

# MICRONPASS

## ACCESS CONTROL



WEB SOLUTION - IT & IoT - SMART  
M - MOBILE ACCESS CONTROL - W  
OLUTION - IT & IoT - SMART SEC  
ITROL - WEB SOLUTION - IT & IoT  
SECURITY SYSTEM - MOBILE AC  
ROL - WEB SOLUTION - IT & IoT  
T - SMART SECURITY SYSTEM -  
ACCESS CONTROL - WEB SC  
WEB SOLUTION - IT & IoT  
MOBILE ACCESS CONTROL  
SMART SECURITY SYSTEM  
L - WEB SOLUTION - IT &  
- MOBILE ACCESS CON  
RT SECURITY SYSTEM  
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E ACCESS CONTROL  
N - IT & IoT - SMART  
RT SECURITY SYST  
- WEB SOLUTION  
LUTION - IT & IoT  
RT SECURITY SY



# Micronpass: the Access Control Solution

MICRONPASS is the dynamic and versatile solution to ensure the highest protection in terms of Access Control and security.

## **MICRONPASS is security**

It handles the realtime security of areas and buildings, ensuring a complete monitoring of the secured sites.

It is born as a tool for definition of the access rules in controlled areas, providing a real-time situation of all the employees in the premises.

It manages personal details, grants or denies authorizations, provides passwords, allows multiple controls by time ranges and areas, releases printed reports for transits and alarms of all checked sites.

## **MICRONPASS is a complete WEB solution**

The complete web-based technology of this application enables Access Control anytime and anywhere in the world.

Through Internet and Intranet connection, it is available from any connected workstation. Users may log in to the application according to configurable authorization profiles, without the need of further software installations.

## **MICRONPASS is versatile**

The versatility of Micronpass WEB lets the users manage Access Control in different ways, according to the infrastructural needs, the safety level requirements and the entrances to be controlled.

## **MICRONPASS is flexible**

Micronpass WEB is a fully scalable system, an optimal solution for both average-sized plants and large plants with thousands of entrances, in one or many locations, geographically distributed in several countries or continents. Fully interoperable with anti-burglary, anti-fire, video-surveillance and building automation systems, Micronpass WEB handles security with the highest degree of flexibility.

## **MICRONPASS is innovative**

It is integrated with the most modern and cutting-edge identification technologies and with advanced management systems.



# Complete, reliable, real-time Access Control



## Micronpass Subsystems

- MicronApp
- Stamping Apps
- Guests Management
- Video Integration
- Plate Recognition
- Badge Enrolling
- Badge Printing
- Canteen Management

## Custom Solution

- On-site Analysis
- Customized development for vertical integrations

## Multilingual Micronpass

- Italian
- English
- Spanish
- Portuguese
- French
- Romanian
- Polish

## Micronpass

- Data Acquisition and Transmissions
- System Monitoring and Maintenance
- Access Control Management
- Entrances Management
- Personal Data Import
- Reasons Management
- Reports Printing
- Historical Data Collection

## Micronpass Modules

- External Companies Management
- Undesired People Management
- Transits Display
- Critical Events Warning Systems
- Team Emergency Management
- Integrations with External Applications



# Modular and versatile Access Control

Micronpass is available in two versions, alternative and complementary at the same time, i.e. On-line and Off-line, in order to provide a complete and technologically advanced answer in the Access Control settings.

The “On Line” solution, applied in companies equipped with network infrastructures, is specifically recommended to solve security needs in terms of real-time Access Control. The “Off Line” solution, on the other hand, is mainly recommended to monitor areas that are hardly reachable by the company network infrastructure (e.g. decentralized warehouses) and within any environmental settings where the power supply might be an infrastructural limit.

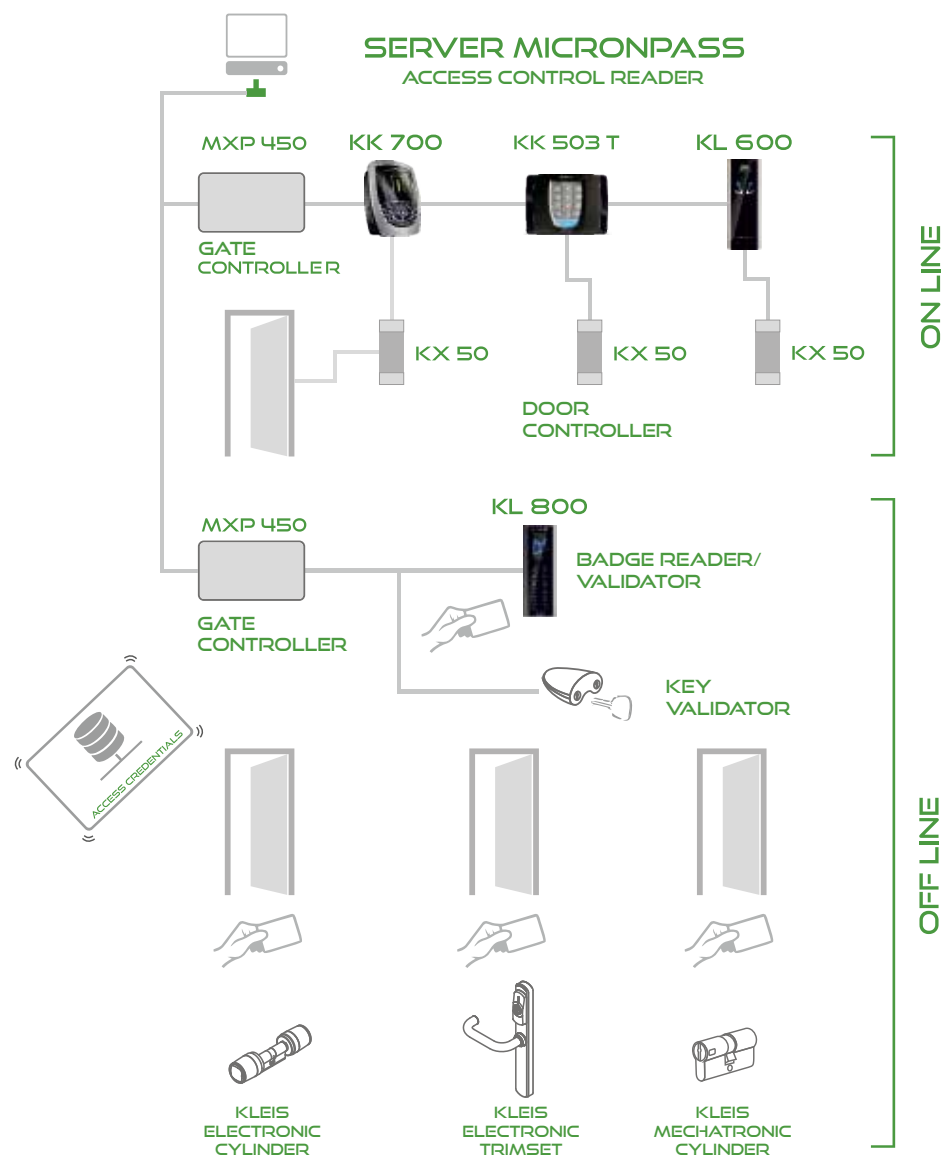
Both “On Line” and “Off Line” versions can be operational in the same Access Control system.

## On Line Micronpass

- Hardware components: door controllers, RFID readers
- User ID devices: RFID card, Smartphone, Bluetooth Low Energy, QR code
- Software components: Micronpass

## Off Line Micronpass

- Hardware components: cylinder locks, electronic trim sets, mechatronic cylinder
- User ID devices: RFID cards, electronic keys
- Software components: Micronpass



# Immediate and Intuitive Access Control

## Data Acquisition and Transmission Management

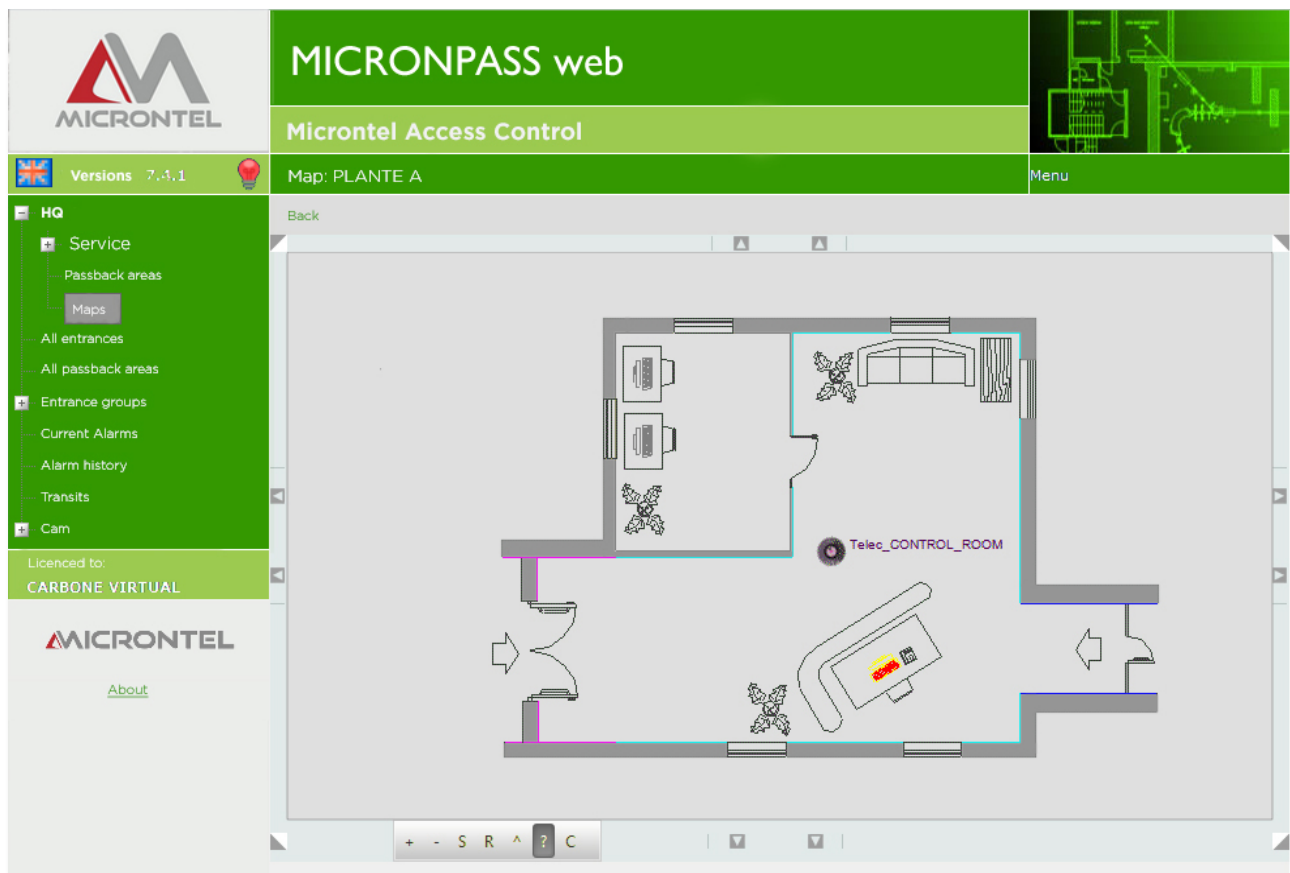
The Data Acquisition and Transmission feature between the server and the devices performs the monitoring of the plant status and it's equipped with a diagnostic user interface.

In the On Line applications, the feature acquires the real-time events transmitted by the Micronpass application.

In the Off Line applications, the feature transfers the access credentials defined on the Micronpass application into the RFID card or into the electronic key, and then acquires the transits from the card internal memory.

## Plant Monitoring and Maintenance

The Plant Monitoring and Maintenance feature lets the user verify the plant status and the alarms physically connected to the terminals, in order to carry out maintenance and gate service commands, and to control and manage antipassback areas by real-time signalling the present employees in the area and monitoring the maximum capacity of people. It also monitors the system by using coloured icons to map and indicate the interactive gates and allows the graphical visualization of the plant availability and status, the presence in the antipassback areas and the alarms with reset functions.





## Modern and Interactive Access Control

Micronpass Web Real Time is the core of the Access Control solution. Thanks to the technology applied to the development of the interface, the user may take advantage of a powerful

Interactive tool for Access Control management. The Micronpass Dashboard can be used to activate and customize mini-application (widgets) in order to maximize the user experience.



### Access Control Management

- ▶ User management with access profiles definition, to control gates and users, with the authorization to access selected reports according to the organization chart
- ▶ Multi-company personal data management, including photo and personal ID assignment with multiple reading technologies: active-passive tags, magnetic stripes, fingerprints, Bluetooth, QR Code, UHF
- ▶ Definition of personal or group access profiles, including time ranges, gates or entrance groups
- ▶ Tables management: time ranges, festivities, groups of entrances, scheduled commands
- ▶ Real-time Time and Attendance display
- ▶ Access Stampings display



# Flexible and Integrated Access Control

## Gates Management

It creates logical sets of gates representing the building areas or gate types. It defines default time ranges that can be linked to specific gates, it manages scheduled commands, it carries out the removal of access profiles from a specific gate and empties the antipassback areas (such as parking areas). It handles time ranges to lock/unlock areas depending on specific events, regardless of the access profiles defined in the areas themselves.

## Personal Data import

It regularly aligns, according to a set schedule, the personal data (employees, external collaborators, guests) from an external management system by assigning a specific access profile. Furthermore, it performs the complete traceability of the personal data alignment operations for a quick consultation.



## Reasons Management

It offers integrated management between the Access Control system and the Time and Attendance system, setting the devices with specific features that differ from the typical Access Control application, e.g. enabling the function keys to manage reason-labeled stamping (service leave, overtime, one-day leave, nursing leave, mission).

The system creates an ASCII file for each type of transaction, configured to be subsequently imported by external attendance detection management procedures. The devices used for the above mentioned applications can integrate the typical Access Control management procedure, such as defining access profiles (period of validity, time ranges, gate permissions).






# Access Control for complete and precise information

## Report management

The report management can be used to customize the data extraction criteria and print the results in ASCII / Word / Acrobat Reader / XLS formats.

### Printing examples

- ▶ Present people in the company as per security regulations and laws
- ▶ People personal data with detailed sheets
- ▶ Assigned / Not assigned cards
- ▶ Time ranges and festivities
- ▶ Gates list / Groups of gates
- ▶ Transits graphical report
- ▶ Profiles on gates / groups of gates
- ▶ Comparison of transits through gates / groups of gates
- ▶ People in Antipassback Areas
- ▶ Daily attendance
- ▶ Present / Absent people
- ▶ Monthly attendance
- ▶ Transits
- ▶ Unrecognized cards
- ▶ Badge assignment historical data
- ▶ Disabled employees
- ▶ Past alarms log
- ▶ Users log



# Microntel Access Control

11/12/2017 12:21:56

## Transits in table format

admin

### TRANSITS PER GATES

#### Custom report parameters

##### Description

0015 - TRANSITS PER GATES

##### Data extraction criteria

Transit entrance = PARKING

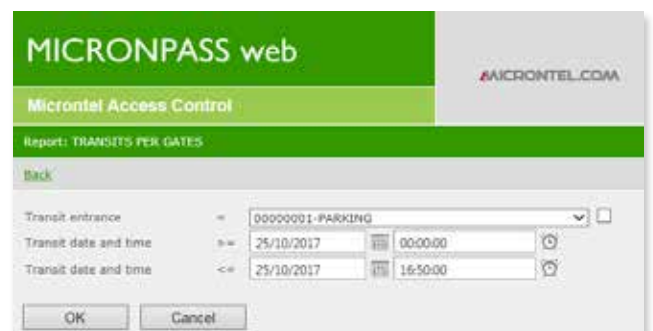
and Transit date and time >= 25/10/2017 00:00:00

and Transit date and time <= 25/10/2017 16:50:00

Date and time	Dir	Last and First Name	Cost C	Badge	Result	Azienda/Matricola	St
Transit entrance		Type			Internal/External Company		
25/10/2017 07:23:31 Ent		Zilio Valter	Dip	---	0000000002 Accepted	0001/00000002	0A
00000001-PARKING		---			MICRONTEL SPA		
25/10/2017 07:50:39 Ent		Motta Giuseppe	Dip	---	0000000037 Accepted	0001/00000037	0A
00000001-PARKING		---			MICRONTEL SPA		
25/10/2017 07:55:25 Ent		Bianco Michele	Dip	---	0000000004 Accepted	0001/00000004	0A
00000001-PARKING		---			MICRONTEL SPA		
25/10/2017 08:12:07 Ent		Zerbini Riccardo	Dip	---	0000000038 Accepted	0001/00003011	0A
00000001-PARKING		---			MICRONTEL SPA		
25/10/2017 08:16:54 Ent		Ceci Ruggiero	Dip	---	0000004009 Accepted	0003/00000006	0A
00000001-PARKING		---			Even		
25/10/2017 08:17:09 Ent		Morone Giancarlo	Dip	---	0000000031 Accepted	0001/00000031	0A
00000001-PARKING		---			MICRONTEL SPA		

It is possible to create and customize different extraction criteria for each kind of report. For instance, the transits report could display all the transits filtered by date and time and occurred through a specific gate.

The user can also define a customized sorting order of the results. New extraction criteria may also be available or hidden to other users, depending on their authorizations.



## Historical Data Management

The Historical Data Management is meant for any automatic database maintenance activity: by using customizable criteria, the user can remove any obsolete record, thus making the database size more

stable and defining the quantity of data to be archived in the procedure. Historical data can also be exported into an external database or, alternatively, on a text file.



# Micronpass modules to satisfy any safety requirement

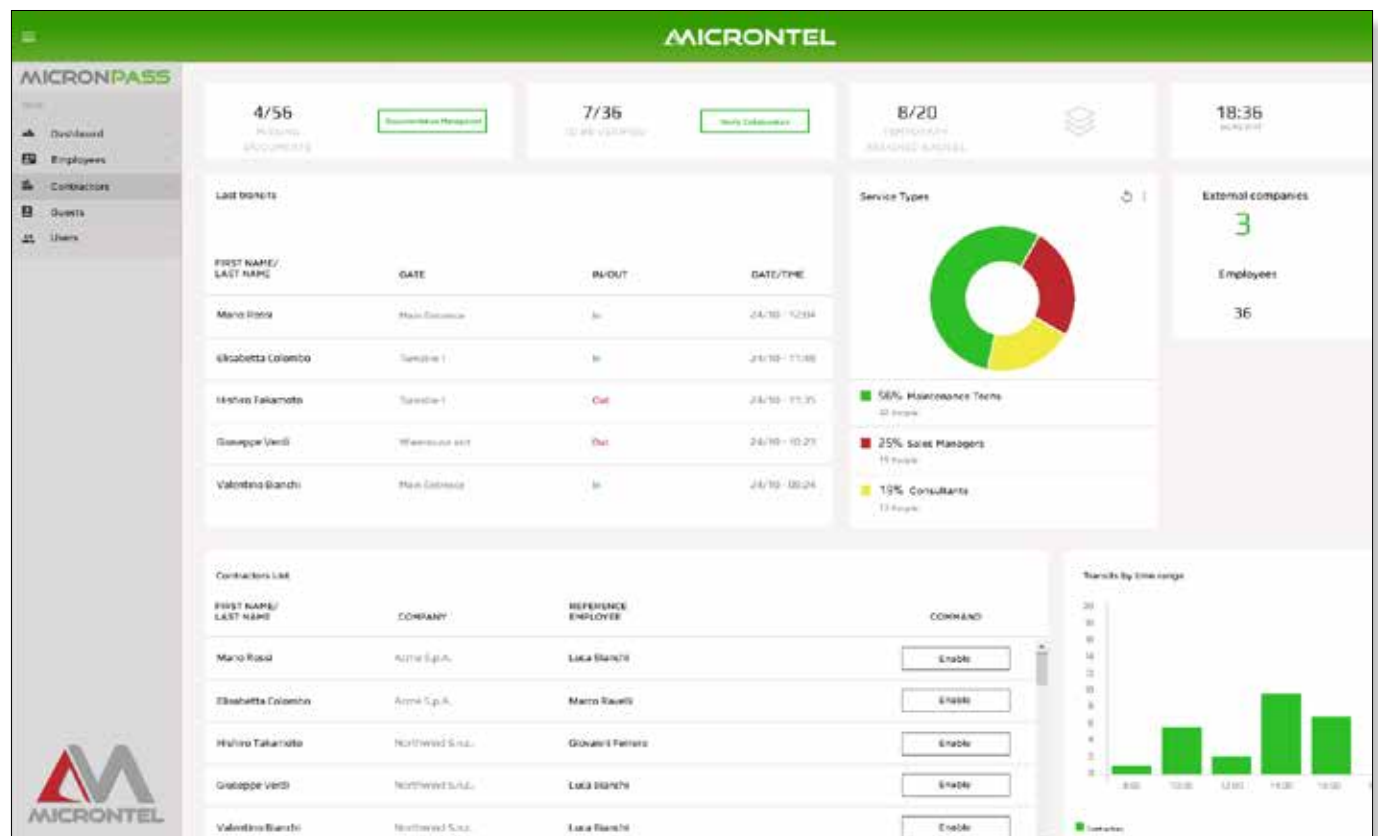
## External Companies Management

The External Companies Management module handles the External Companies that usually access the plant, by editing the personal data, defining the access profile to the gates, assigning an internal reference employee.

It also provides personal data reports with detailed transits, daily attendance, present/absent people in the premises. It produces a personal data sheet with daily and monthly attendance total time, for

each external collaborator.

The module can be integrated with the Documentation Management module, which subordinates access permissions to the company depending on the validity of the documentation provided in compliance with the law on health and safety protection of employees in the workplace (such as DURC, DUVRI, INAIL Insurance Position and INPS).



## Undesired People Management

The Undesired People Management module allows to define persons, group of persons or even whole companies as 'undesired', therefore temporarily or permanently disabling their access into the secured areas. All access attempts are highlighted and can also be printed in the corresponding reports.

## Transits Display

The module shows real-time transits through specific gates, simultaneously displaying personal data underneath an identifying photograph. It highlights with different colors the outcome of the transaction (access granted, refused, randomly selected and so on).



# Micronpass modules to satisfy any safety requirement

## Critical Events Management

The module is an active monitoring tool, for both hardware and software, on the Micronpass system, through continuous monitoring and notification of anomalies on the plant by automatically sending reports to multiple preconfigured email accounts. It guarantees prompt intervention in case of criticalities in system operational functioning and in relation to controlled alarm status.

### ► Monitor and notification on system status

It can detect potential malfunctioning of the devices and generate an immediate notification via email to specified email accounts.

### ► Monitor and notification on alarm status

It detects the occurrence of specific 'critical events' such as fire alarms, general evacuations, security breach, forwarding email notification to specific email accounts.

There are multiple practical applications of this module, mostly related to the possibility to provide an interactive tool for Access Control. The module fulfills the most concrete safety requirements (alarm notification, people in the area, etc.) and can provide automatic reports such as the list of present people, the consumed meals in the canteen or the list of guests welcomed throughout the day.



## Emergency Team Management

The module tracks the real-time composition of the fire-fighting and first aid teams. Emergency Team Management module generates the real-time report of the staff assigned to fire-fighting and first aid duties currently present in the building. The report can be automatically forwarded to specific email accounts or towards a network printer at scheduled times or corresponding to the occurrence of a specific event.

## Integration with External Applications

The module is a web service for the integration of personal data with external procedures. It allows the external management of personal data for employees, external collaborators and guests, and the assignment of keys and access profiles. The web service makes multiple features from Micronpass available to be used to manage information from the Access Control system and to import real-time data.

# Micronpass Subsystems for a Smart Access Control

## MicronApp

Micronpass integrates the Bluetooth and QR Code identification technologies already available on smartphones, in order to perform an access on a controlled gate: MicronApp is born, the card virtualization app.

MicronApp Bluetooth lets the user open the entrance in several ways:

- Manual choice of the selected entrance
- Automatic opening by physically approaching the entrance
- "Twist and go" mode by rotating the mobile device

MicronApp-QR Code lets the user generate an encrypted QR Code token, with a predefined period of validity, with a simple touch on the app.

MicronApp also allows the past access events browsing. MicronApp is available on Google Play or App Store.

## Stampings App

Stampings App, available on Google Play or App Store, can be used to register a stamping from a mobile device, labelling it with a reason, just like if performed on a Time and Attendance Detection panel. The user selects the stamping direction (entry / exit) and the reason to be linked to it.

The system creates a virtual stampings with the displayed date and time, automatically synchronized with the server where the Micronpass procedure is installed.

Stampings App can be used on mobile device such as tablets and smartphones, with both iOS and Android.

The stamping can be linked to the device GPS tracking system, thus displaying the geographical position (through the Google Maps API) and confirmed by the user.



# Micronpass Subsystems for a User Friendly Guests Management

## Guests Management System

The Guests Management System controls occasional visitors who access the plant by means of personal data management, codes, authorizations and the definition of an access profile on the gates. It enables the reception to manage entrance permits, to verify the contact to be visited, and issue an authorization document to the visitor (badge or paper pass).

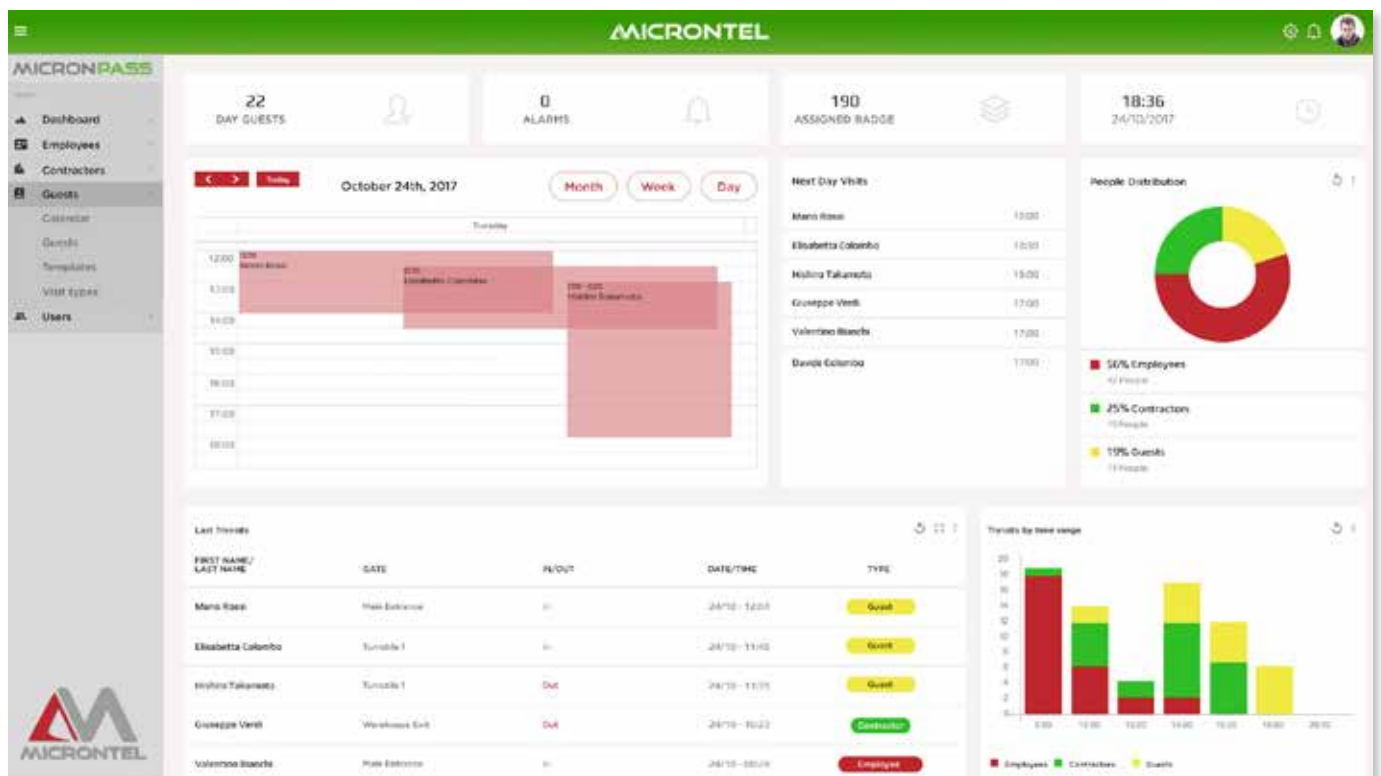
The system, aligned with the most advanced identification standard methodologies, can be handled on the mobile devices as well, thanks to the Bluetooth and QR Code technologies. A guest with a badge can enter controlled gates, moving freely within the building, depending on his/her access profile.

The Guests Management System issues general and detailed personal data printouts of transits,

daily attendances, people present or absent in the company, the visitor log, even to internal contacts. The system, by registering any guest, lets the user monitor the guests already present in the building, in compliance with the safety laws and regulations. The system displays statistical summaries with a modern and captivating design.

The Guests Management System may be managed with the help of new tools making the access to a modern company even more and more user-friendly:

- ▶ tablets for the guest self-identification
- ▶ self check-in kiosks and self-service card collection
- ▶ motorized readers equipped with an autonomous card delivery system



## Microsoft Exchange Integration

In order to optimize any business process related to the Guests Management, such as booking meeting rooms and guests reservations, the integration with the Microsoft Exchange database lets the user take advantage of the whole potential of

Microsoft Outlook.

Thanks to its integration with Micronpass, Microsoft Outlook creates a customized invitation, thus managing all required elements to handle the guest's access in the company.

# Micronpass Subsystem for a Full Access Control

## Video integration

The Micronpass Access Control system offers the highest control, security and monitoring requirements by fully integrating with video supports. Specifically, the IP cameras features are integrated in the application, in order to display live videos on the browser or linking brief video recordings to events handled by the Access Control system, such as alarms, transits and video archiving. Furthermore, it's possible to view recordings

that are not linked to the Access Control system, but directly managed by the camera intrinsic features, such as Motion Detect. The integration within the web system lets the user take advantage of the native potential of Web Server applications, like the flexibility and accessibility of the safety and control tool within the company network, just by using a browser.

Live recording



Archival Recording



## Vehicle Plate Recognition

For any vehicle entrance with automatic vehicle plate recognition, the Vehicle Plate Recognition system is available within the Micronpass. The system is made of an hardware component (IP camera with embedded OCR sensor) and a software module, installed on the Micronpass application server.

The module ensures the entrance monitoring in two different ways:

- ▶ Access after having checked the enabled car-plate
- ▶ Access with double checking: badge and corresponding car plate

# Micronpass Subsystems for a Multi-functional Access Control

## Badge Enrollement

The Badge Enrollment System lets the user insert the identification code of a person into the Micronpass Access Control system, automatically assigning the corresponding RFID and/or Magnetic Track and/or fingerprint template.

The system can be managed through an hardware component meant to simplify the code reading, fully compatible with the use identification technology (RFID, magnetic, fingerprint) in order to:

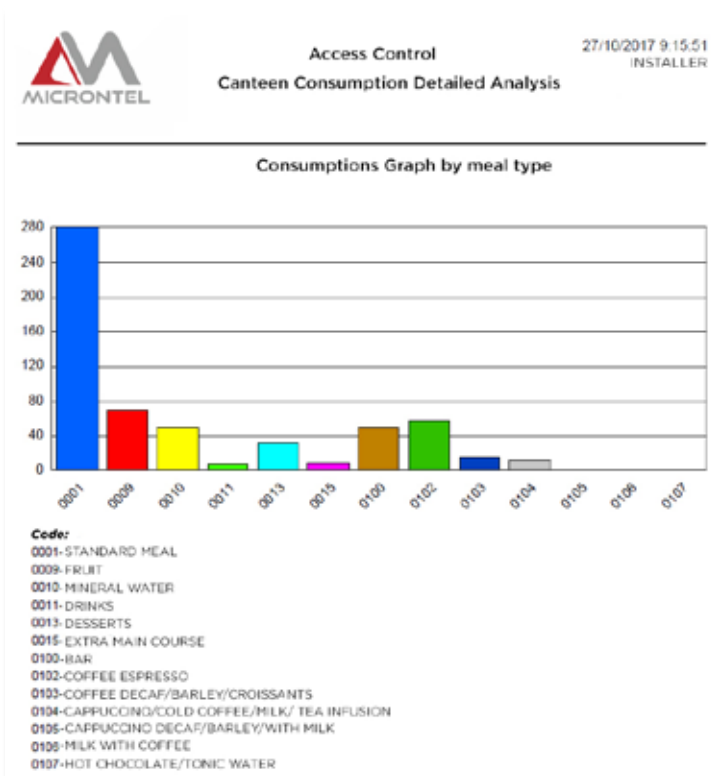
- ▶ quickly identify the status of a card within the system
- ▶ uploading and set-up of new badges to be assigned at a later time
- ▶ quick insertion of new personal data in the database and association with a second-technology ID

## Canteen Management

The Canteen Management System acquires and process the transactions from users of the canteen service, in order to be forwarded as a report to any external canteen manager or to be acquired by the Time and Attendance management system. It is also possible to create a summary analysis or a detailed report of the purchased articles. The system is made of a software module for Canteen Management and an hardware device, namely a terminal or a Panel PC, possibly equipped with a ticket printer.

## Badge Printing

The Badge Printing System produces identification cards, thanks to a Badge Printing Management software module and a printer for the technical and graphical customization of the cards.



# Custom Solution to satisfy specific Access Control requirements

Microntel's expertise, combined with the versatility of the Micronpass platform, allows the elaboration of customizations for vertical integration with cutting-edge technologies and advanced management systems.



## Integration with INDOOR POSITIONING SYSTEM

The integration with devices and solutions born for IoT in Bluetooth Low Energy technology: Indoor Positioning, by using the beacon technology and Mobile BLE devices, let the user locate objects and people inside a building with extremely high accuracy, even in closed and geographically restricted environments, tracking any movement within a given perimeter. Micronpass verifies the access profile and execute the entrance opening, thus fully integrating with the Indoor Positioning System.

## Integration with LOGISTIC FLOW MANAGEMENT SYSTEM

Customized development of a Logistic Flow Management System, meant to register and automatically detect vehicles moving for load/unload within the facility. The system manages all the steps of the logistic flow, from the carrier's registration and the real-time check of the scheduled load, to the assigned loading and unloading bay calling management system by using pagers.

## Integration with VIDEO MOTION DETECTION

Integration with advanced, cutting-edge Video Motion Detection systems in order to guarantee an efficient alarm management. By using a software interface, Micronpass handles the real-time communication of a critical event, such as an entrance break-in or unauthorized access attempts. The video system, acquiring the alarm, automatically produces a live video or start a recording of the event.

## SAP NETWEAVER COMPLIANT PI

Certified integration with Management System SAP, for personal data alignment (SAP-HR) and stamping export (SAP-TM).

**SAP® Certified**  
Integration with SAP Applications

# MULTI-ACCESS CONTROL SYSTEM KARPOS MXP 450

Advanced Technology for Smart solutions



MXP 450 is a Multi-Access Control terminal designed and manufactured by Microntel S.p.A.

## MULTI-ACCESS CONTROL SYSTEM KARPOS CONTROLLER MXP 450

The Multi-Access Control System is made of the Karpos Controller MXP 450, to which up to 16 readers Kleis, KK 503 and KARPOS KOMPACT, in order to handle up to 16 inlet entrances or 8 inlet/outlet entrances.

The connection between the terminal and the central system is available in TCP/IP, WiFi and GPRS. The communication towards the readers is ensured by the Local Bus module, with a maximum extension of 200 meters on two separate protected channels.

The Multi-Access Controller MXP 450 is equipped with connection interface with standard Wiegand and Clock-data readers.

The input/output signals of each entrance (electric lock, door status detection, cameras, push buttons, and so on) occurs thanks to the gate actuators KX 50.

Thanks to the versatile and flexible technology applied in realizing it, the terminal Karpos Controller MXP 450 is available for installation on DIN support or plastic housing.

### TECHNICAL SPECIFICATIONS

- Management of up to 16 readers KLEIS, KK 503 and KARPOS KOMPACT in order to control up to 16 inlet entrances or 8 inlet/outlet entrances
- Maximum distance controller-readers: 200 meters on two separated protected channels
- Connection interface with Clock-Data Standard ISO track 2
- Possible connection interface with Standard Wiegand, upon specific configuration
- 3 network connection interfaces: Ethernet TCP/IP (native), WiFi, and GPRS
- Linux architecture
- Microprocessor ARM Cortex A9
- 512 MB RAM Memory
- Flash memory: 8 GB Micro SDHC memory card, expandable up to 32 GB
- Firmware updatable via download by server
- Installation on DIN support, also available with plastic housing

#### Interfaces

- 2 Relais 24 V AC/DC, 1 A per actuators
- 1 Digital input
- 2 Configurable communication channels
- 2 USB interfaces
- 2 Local Bus channels

#### Dimensions

- Standard housing- IP 65 Plastic waterproof panel board (HxLxP) 200x267x112 mm (12 DIN modules)
- DIN Support - Plastic box (HxLxP) 90x158,5x60 mm







#### Power Supply

- 220 V AC Power Supply, protected by magnetothermal circuit breaker (5 amp)
- Max consumption 15 W
- Lithium battery 3 V rechargeable

#### Operating Enviromental Conditions

- Operating temperature range: 0° to +50° C
- Storage temperature range: -10° to +60° C
- Humidity range: 5% to 95% (non-condensing)



MXP 450		Versions		
Technical Specifications		MXP450 ETH	MXP450 Wlan	Mx450 GPRS
Readers	Ethernet TCP/IP 10/100 base T 			
	WiFi 802.11 			
	GPRS 			

## ACCESS CONTROL READERS

# KLEIS

High performance and essential Design objects

KL 600



KL 800



KL 600



KL 800



KLEIS is an Access Control Reader line designed and manufactured by Microntel S.p.A.

## ACCESS CONTROL READERS KLEIS

Designed and crafted to ensure top-notch security, the KLEIS Access Control reader identifies the card assigned to each user.

KLEIS represents the new Access Control reading generation, equipped with interfaces with cutting edge technologies such as NFC, smartphones, Bluetooth Low Energy, QR Code. Its groundbreaking design ensures an easy fit in any work environment, including elegant and stylish settings. The housing can be easily inserted into the door frame, thus satisfying all installation requirements.

Thanks to a state-of-the-art technology for multi-door control, a single Karpos Controller MXP 450 can manage up to 16 readers, with a total 200 meters cabling length, on two separated protected channels.

An intuitive and immediate user interface, providing acoustic and visual signals about authorized or denied access; a graphic display and back-lighted keypad interacting with the user and including PIN code entry features: all of this, and more, distinguishes the wide versioning of the KLEIS line.

## TECHNICAL SPECIFICATIONS

### Reading technologies

- 125 kHz: Read Only e Read & Write
- 13,56 MHz Multistandard: ISO 14443 A Mifare®, ISO 14443 B, ISO 15693 Long Range, NFC, Bluetooth
- Average reading distance: max 5 cm (for both frequencies)

### Interfaces and versioning

- Status LED in blue, green and red to confirm or deny the access (KL 600 series)
- 12 numerical key pinpad for PIN code management (KL 800 series)
- OLED graphic display (128x64 pixel) showing messages to confirm or deny the access (KL 800 series)
- Connection interface to any reader equipped with Standard Clock-Data ISO track 2
- Loc Bus connection interface

### Dimensions

- (HxLxP) 130x45x15,5

### Power Supply

- 12 V DC from Loc Bus

### Operating Enviromental Conditions

- Operating temperature range from -10° to +50°
- Storage temperature range from -10° to +60°

Several color customization are available upon



KLEIS		Versions									
Technical Specifications		KL 601	KL 602	KL 611	KL 801	KL 802	KL 811	KL 650	KL 660	KL 850	KL 860
Readers	125 kHz RO										
	125 kHz R&W										
	Multistandard 13,56 MHz										
Devices	Signal Led										
	Keyboard										
	Display										
	Bluetooth										
	NFC										
	Available for outside use										

## ACCESS CONTROL READERS

# KK 503 WALL MOUNTED

Elegant and fully integrated Design objects

KK 503

KK 503 - T

KK 503 - B



Selected by ADI INDEX for the  
XXIII "Golden Compass" International Award



## WALL MOUNTED ACCESS CONTROL READERS KK 503

Designed and crafted to ensure top-notch security, the Access Control Reader KK 503 identifies the card assigned to each user.

Its ground-breaking design ensures an easy fit in any work environment, including elegant and stylish settings. Its modular architecture expresses technology and consistency, and its wall mount design is aimed at meeting all installation requirements. Thanks to its state-of-the-art technology for multi-door control, a single Karpos Controller

MXP 450 can handle up to 16 readers, with a maximum cabling length of 200 meters on two separate protected channels.

An intuitive and immediate user interface, providing acoustic and visual signals about authorized or denied access; a back-lighted keypad and capacitive fingerprint sensor interacting with the user and including PIN code or fingerprint entry features: all of this, and more, distinguishes the wide versioning of the KK 503 line.

### TECHNICAL SPECIFICATIONS

#### Reading technologies

- ▶ 125 kHz: Read Only e Read & Write
- ▶ 13,56 MHz: ISO 14443 A Mifare®, ISO 14443 B, ISO 15693 Long Range
- ▶ Average reading distance: 10 cm (for both frequencies)

#### Interfaces and versioning

- ▶ Status LED in blue, green and red to confirm or deny the access (KK 503 series)
- ▶ 12 numerical-functional key pinpad for PIN code management (KK 503-T series)
- ▶ Biometric sensor equipped with capacitive technology; maximum amount of templates memorized = 9000 on 4MB RAM, expandable up to 19000 on 8MB RAM; enrollment and verification time: <1 sec; image resolution: 508 dpi; sensor area: 12.8 x 18 mm (KK 503-B series)

- ▶ Connection interface to any reader with Clock-Data ISO track 2
- ▶ Loc Bus connection interface
- ▶ Local network burglar detection, displayed on main controller

#### Dimensions

- ▶ Installation on flush-mounting box 503 (HxLxP) 85x119x5,7 mm

#### Power Supply

- ▶ 12 V DC da Loc Bus

#### Operating Environmental Conditions

- ▶ Operating temperature range: -10° to +50 °C
- ▶ Storage temperature range: -10° to +60 °C



KK 503		Versions							
Technical Specifications		KK 503-1	KK 503-2	KK 503-11	KK 503-T1	KK 503-T2	KK 503-T11	KK 503-B	KK 503-B11
Readers	125 kHz RO								
	125 kHz R&W								
	13,56 MHz Mifare®								
Devices	Fingerprint								
	Signal Led								
	Keyboard								

# ACCESS CONTROL READERS

## KARPOS KOMPACT

Modular and robust Design objects

KK 600

KK 700

KK 800

KK 900



## ACCESS CONTROL READERS KARPOS KOMPACT

Designed and crafted to ensure top-notch security, the Access Control reader KARPOS KOMPACT identifies the card assigned to each user. Its ground-breaking design ensures an easy fit in any work environment, including elegant and stylish settings. The modular architecture and ergonomic housing aims at satisfying all installation requirements.

Thanks to its state-of-the-art technology for multi-door control, a single Karpos Controller

MXP 450 handle up to 16 readers with a maximum cabling length of 200 meters, on two separate protected channels.

An intuitive and immediate user interface, providing acoustic and visual signals about authorized or denied access; a back-lighted keypad and capacitive fingerprint sensor interacting with the user and including PIN code or fingerprint entry features: all of this, and more, distinguishes the wide versioning of the KARPOS KOMPACT line.

### TECHNICAL SPECIFICATIONS

#### Reading technologies

- ▶ 125 kHz: Read Only e Read & Write
- ▶ 13,56 MHz: ISO 14443 A Mifare®, ISO 14443 B, ISO 15693 Long Range
- ▶ Average reading distance:  
10 cm (for both frequencies)

#### Interfaces and versioning

- ▶ Status LED in green and red to confirm or deny the access (KK 600 series)
- ▶ 12 numerical-functional key pinpad for PIN code management (KK 700 series)
- ▶ LED graphic display (128x64 pixel) showing messages to confirm or deny the access (KK 800 series)
- ▶ Biometric sensor equipped with capacitive technology; maximum amount of templates memorized = 9000 on 4MB RAM, expandable up to 19000 on 8MB RAM; enrollment and verification time: <1 sec;

image resolution: 508 dpi; sensor area: 12.8 x 18 mm (KK 900 series)

- ▶ Connection interface to any reader with Clock-Data ISO track 2
- ▶ Loc Bus connection interface
- ▶ Local network burglar detection, displayed on main controller

#### Dimensions

- ▶ (HxLxP) 108x80x55 mm


























#### Power Supply

- ▶ 12 V DC from Loc Bus

#### Operating Environmental Conditions:

- ▶ Operating temperature range: -10° to +50 °C °
- ▶ Operating storage range: -10° to +60 °C



KARPOS KOMPACT		Versions										
Technical Specifications		KK 601	KK 602	KK 611	KK 701	KK 702	KK 711	KK 801	KK 802	KK 811	KK 900	KK 911
Readers	125 kHz RO											
	125 kHz R&W											
	13,56 MHz Mifare®											
Devices	Fingerprint 											
	Signal Led 											
	Keyboard 											
	Display 											
	Available for outside use											



SYSTEM - MOBILE ACCESS CONTROL  
N - IT & IoT - SMART SECURITY SY  
MOBILE ACCESS CONTROL - WE  
SECURITY SYSTEM - MOBILE ACCESS  
WEB SOLUTION - IT & IoT - SMA  
Y SYSTEM - MOBILE ACCESS C  
CONTROL - WEB SOLUTION - IT  
RT SECURITY SYSTEM - MOB  
M - MOBILE ACCESS CONTR  
T - SMART SECURITY SYSTE  
- WEB SOLUTION - IT & Io  
4 - MOBILE ACCESS CON  
SOLUTION - IT & IoT - S  
- MOBILE ACCESS CO  
SECURITY SYSTEM - M  
CONTROL - WEB SOLU  
UTION - IT & IoT - S  
LE ACCESS CONTI  
CONTROL - WEB  
TION - IT & IoT -

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