D terminal	TBS 3D enrollment	TBS 2D mini	TBS 2D terminal	PCS INTUS 1600PS
	-						
User interface							MagicEye
Color signal		-					(RGB LEDs)
PIN entry		•	•			•	•
Buzzer		•	•		•	•	
Keypad		-	-			•	•
Touch screen			5,0″			3,5″	
Hardware							
Dimensions (H x W x D) in mm	100 x 129 x 78	211 x 140 x 85,6	230 x 160 x 95	160 x 195 x 100	100 x 100 x 11	160 x 100 x 75	300 x 140 x 71
Color	Black	Black	Black	Black	Black	Black	White aluminum frame
Reader							
RFID reader (LEGIC or MIFARE)		•	•			•	
Installation							
Cable feed		Flush-mounted	Flush-mounted		Flush-mounted	Flush-mounted	
Installation type		Surface- mounted	Surface- mounted / flush-mounted		Flush-mounted	Surface- mounted / flush-mounted	Surface- mounted
Ambient temperature in °C	0 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60	-20 to +60
Interface							
Relays		Optional	Optional		1	1	Optional
Interface	USB	RS232/TCPIP	RS232/TCPIP	USB	RS232/TCPIP	RS232/TCPIP	Wiegand
Safety							
Degree of protection		IP65	IP30, IP54 optional		IP30, IP54 optional	IP30, IP54 optional	IP30, IP54 optional
Power supply							
Power consumption in W		15	Max. 25	20	10	15	
Power supply	USB	9 to 30 V	9 to 30 V	5V	9 to 30 V	9 to 30 V	Through INTUS PS controller via Cat-5
Method							
FAR 1:100.000 in %		0,5 <1	0,5		< 2	< 2	< 0.000.01
Sensor	Optical 2D	Optical 2D touch, FBI-certified	Touchless, 3D multi-view	Touchless, 3D multi-view	Optical 2D touch, FBI-certified	Optical 2D touch, FBI-certified	Fujitsu PalmSecure™, BSI-certified

*All specifications according to manufacturer







TBS 3D Fingerprint Terminal

TBS 2D Fingerprint Terminal

Biometric technology significantly enhances company security. Conventional systems recognize the user via a PIN code or credential. But there is always the uncertainty of whether the credential is being used by its legitimate owner.

Interflex offers

- 2D fingerprint recognition
 2D fingerprint recognition with multispectral biometric reader
 Touchless 3D fingerprint recognition
- Vein recognition



PCS Palm Vein Scanner

Access Control and Time Recording

	eVAYO acces	ss control and t	ime recording			
	IF-73	IF-800	IF-800 Outdoor	IF-801 Outdoor	IF-5735 IF-5835	IF-5725
		9	0			
User interface						
Display						
Color signal						
Buzzer			•	-	-	-
Keypad						
PIN entry						
Touch screen Hardware					•	•
Dimensions (H x W x D) in mm*	129 x 65 x 21,8	70 x 70 x 42	130,5 x 87 x 24	130,5 x 87 x 24	163 x 87 x 45,8	163 x 87 x 45,8
Color	Black	Depending on the covering	Black / white	Black / white	Black / white	Black / white
Housing material	Plastic	Depending on the covering	Thermally tempered white glass on a poly- carbonate body			
Heating						
Reader						
RFID reader (LEGIC or MIFARE)			•			•
SimonsVoss "Active Technology" Installation			•	•	•	
Cable feed		Flush-mounted	Surface- mounted / flush-mounted	Surface- mounted / flush-mounted	Flush-mounted	Flush-mounted
Installation type		Flush-mounted	Surface- mounted	Surface- mounted	Surface- mounted	Surface- mounted
Ambient temperature in °C	0 to +40	-25 to +55	-25 to +55	-25 to +55	+4 to +40	+4 to +40
Ethernet interface						
 Digital inputs		2 (max. 4)	2 (max. 4)	2 (max. 4)	(4)	
Relays		1 (max. 2)	1 (max. 2)	1 (max. 2)	(2)	
RS485 interface						
Safety						
Anti-tamper switch						•
Degree of protection/ protection class	IP30	IP20	IP54/III	IP54/III	IP30	IP30
Degree of protection according to DIN EN 50102 Power supply						
Fuse protection for electronics		PTC	PTC	PTC	PTC	PTC
Power consumption in VA		Max. 4	Max. 4	Max. 4	Max. 12	Max. 12
Max. switching capacity: 30 V, 2 A		•	•	•	•	
Power supply 12/24 VAC/VDC			•	•		•

Access control IF-0-610 Door Manager IF-810 IF-811 IF-800VP IF-800/W IF-800/W IF-800/W0 83,5 x 44 x 12 IF-800/W0 130 x 130 x 77 150 x 105 x 42 150 x 105 x 42 140 Ø x 34 119 x 77 x 2 Anthracite light gray Anthracite Light gray Anthracite Black Aluminum, Plastic Plastic Plastic Plastic anodized Surface-mounted Flush-mounted Flush-mounted Flush-mounted Flush-mounted Surface-Surface-Surface-Surface-Surfacemounted mounted mounted mounted mounted –25 to +55 –25 to +55 –25 to +55 –25 to +55 -25 to +5 2 (max. 4) 2 (max. 4) 2 (max. 4) 2 (max. 4 2 (max. 4) 1 (max. 2) IP54 IP43/III IP43/III IP65/III IP65/III IK08 PTC PTC PTC PTC PTC Max. 4 Max. 4 Max. 4 Max. 4 Max. 4

() = optional *Depending on the selected decorative frame.

26 $\,\cdot\,$ Allegion $\,\cdot\,$ Interflex Hardware for Access Control and Time Recording

		Time recordi	ng	
/01	IF-812	IF-4735	IF-4735	IF-815
/02	177 A.		-	Land Marine and Marine and Marine Marine and Marine Marine Marine and Marine Marin
	•	•	•	
		•		
		•	•	
		•	•	•
01: 12,8 02: 23	150 x 105 x 42	240 x 360 x 154	239 x 210 x 85	150 x 105 x 42
e/ y	Anthracite	Light gray	Anthracite	Anthracite
	Plastic	Aluminum die casting	Plastic	Plastic
		•		
		•	•	
nted	Flush-mounted	Surface- mounted	Surface- mounted / flush-mounted	Flush-mounted
- d	Surface- mounted	Wall / pillar	Surface- mounted	Surface- mounted
55	–25 to +55	–25 to +55	+5 to +40	–25 to +55
		•	•	
4)	(4)	2 (max. 4)	(4)	2 (max. 4)
2)	(2)	1 (max. 2)	(2)	1 (max. 2)
	•			•
			(■)	-
I	IP43/III	IP65/I	IP32/I	IP43/III
	PTC	0,5 A	0,25 A	PTC
	Max. 4	Max. 50	Max. 12	Max. 4
	•	•	•	•
	•	•	•	•

Offline and Wireless

	Offline/wireless				
	IF-151	IF-151 Outdoor	IF-171	IF-181	Digital lock cylinder
				C-L3 P	O.F
User interface					
Color signal					-
Buzzer					
Hardware					
Dimensions (H x W x D) in mm	29,5 × 20	44,8 x 45	291 x 42/64	Ø 31	Ø 31
Color					
Housing material Readers	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
RFID reader (LEGIC or MIFARE)		•			
Installation					
Installation type	Lock cylinder	Lock cylinder	Door handle	Lock cylinder	Lock cylinder
Ambient temperature in °C	0 to +55	-25 to +65	+5 to +55	-25 to +65	-25 to +65
Safety					
Degree of protection/ protection class	IP20	IP66	IP20	IP66	IP54
Power supply					
Fuse protection for electronics					
Power consumption in VA					
Max. switching capacity: 30 V, 2 A					
Power supply 12/24 VAC/VDC					
Operation					
Batteries, number of	2	2	1	2	2
Battery life (max. number of opening cycles)*	~ 50.000	~ 50.000	~ 50.000	~ 200.000 (depending on the reading technology)	~ 80.000
Batteries, type	CR2, lithium 3 V	CR2, lithium 3 V	CR123A 3 V	CR2450 3 V	CR2450 3 V
Booking memory Roll storage memory for the last 2,000 bookings and 100 system messages	•	•	•	•	
Emergency opening		•			
Battery replacement	Battery replacement tool	Battery replacement tool	Hexagon-head	Battery replacement tool	Battery replacement tool

	Offline/wireless				
	Smarthandle	Padlock	IF-161	PegaSys 2.1	Offline wall reader
		B		7	() ()
User interface					
Color signal					
Buzzer			-		-
Hardware					
Dimensions (H x W x D) in mm	Wide: 224 x 53 x 14 Narrow: 224 x 41 x 14	Variant 8 mm: 70 x 51 x 25 Variant 11 mm: 72,5 x 60 x 25	44,6 x 148,4 x 35,9	Wide: 285 x 65 x 27 Narrow: 285 x 42 x 27	119 x 77 x 23
Color					
Housing material	Stainless steel	Stainless steel	Plastic	Stainless steel	Plastic
Readers					
Installation	-	•	•	•	•
Installation type	Door fitting	Lock cylinder	Cabinet	Door fitting (one side)	Surface-mounted
Ambient temperature in °C Safety	-20 to +50	–25 to +55	+10 to +50	-25 to +65	-25 to +65
Degree of protection/ protection class Power supply		IP65	IP20	IP34, optionally up to IP54	IP65
Fuse protection for electronics					PTC
Power consumption in VA					Max. 4
Max. switching capacity: 30 V, 2 A					
Power supply 12/24 VAC/VDC					
Operation					
Batteries, number of	2	2	1	3	
Battery life (max. number of opening cycles)*	~ 80.000	~ 80.000	~ 20.000	~ 50.000	
Batteries, type	CR2450, lithium 3 V	CR2450 3 V	Lithium 3,6 V AA	Lithium 1,5 V AA/ 1,5 V AAA	
Booking memory Roll storage memory for the last 2,000 bookings and 100 system messages			•	•	•
Emergency opening					
Battery replacement	Battery replacement tool	Battery replacement tool	Battery compartment key	Battery compartment key	

*Depending on the reading technology, the selected battery compartment, the installation conditions and the operating modes

Controllers

	Controllers				
	IF-4070	IF-4072	IF-4076	IF-4077	IF-4078
User interface					
Color signal	7 LEDs (indicating operating status on front side)				
Hardware					
Dimensions (H x W x D) in mm^*	44 x 420 x 225	58 x 160 x 90	604 x 304 x 105	604 x 304 x 105	604 x 304 x 105
Color					
Housing material	Lacquered sheet steel	PC UL 94V-0	Lacquered sheet steel	Lacquered sheet steel	Lacquered sheet steel
Installation					
Humidity Max. 95%, non-condensing		•		•	•
Installation type	Desktop housing, stackable / installation into 19" slide-in rack, 1 HU, 84 DU	Mounting rail EN 60715 TH 35	Wall-mounted with screws	Wall-mounted with screws	Wall-mounted with screws
Ambient temperature in °C	+5 to +40	+5 to +40	+5 to +40	+5 to +40	+4 to +40
Interface					
PoE (Power over Ethernet) Power class 3		•			
Relays	8	2	Up to 32	Up to 8	Up to 8
Digital inputs	8 (for floating sensors), debounce time of contacts at least 100 ms	4 (for floating sensors)	Up to 32	Up to 16	Up to 16
Relay contacts Normally open (NO), normally closed (NC), change-over contact	•	•	•	•	•
Interface for service device RS232 or RS485 with 9,600 baud (1,200 baud, 19,200 baud possible)	•	•	•	•	•
Interface to slave terminals RS485 with 9,600/19,200 baud (default setting = 19,200 baud)	•	•	•	•	•

Controllers IF-4070 IF-4072



Safety		
Fuse protection for electronics	250 mA, slow-blowing fuse type TR5	
Degree of protection/ protection class	IP30/III	IP20/I
Power supply		
Output relays Switching capacity 30 V, 2 A	•	•
Power consumption in VA (approx.)	16	12
Power supply VAC/VDC	Optional	
Power supply 230 VAC, +/-10 %, 50 Hz (optional also 110 VAC)	•	
Other		
Electrical service life (switches)	500,000	500,000
Host (10/100 MB Ethernet acc. to IEEE 802.3)		

	IF-4076	IF-4077	IF-4078
	According to equipment	According to equipment	According to equipment
	IP20/I	IP20/I	IP30
	30	•	•
	48		20
	•		
	500,000	500,000	500,000
_	•	•	•

Distributors

	Distributors				
	IF distributor power supply	IF distributor, 1-2 doors	IF distributor, 4 doors	IF distributor, 1-2 doors	IF distributor, 1-2 doors
Hardware					
Dimensions (H x W x D) in mm	300 x 300 x 120	300 x 300 x 120	300 x 300 x 120	300 x 300 x 120	600 x 300 x 120
Color	Painted, RAL 7035	Painted, RAL 7035	Painted, RAL 7035	Painted, RAL 7035	Painted, RAL 7035
Housing material	Steel	Steel	Steel	Steel	Steel
Installation					
Humidity 95%, non-condensing		•		•	•
Installation type	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted
Ambient temperature in °C	+5 to +40	+5 to +40	+5 to +40	+5 to +40	+5 to +40
Interfaces, inputs/outputs and contacts					
Anti-tamper switch					
Controller inputs					
Controller output relays					
I/O controller board		2	4	2	2
Sensor inputs		4	8	4	4
Output relays		2	4	2	2
Operating status indicators	LED	LED	LED	LED	LED
IF-4072					
Ethernet					
Interfaces to slave terminals: RS485					
Service interfaces: RS232					
Power supply					
Mains voltage 230 VAC	•			•	•
PSU 230 V/24 VDC 2,5 A Transformer, 230 V/20 VAC 1,6 A				•	•
Protection Circuit breaker, 1-pin, 6 A				•	•
Power consumption approx. 4 VA (with one slave terminal)	•			•	•
Output relays Switching capacity 30 V, 2 A		•	•	•	•
Mains filter	1-phase AC filter	1-phase AC filter	1-phase AC filter	1-phase AC filter	1-phase AC filter
Safety					
Degree of protection/ protection class	IP30	IP30	IP30	IP30	IP30

	Distributors				
	IF distributor, 4 doors	IF distributor, 8 doors	IF distributor, 2 doors	IF distributor, 4 doors	IF distributor, 8 doors
Hardware					
Dimensions (H x W x D) in mm	600 x 300 x 120				
Color	Painted, RAL 7035				
Housing material	Steel	Steel	Steel	Steel	Steel
Installation					
Humidity 95%, non-condensing	•	•	•	•	•
Installation type	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted
Ambient temperature in °C	+5 to +40				
Interfaces, inputs/outputs and contacts					
Anti-tamper switch		•	•	•	-
Controller inputs			4	4	4
Controller output relays			2	2	2
I/O controller board	4	8	2	4	8
Sensor inputs	8	16	4	8	16
Output relays	4	8	2	4	8
Operating status indicators	LED	LED	LED	LED	LED
IF-4072			•	•	
Ethernet			•	•	
Interfaces to slave terminals: RS485			•	•	
Service interfaces: RS232			-		
Power supply					
Mains voltage 230 VAC				-	-
PSU 230 V/24 VDC 2,5 A Transformer, 230 V/20 VAC 1,6 A		•	•	•	
Protection Circuit breaker, 1-pin, 6 A		•	•	•	
Power consumption approx. 4 VA (with one slave terminal)			•		
Output relays Switching capacity 30 V, 2 A	•	•	•	•	•
Mains filter	1-phase AC filter	1-phase AC filter	1-phase AC filter	1-phase AC filter	1-phase AC filter
Safety					
Degree of protection/ protection class	IP30	IP30	IP30	IP30	IP30

Interflex -Services from a Single Source

Consulting



Our expert consultants provide targeted assistance in the core business fields of access control, time recording and workforce management.

Project Management



Specially trained and certified project managers get the jobs done on time.

Training Courses



Selected topics are covered in courses that systematically build upon one another. In small groups, we introduce our system to your employees and help them become more comfortable with its use. We offer standard courses in a positive learning environment as well as customized training courses at your site.





Our maintenance offer for software and hardware will be tailored to your individual needs.

Support

Our system consultants from our Customer Care Team will be glad to answer any questions.

Please contact our User Helpdesk if you have any questions regarding your system. Email:

Telephone:

00 8000 2000 951

interflex.support@allegion.com



System Introduction

1. Installation

2. Configuration 3. Initial operation

Our employees introduce the Interflex

system on a step-by-step basis:



•

The hardware is installed on your site by our trained technical personnel.

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Interflex Datensysteme GmbH offers holistic solutions for workforce management including time management and personnel scheduling as well as customized and innovative security solutions including access control, video surveillance, security control centers, and visitor management.

With several thousand system installations managing more than 4.7 million users, Interflex is one of the international market leaders. Interflex was founded in 1976 and has been a part of the Allegion Group since 2013.

Further information is available at **www.interflex.de**

About Allegion™

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions. Allegion had \$2.7 billion in revenue in 2020 and sells products in 130 countries.

For more, visit **www.allegion.com**





