



## KNX Axesso System



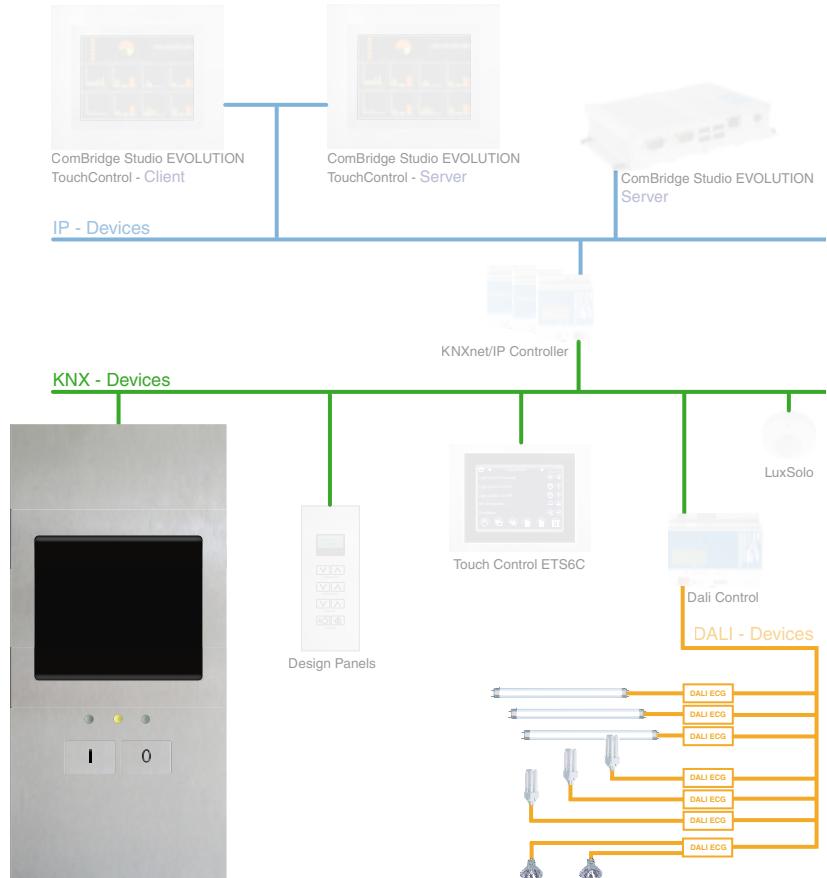
Access control and time-management  
Opening doors the intelligent way

## Access control in modern buildings – controlled entry without keys

Access control systems based on access cards and card readers are becoming increasingly common in building technology. The advantages compared with conventional, key-based locking systems are obvious: Easy and flexible handling combined with maximum security. Unlike a classic key, additional functions can be integrated into a card system.

For example, functions such as time-management and access protocol can be incorporated. A card thereby not only enables access to a building but also replaces the traditional time card. Especially in commercial premises, often a large number of different doors need to be opened.

Different main entrances, access to a car park, access to outdoor facilities, access to different offices and labs, access to meeting rooms and lift activation. Even in simple office buildings, numerous different locking procedures are often required. Using a card-based system therefore does not only offer greater flexibility but also a more economical solution than a complex locking system with different key hierarchies.

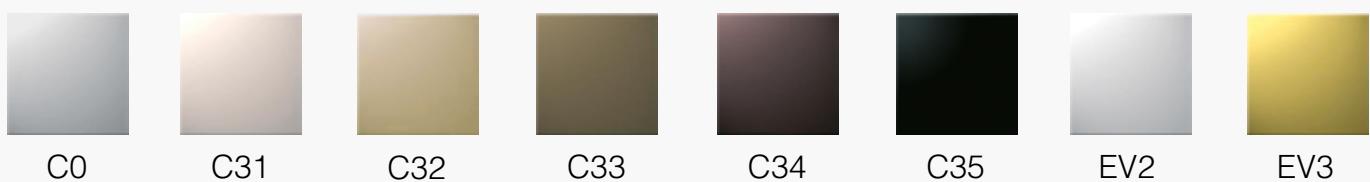


## Axesso card readers – Solutions for different applications and user requirements

Axesso card readers are available for different card technologies and in different designs. The Largo design offers both readers with classic contact chip cards and readers for contactless RF-ID cards in modern 13,56 MHz technology.

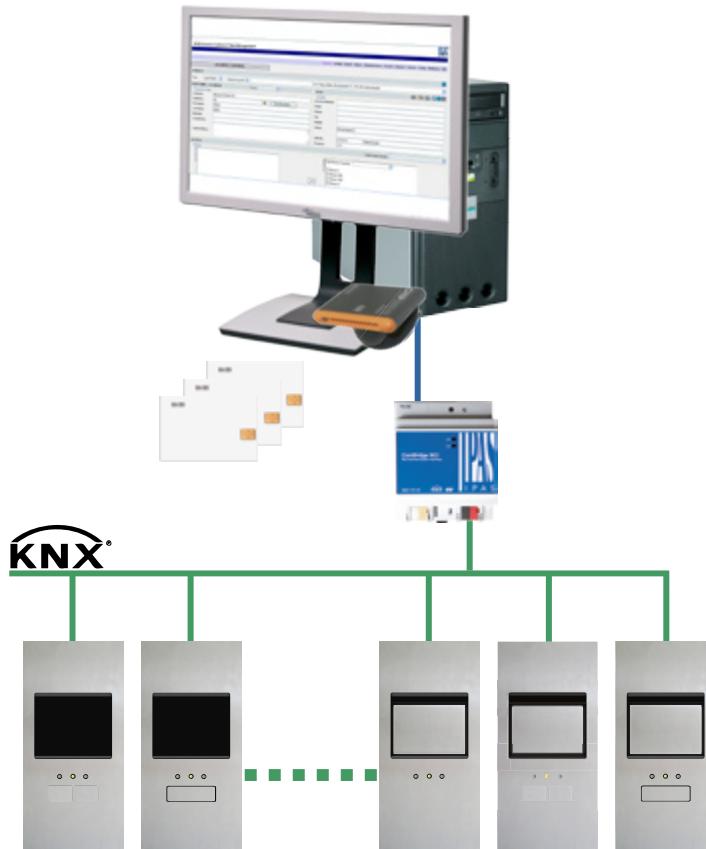
Moreover, the Largo Design readers can be ordered with either one or two additional, freely programmable pushbuttons. This offers a simple and cost-effective way of incorporating an additional bell button or light switch, which activate the desired function directly via KNX. As is the case with all IPAS design products, different anodised colours can be chosen for the high quality aluminium surface. IPAS card readers therefore fit in perfectly with any architectural environment.

### ANODISING COLORS ALUMINIUM



## IPAS Axesso System – Easy use and maximum security

The most important components within the Axesso System are the KNX card readers. The Axesso readers have a KNX connector and can be directly integrated into the installation bus system.



A KNXnet/IP gateway (e.g. IPAS ComBridge NCI) connects the KNX system and the IP (Ethernet) network of the server via the Axesso Server Software. This means that the communication of the server software with the readers is based on the existing building networks KNX and Ethernet.

The Axesso readers work autonomously within the KNX system. If the access cards have been programmed, no server is required to obtain access within the system. If a card is inserted into the reader or placed before it, the device compares the access code on the card with the code saved on the reader. If the two match, the reader permits access. An electronic door release can be contacted directly by the switch contact that is integrated in the reader.

No communication with the KNX bus and no additional actuators are required to grant access rights. Manipulation through a bus telegram therefore becomes impossible.

A communications object that will enable access via an external switch actuator is, of course, available for applications with low security requirements.

In addition to the binary output to control the door lock, some Axesso card readers also have two inputs for binary signals. These can, for example, be used to analyse door contacts. Unauthorised or forceful entry to a room can thereby be notified as an alarm via the KNX system, which again means: Easy handling, maximum security.

CHIP CARD-READER

without button



1 button



2 buttons



TRANSPOUNDER CARD-READER

without button



1 button



2 buttons





## Beach Resort – Greece

Bungalow resort in the Kallithea Bay on Rhodes

Anodised aluminium surface,  
 Flush-mounted in lime stone,  
 Central room management,  
 User acknowledgement,  
 Central alarm functions with direct link to reception

## Axesso Server Software – Central user and card management

In addition to the card readers, the central system component is the Axesso software that is installed on the server. The Axesso software is used for the central administration of card holder and card details. Both the access codes on the reader and the cards



themselves are programmed using the software. Using the web interface, the service and operating personnel of a building can create new users and grant or cancel access rights within seconds. Basic functions are easy to use and intuitive and icons are easy to understand.

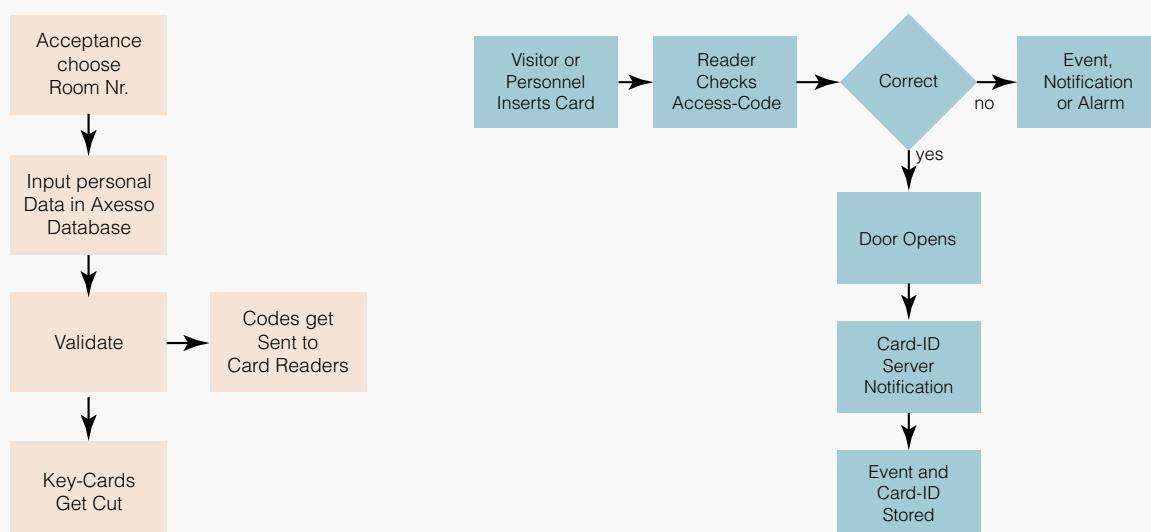
The web-based concept of the Axesso software makes it possible to operate the software from additional operator stations. This way the Axesso server with the sensitive card holder information can be installed in a safe server room whilst the operator stations used to generate the cards or to administer and generate reports can be set up locally for the respective service or administration personnel. The operator stations require no specific software as they directly access the Axesso pages via the standard Internet Explorer and the IP network.

## Protocol, time-management and card holder scenes – Extra functions, no extra work

If the Axesso software is active, each access is recorded on the system and entered into a chronological database. This makes it possible to know which card holder was in the building or a specific room at what time. If required by data protection laws, access details can be automatically and permanently deleted after a prescribed period.

The Axesso software offers the possibility to calculate the times that a card holder spends within a building. Daily usage/working hours can be accumulated for any length of time. A data export function makes it possible to use this information for accounting purposes. Axesso thereby become a time recording system.

When an access card is created, specific card holder scenes can be defined and assigned to the card. This means that simply on opening the door, room temperature and lighting can be adjusted to a card holder's personal preference.





## Zeche Zollverein – Essen

UNESCO world heritage site

Access to and operation of the museum "Monument Route"

Aluminium black anodised,  
Flush-mounted in stainless steel,  
Control and administration of guided tours,  
Activation of tour-specific light scenes,  
Cards with special functions for maintenance  
and service personnel, time-management

## Axesso in a hotel – The intelligent way to enter a room

The IPAS Axesso offers attractive possibilities for use in a hotel environment. A special card reader model for hotel applications offers not only the usual operational LEDs but additional room status displays. This means that the service personnel can see a guest's requirements at a glance.

Especially in modern apartment hotels, apartments may require their own bell. The bell button can be directly integrated into the card reader. Through individual engraving the device can also be transformed into an elegant door sign.



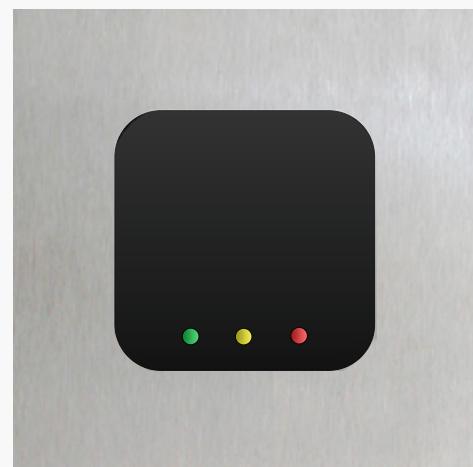
Particularly interesting for the hotel environment is the Axesso card holder to activate a room. Unlike the standard device, the IPAS card holder double-checks the card code and only if the right card is inserted in the slot can power supply and air conditioning be activated. A guest cannot leave these on by inserting a different card, e.g. a credit card into the slot. The IPAS Axesso system thereby helps hotels to save energy.

Axesso can also be linked to other property management systems. A special version of the Axesso software provides an interface to the widely used FIAS protocol (Fidelio Interface Application Specification). Axesso thereby becomes part of a hotel's complete reservation and administration system.

## Axesso WP – humidity-proof and temperature-resistant: The model for outdoor use

Axesso WP readers have been developed specifically for use in outdoor facilities or pool areas. This particular model is only available with RF-ID technology. The reader unit and controller unit are mounted separately and are only connected through a cable.

The sealed reader unit is completely humidity-proof and temperature-resistant. It can therefore be mounted outside without any problem. Connection to the KNX bus is via the controller unit which is mounted on the weatherproof inside of a wall, in close proximity to the reader unit.



## IPAS – for buildings of the future

Since its establishment in 1996, IPAS stands for innovative products and solutions in building automation. Based on the global KNX standard, IPAS develops and manufactures devices and software for buildings of the future.

Every day our highly-qualified IPAS team rises to the challenge of developing the best technological and economical solutions for our clients. Knowledge, experience and creativity direct everything we do from development to production and distribution.

Informed by our project management experience and the global use of our products, IPAS today stands for sustainable values. It is our company policy to create and sustain employment, to assume responsibility for the community and to train young people.

Our relationship with our clients is based on fairness, cooperation and integrity.

In the manufacture of our products, we strive for the upmost quality taking into consideration resource saving technologies and manufacturing processes. Sustainability and environmental awareness are integral to our work. Our certified quality management system in accordance with DIN/ISO 9001, guarantees that all our processes meet these requirements.

It is our aim to always realise the individual wishes of our clients and to offer the best-possible solutions for your requirements, true to our maxim:

**„A satisfied client is the best reference“.**

The information in this brochure contains details and features that may differ from those described in individual cases or may be subject to technical changes.

IPAS GmbH  
Grabenstrasse 149a  
D-47057 Duisburg  
Tel.: +49 203 37867-0  
Fax: +49 203 37867-10  
email: support@ipas-products.com  
web: www.ipas-products.com

