TIDOMAT smartONE

Access and Security system

TIDOMAT®

TIDOMAT smartONE

smartONE consists of a premium segment access control system, with the possibility of an advanced and integrated intrusion alarm with fire detection. The system can be customized according to needs and grow over time. It caters to simple access solutions as well as advanced property security, infrastructure, public facilities, industrial and commercial operators, and alarmed and monitored security objects. Security levels and functionality can be varied in several different ways. Everything can be brought together under one system with comprehensive system management.




smartONE is a future proof security system with ongoing development that guarantees new features and the latest technology.

Low energy consumption and sustainable material choices characterize smartONE. High quality, long lifespan, and low maintenance costs are other values that we strive for.

smartONE is built to withstand tough industrial environments and is designed to function continuously, even under challenging conditions. The possibility of integration and utilization of multiple security enhancing and complementary products provides a wide range of applications.

Overall, TIDOMAT smartONE is a powerful and versatile solution.

Why choose smartONE?

The security system is scalable, from the individual central unit with up to 64 controlled access points to several hundred thousand access points and card owners, with or without intrusion alarm. Expansion takes place within the same system without the need for costly system replacements. Benefits such as utilizing a common network and the same hardware for multiple functions and possibilities are natural for smartONE.

TIDOMAT smartONE

... is an access control system with a certified and integrated intrusion alarm with fire detection, but they can also be installed separately.

... has a built-in electronic control and regulation system for automation of events and functions.

... in its basic version, does not require connection to a server or separate software installation. The central unit has a built-in web server.

... has great possibilities to connect and control third party products.

... is installed in a basic version with preconfigured hardware in four simple steps. Permissions are assigned with a few clicks, and then smartONE is ready to use.

The security system consists of:

- **Access control**
- **Intrusion alarm with fire detection**
- **PW32 – Central administration**
- **Door phone**
- **Alarm control panel**
- **Alarm monitor**
- **Zone monitor**
- **Online cabinets and locker locks**
- **Integrations and licenses**
- **ASSA Aperio wireless locks**
- **SimonsVoss SmartIntego wireless locks**

Low energy consumption and sustainable material choices

Administration

- **Web browser-based user interface with full control over identity credentials and access points.**
- **Dynamic and customizable user interface.**
- **Built in help files.**
- **Multiple individuals can use the system simultaneously with different privileges.**
- **With the help of a computer, administration, configuration, updating, and maintenance can be done locally or remotely, wherever you are.**

The administrator can easily determine who has authorization and access, to which area, and during which times the authorization should be valid. It is equally easy to block and deny identity credentials and permissions in the system. The administrator also has the right to remotely open access points from the interface.

All events are logged in the system and can be reproduced if needed. The system also has the capability to send events and alarms to the administrator, alarm center, and other recipients via email, SMS, IP-notify, or HTTP request. This feature is very useful when key personnel, for example, need to be alerted in a simple and efficient manner.

Central administration – TIDOMAT PW32 (License)

- **Connects all smartONE installations to a comprehensive system.**
- **Monitoring and administration are done centrally.**
- **Utilizes existing network.**
- **Geographical location is not an obstacle.**

When the need grows and larger or multiple security systems are desired, TIDOMAT PW32 can interconnect and manage multiple smartONE objects within a single comprehensive system. The geographical location of the objects is not an obstacle. Connection is made via a network and centrally managed. Several hundred thousand door environments and card users can be handled.

TIDOMAT PW32 utilizes the existing network as far as possible to achieve maximum flexibility and performance. The products are connected to the local network, making it easy to complement with other network devices and establish communication with integrated units. PW32 can also be connected to a separate and isolated security network.

Different objects, identity credentials, and access points are easily managed with the PW32 Easy Client user interface. The interface includes programs for managing access points and identity credentials, configuring hardware, maintaining the system, and utilizing communication channels through the user interface.

Service and maintenance

Service, updates, support, and system maintenance are handled excellently by smartONE. Many expensive onsite visits and troubleshooting can instead be managed remotely through remote connection. Technicians or administrators can solve most challenges without the need for an on-site visit. If a visit is required, there is often information about the issue already available in the system. Therefore, troubleshooting, an action plan, and any necessary spare parts can be prepared before the onsite visit, minimizing expensive return visits.

Remote connection requires a central unit connected to the network.

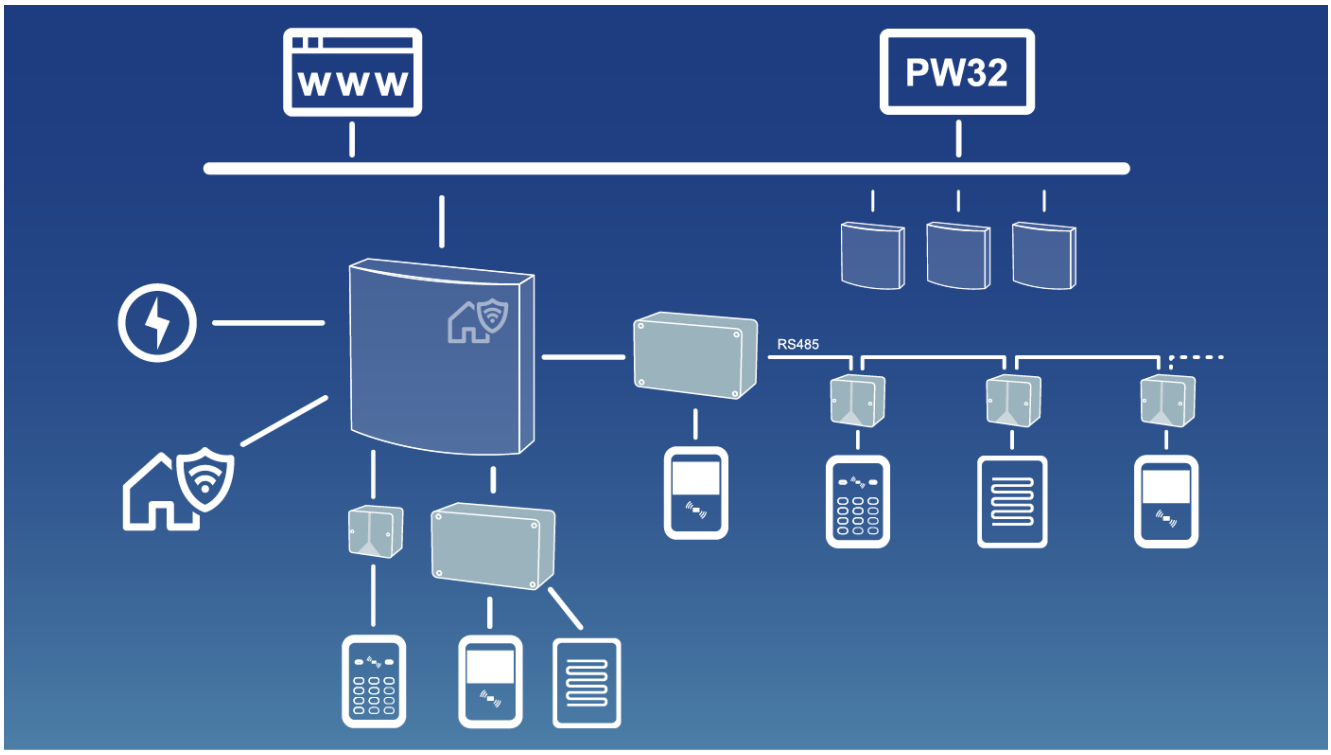
- **Remote update**
  Take advantage of new software, features, and functionalities, as well as remotely update the system's hardware.
- **Remote maintenance**
  Perform maintenance and monitor system status remotely.
  Check alarms, battery status, aged batteries, days remaining until system service, and more.
  Import/export data and create database backups.
- **Remote troubleshooting**
  Check alarms, error messages, and perform troubleshooting with graphical real-time presentation of the status of inputs and outputs.

System architecture

smartONE consists of a central unit where all door controllers are connected. The door controller can be connected to section cards with in- and outputs, a control panel, a door phone, as well as various types of card readers. Locks, magnets, door automation systems, detectors, and other sensors, transmitters and switches can also be connected.

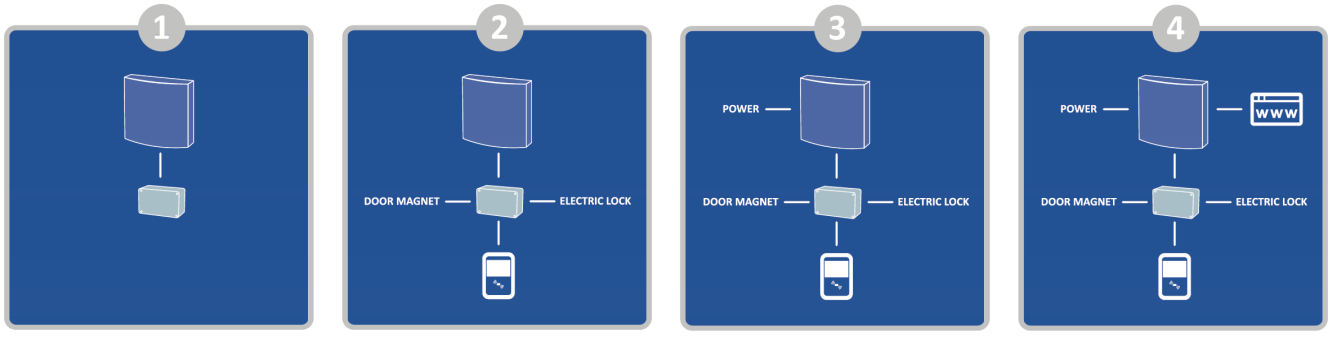
For optimal expansion of access points, connections can be made in two different ways; 1:1 via current loop or door-to-door via RS485 loops.

Certified alarm features are unlocked with a license key.



smartONE is an innovative security system where all data transmission occurs securely through encrypted and monitored two-way communication. In its basic configuration, smartONE does not require a connection to a server or separate software installation. The central unit has a built-in web server.

A basic installation with preconfigured hardware is done in four simple steps, and permissions are assigned with just a few clicks.



INSTALL HARDWARE

INSTALL CARD READER + ACCESSORIES

CONNECT POWER SUPPLY

CONNECT NETWORK/COMPUTER AND ASSIGN PERMISSIONS

Built-in control and regulation system

In addition to being an innovative access control system with an intrusion alarm, smartONE has its own built in electronic control and regulation system for event and function automation. The combination of the system's hardware and software makes the security system exactly what it is - SMART.

The control system has programmable inputs and outputs that can be influenced in many different ways. In addition to programmable NO/NC and voltage-controlled inputs and outputs, the control system can activate inputs and outputs based on time, date, season, or sunrise and sunset.

Control can also be done using events, links, schedules, bookings, external requests, and through APIs. Combinations of these control and regulation functions can also be performed to achieve unique and desired functionalities.

The control system is not locked to products from Tidomat but has great capabilities to connect to third-party products.

To further enhance the user friendliness of smartONE, there is the possibility to import and export both information and events. It is also possible to integrate the system with other services and manufacturers on the market, such as cloud services, payment services, as well as property related and energy saving systems for room control.

Integration can be done with Websocket, REST API, and Modbus.

The flexibility of the system means that most customer requirements can be easily fulfilled.

The possibilities with smartONE are many and unique.

Increased security

The "Increased security" feature is designed for businesses where the blocking of a large number of entrances and exits needs to be done quickly and efficiently. The need for this may arise in situations involving threats and other security scenarios.

When needed can, for example, schools, courts, shopping centers, and security facilities easily close and lock all or selected entrances and exits.

Being able to lock out or lock up an assailant can often deter a threatening situation or at least limit the perpetrator's ability to proceed. This function is commonly used for perimeter protection but can be adapted to any desired areas.

In the heightened security mode, the system can be programmed to only allow authorized personnel to enter. For example, emergency responders, security guards, or maintenance staff who can intervene to ensure that the situation is secure.

Cardholders with regular access privileges will not be able to use their cards at access points with heightened security. Even unreported lost cards will be rendered ineffective, minimizing unauthorized access during heightened security.

smartONE Intrusion Alarm (License)

The smart access control system has been supplemented with an approved intrusion alarm in grade 1 to 4. smartONE only needs an upgrade of the software in the central unit and activate the license key to access the desired alarm grade.

Upgrading to an intrusion alarm provides access to advanced capabilities for alarming and monitoring. Therefore, the system can be supplemented with various types of alarm products such as detectors, sensors, sirens, alarm monitors, and more.

By utilizing a shared network and the same hardware for multiple functions and capabilities, one can avoid expensive costs associated with system replacement.

- Cost-effective and secure solution.
- Flexible customization with endless possibilities.
- Four input modules and 36 alarm sections per access point.
- Eight relay modules and 68 relay controls per access point.
- Practical and easy to use control panel.
- Can be connected to an alarm monitor with alarm presentation and voice synthesis.
- Microzones.
- Dynamic partitioning.
- Walk test of detectors and sensors in real-time.
- Easy management of new and existing external alarms, such as RWC and emergency alarms.
- Night locks/emergency exits.
- Built in troubleshooting with realtime graphical control of inputs.
- Automatic intrusion alarm certificate, appendix 3 and 4.
- Local database backup for quick restoration.
- Control of OSDP locks from Safetron.
- Several other smart and unique features for customer customization.

Control panel

With the help of a control panel with a touchscreen, all alarm related functions are managed in a practical and easy to use manner.

Enclosures

- smartONE intrusion alarms are available with flexible and approved enclosures. The central unit SO-3208 is alarm-certified with its own enclosure. The certified alarm enclosures TBH-LK-MINI and TBH-LK-MAXI can be configured in various designs and can therefore be easily customized according to specific needs with certified alarm products.
- The larger enclosure, TBH-LK-MAXI, is preferably used for central installations.
- The smaller enclosure, TBH-LK-MINI, is used for satellite installations.

Modules

With the help of input and relay modules, it is easy to manage sensors, switches, detectors, elevator controls, RWC, emergency alarms, and more. An access point can handle up to 36 alarm sections and 68 relay controls.

Alarm monitor (License)

Comprehensive review of the situation, evaluation of needs, and selection of the appropriate action. All three steps are of great importance when quick and critical decisions need to be made.

By complementing smartONE with a compact application server that connects behind any desired screen, desired alarms and alerts can be presented in plain text. If the application server has an internet connection and the screen includes speakers, alarms are also presented with voice synthesis that verbally announces the specified alarm. Sound and light capture the operator's attention.

When no alarms are being presented on the alarm monitor, the monitor can be used to display digital content. When an alarm is activated, the monitor returns to alarm presentation mode.

The alarms are presented in three different categories:

- **High-priority alarms handle, for example, personal alarms.**
- **Priority alarms handle, for example, property alarms.**
- **Ongoing events handle approved events such as door openings.**

When no alarms are being presented on the alarm monitor, it can be used to display digital content. This can include a website, company logo, information board, or simply a beautiful image. When an alarm is activated, the monitor returns to alarm presentation mode.

The application server is network based and connects to the same network as smartONE. This provides a simple and flexible installation. The screen size can vary based on customer preferences. The screen is not included in the product.

Zone monitor (License)

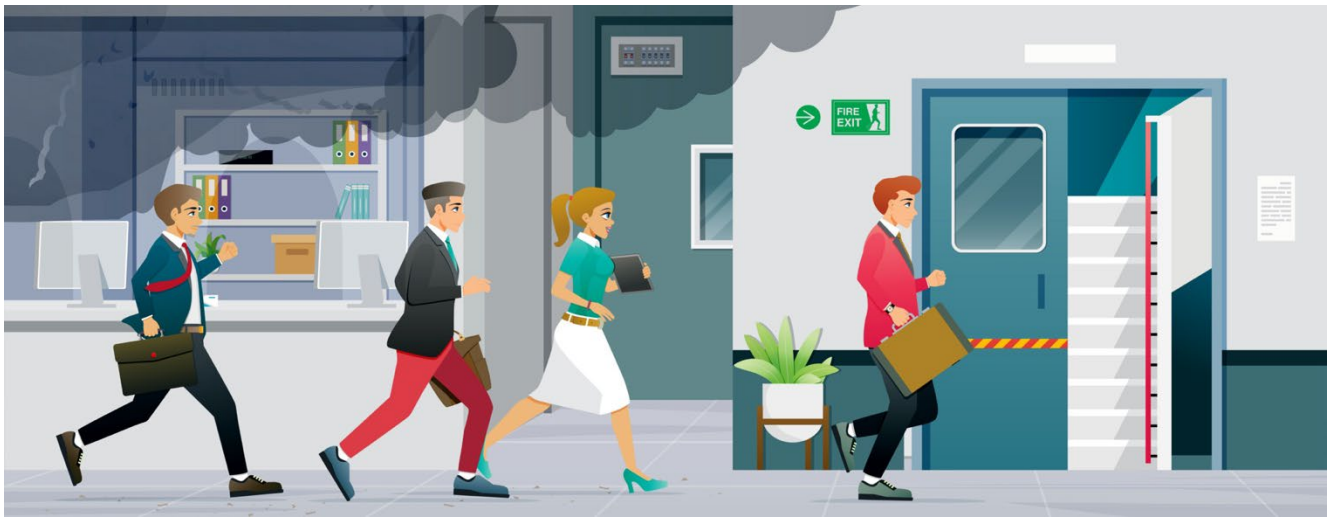
By complementing smartONE with a compact application server that connects behind any desired screen, the zone monitor can track credentials in different spaces, areas, and zones. When identity bearers pass through different zones, location information can be clearly presented. Different types of identity bearers such as personel, machinery, and vehicles can be read using various identification and reading techniques.

Information about the whereabouts of personnel can often be of great importance for the safety of the staff or individuals involved.

Examples of areas of use:

- Ensuring that premises and spaces are empty before arming the alarm.
- Ensuring that personnel, vehicles, and machinery are in the correct location before hazardous work tasks.
- Overview of personnel, vehicles, and machinery in large areas.
- Clear and rapid headcount of personnel during evacuation.

The application server is network based and connects to the same network as smartONE. This provides a simple and flexible installation. The screen size can vary based on customer preferences. The display screen is not included in the product.



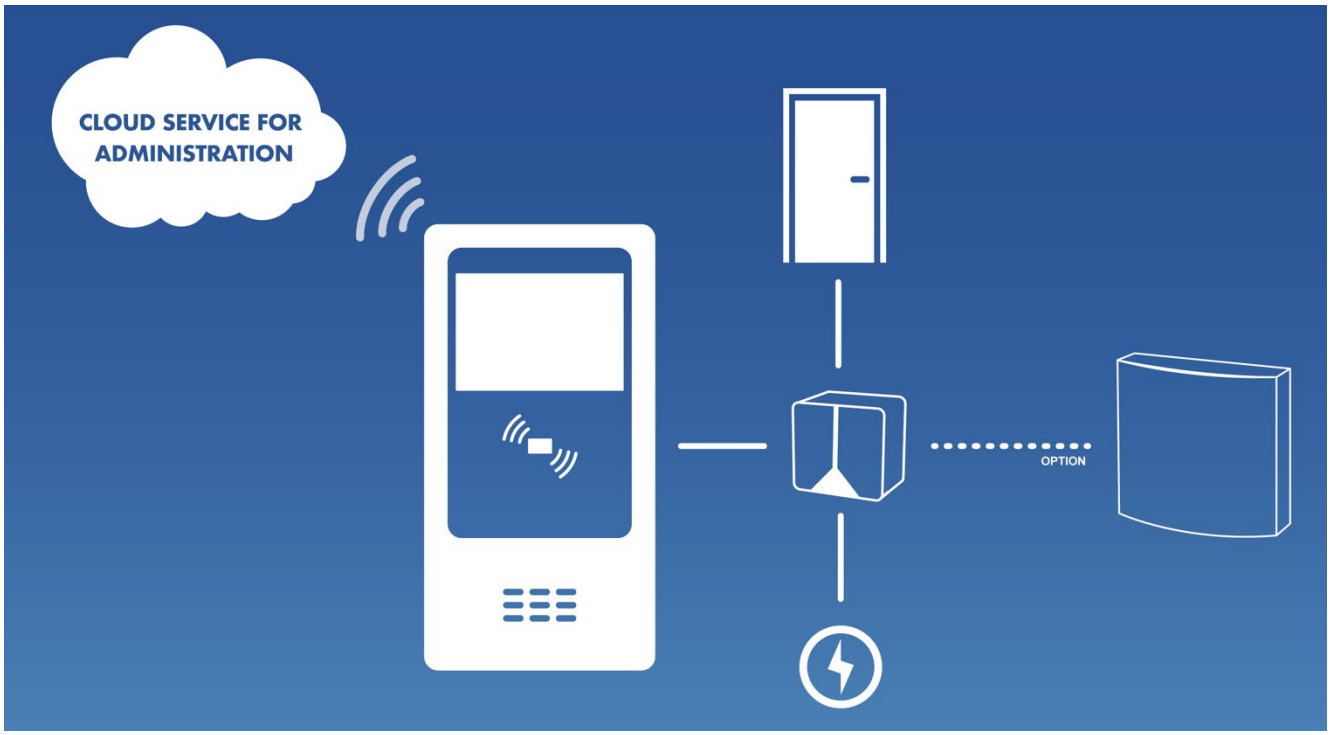
Door phone SO-3396-LTE

- **Door phone and card reader for the mobile network.**
- **Fast and easy installation.**
- **Remote door opening via telephone.**
- **Managed via cloud service.**
- **Exclusive and sustainable material selection.**
- **Easy-to-use touch screen.**

Combined door phone and card reader with touch screen and dual reading technologies. Robust and exclusive construction in aluminum with high corrosion resistance. All services and settings are managed with any web browser via a cloud service.

The door phone communicates with the cloud service through the mobile network, eliminating the need to extend a network connection to the device.

The door phone functions as a standalone access control system for a single door but can be conveniently integrated into the larger smartONE system.

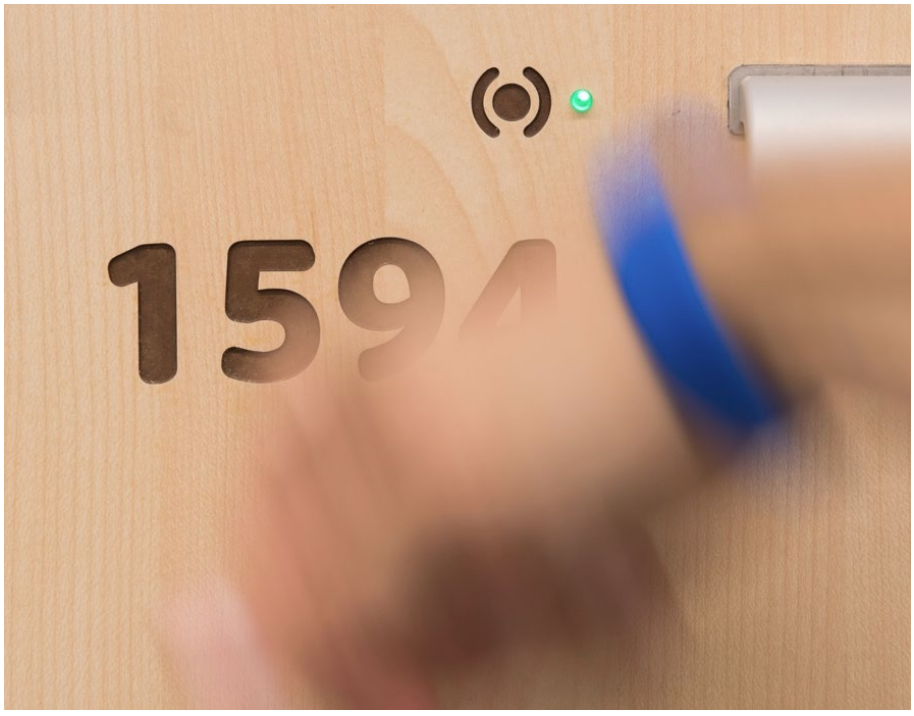


Online lockers and cabinet locks

Tidomat provides lockers and cabinet locks that are compatible with smartONE. The functionality for controlled and monitored opening can be applied to various types of lockers, such as key cabinets, safes, security cabinets, medical cabinets, computer cabinets, mobile phone lockers, and changing room lockers. These are commonly found in spa and baths, schools, nursing homes, hospitals, offices, and other similar environments.

Each identity bearer can have temporary or permanent lockers, but they can also share lockers with others. Key management can be phased out and instead integrated into an access control solution. Online-connected lockers reduce costs, simplify administration, and provide security and traceability.

- Can be connected to an existing smartONE system.
- Multiple devices can be interconnected.
- Possibility for emergency opening with a key.
- Customizable locks are available for installation in existing lockers.
- Cabinets with locks are available in water resistant natural materials and in modular solutions with one, three, or five lockers.



Locker management software (License)

Locks and lockers are easily administered and managed with the locker management software. The interface handles a large number of lockers. Administrators have the ability to monitor availability and status in real-time in a clear and concise manner. They can see if a locker is vacant, occupied, blocked, or tampered with.

The software is part of TIDOMAT PW32.

Integration and Licenses

smartONE offers multiple possibilities for integrating and connecting with external systems and services. For instance, property related systems such as heating, ventilation, and lighting can benefit from the access information provided by the security system. Various payment solutions and services can be integrated, for example, to grant or deny access to spa and baths, gyms, tanning salons, offices, hotels, and more.

The possibilities for new features and integrations are numerous.

REST-API (License)

Scalable and simple. Utilize the existing infrastructure in the system for new possibilities. Retrieve information, program, and control.

Websocket (License)

Integrate and connect. Facilitate real time communication and sharing between applications to the desired client or server application.

Modbus (License)

Modbus network connection allows other systems to connect to smartONE, enabling integrations with, for example, PLC and BMS for building management.

An access control system can be an important tool in coordinating the collaboration of other systems in a building. Lighting, ventilation, water, cooling, and heating systems can be optimized using information from the access control system. For example, by knowing when, where, and for how long individuals are present in different parts of the building. This enables optimization or even shutdown of energy consuming functions in apartments, rooms, and common areas when they are not in use.

SimonsVoss SmartIntego (License)

When wired systems are not sufficient, SmartIntego readers can provide access control to locations where it was previously not possible or cost effective. No wiring or cable connection is required. Batteries make cylinders and smarthandles independent of external power supply.

SmartIntego can be connected flexibly as a part of an existing or new smartONE facility.

Aperio (License)

Expanding the security system with Aperio's wireless technology is an easy way to achieve comprehensive access control for the entire building. Interior doors can be easily connected to the system without traditional wiring. Batteries make the wireless Aperio readers independent of external power supply.

Aperio can be connected flexibly as a part of an existing or new smartONE facility.

OEM-reader (License)

The OEM reader license unlocks the possibility to use other brands of card readers with the system. However, activating the license is not a guarantee that products other than smartONE will have full functionality.

External Link (License)

External Link enables the central unit to handle connections with other smartONE central units. It also allows communication with external network based products through an open API. This creates multiple opportunities to control network products through software and manage their functionalities within the security system. This can include building related systems for lighting, heating, and ventilation, as well as products such as network cameras and network speakers.

With External Link, expensive and difficult cable installations can be avoided.

External Link provides access to:

- Network based control through an open API.
- Remote operation between central units.
- Software based operation of doors, gates, entrances, and barriers across large areas or from remote locations.
- Operation of NO/NC controlled functions through the network.
- Easy management of visitors, deliveries, couriers, service personnel, and more.

Booking (License)

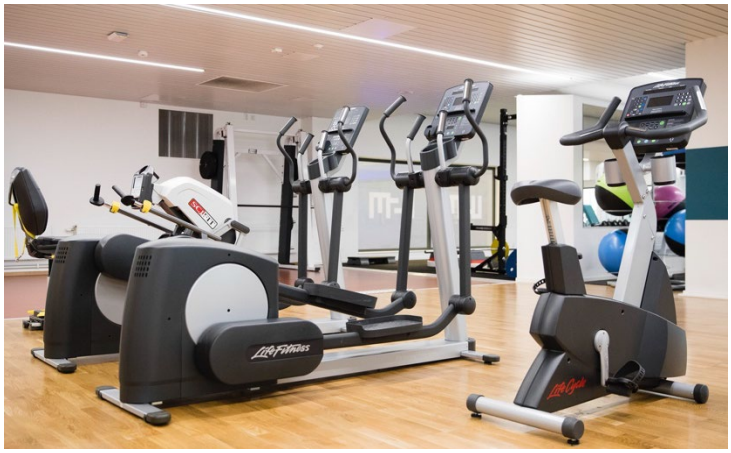
Booking enables the reservation of a facility or area within smartONE. The same identity credential can provide access to multiple locations and objects. Sports halls, schools, and activity venues often benefit from this type of booking function.

Booking can be done in several different ways: one-time booking, recurring booking, interval booking, or scheduling-based booking.

A booking can have up to eight additional features that are activated for the identity credential during the reserved time. Each additional feature represents a control from smartONE that allows a specific function for a specific duration. In a sports hall, these features can unlock the usage of amenities such as the sound system, basketball hoops, sauna, and more. Once the booking time is over, the features are deactivated. In many cases, it is a safety aspect that the functions are switched off when authorized personnel are not on site. Control of extra functions can of course also be applied to other areas that require access activation.

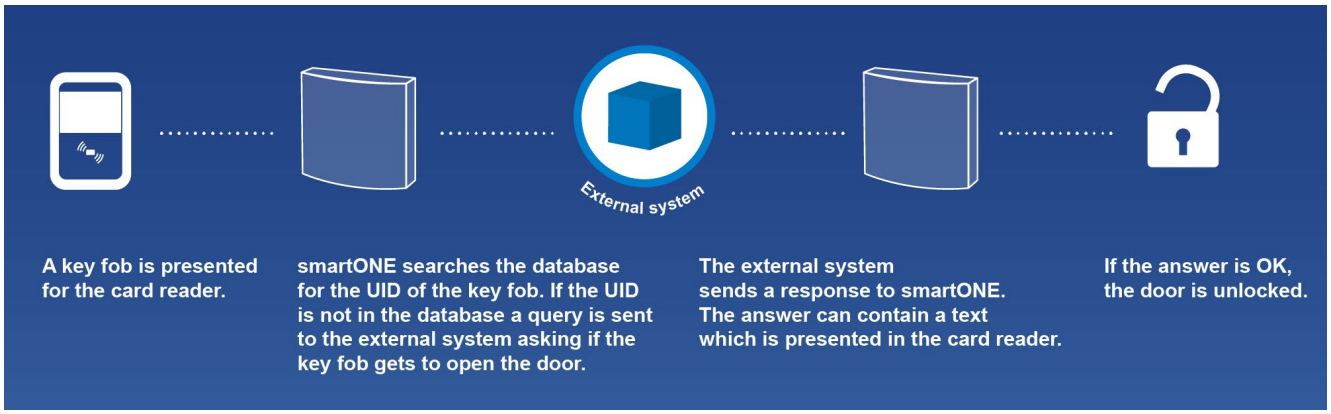
External Request (License)

smartONE can query an external system to determine if an identity credential is authorized for access or if access should be denied, External Request. The same applies to a specific function or control. The external system can be a payment service, a cloud service, a booking system, or any other external authorization service. Examples of businesses that can benefit from external requests include spa and baths, gyms, tanning salons, and coworking spaces.



In smartONE, there is an option to store data for a predetermined period of time, which is sent back from the external system. This is useful when access or services need to continue functioning even if communication with the external system temporarily fails. Once the data has been sent and stored, the service will operate locally for the predetermined time period.

Procedure



smartONE queries the payment service for permission to proceed with access → The payment service accepts the credentials → Revenue accrues to the payment service. → Authorized access occurs → The identity holder can use the facilities.

Scrambled Keypad (License)

There are several ways for unauthorized individuals to discover a PIN code that needs to be entered at a card reader for access. Heat reading on the keypad, fingerprint scanning, motion patterns, and sound signals, to name a few.

Often, traditional two-factor authentication is sufficient. But what happens if unauthorized individuals find or obtain a key fob and read the code using any of these methods?

Scrambled Keypad provides our touch screen card readers with an additional security dimension that prevents unauthorized individuals from easily obtaining a PIN code. With each new request for a PIN code, the order of the keys is randomly scrambled. As a result, each entered PIN code will never have the same motion pattern as the previous one.

This makes it significantly more difficult for unauthorized individuals to obtain a PIN code.

TIDOMAT smartONE is a future proof security system with ongoing development that guarantees new features and the latest technology.

Reseller:

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CERTIFIERAT SSF 1014 SVENSK CERTIFIERING