



NOVUS  
MANAGEMENT  
SYSTEM



# INTEGRATION CONFIGURATION VISUALISATION OF SECURITY SYSTEMS

**NEW  
VERSION**

NOVUS MANAGEMENT SYSTEM AC

V.5



**INTELLIGENT**  
FACILITY SUPERVISION

# Discover how **comfortable** can be **the efficient management** of security systems **in any facility**



Integration with **I&HAS alarm system!**  
Full control of security thanks to the integration  
with **Satel alarm control panels**



## VISUAL SURVEILLANCE SELECTED FUNCTIONS



### MULTIPLE MONITORS OPERATION

NOVUS MANAGEMENT SYSTEM AC software gives a possibility to **preview** images from cameras on **multiple monitors in up to 4k resolution**. Division of the cameras displayed on monitors can be **configured freely**, that is accurate and **comfortable for the operator**. Decoding images from the cameras is carried out through the processing power of a graphic card of any manufacturer (DXVA technology).

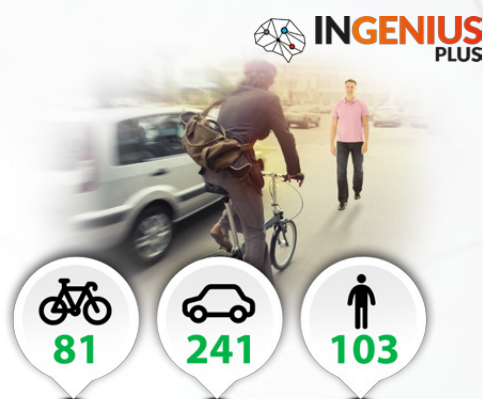
### ADVANCED CAMERAS CONTROL

The application allows for quick and intuitive **control of PTZ cameras** as well as stationary cameras, these ones equipped with a **motor-zoom lens**. The control is **available from the level of the image** as well as from the dedicated **PTZ tool**. When using cameras such as „fisheye“ there is a possibility of creating **virtual views** and applying virtual PTZ in places where the installation of multiple cameras is limited.



# The newest software designed for intelligent facility monitoring

## Complex solution integrates Video Surveillance, Access Control, Time and Attendance, Intrusion and Hold-up Alarm as well as Automation systems



### INGENIUS PLUS ADVANCED INTELLIGENT IMAGE ANALYSIS FUNCTIONS BASED ON AN OBJECT CLASSIFICATION

The innovative **INGENIUS PLUS** image analysis technology used in NOVUS brand cameras uses i.a. an **algorithm that distinguishes objects in the field of view of the camera**, enabling the **recognition of a person, vehicle** as well as a **bicycle or motorcycle**. The algorithm detects a specific object **regardless the weather conditions**. The functionality of an object classification enables e.g. a **verification of taken parking places** on the basis of a video image as well as **reduces a number of false alarms** in the peripheral security system. The function of **counting objects** with recognized shapes that has **crossed a virtual line** can be used in facilities such as **commercial centres** and other public facilities with **high intensity movement**. The results from individual cameras are displayed regularly.

### PRIORITIES OF EVENTS DISPLAY

Full-configuration of **automatically switching views** accelerates the reaction of an operator to the **alarm events**. The full-screen views of selected cameras installed in neuralgic places help to effectively monitor a displayed scene and **shorten the reaction time** to alarm events.



## CHECK THE OTHER FUNCTIONS OF NOVUS MANAGEMENT SYSTEM AC SOFTWARE





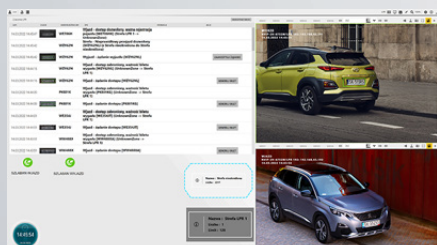
## PLAYBACK RECORDINGS

The playback recordings function in NOVUS MANAGEMENT SYSTEM AC software enables a **preview of archival event recordings** from NOVUS recorders. It also enables **video-verification** of previously triggered **alarms** from integrated systems.



## LICENSE PLATE RECOGNITION LPR

The **NOVUS MANAGEMENT SYSTEM AC** software, in conjunction with the **NOVUS 6000 series LPR IP cameras**, creates an advanced **license plate number recognition system** that enables automating of car passing control and vehicle registration. The area of the controlled facility can be divided into **parking zones** with assigned entrances/ exits. In addition, the zones can be **visualized on the panels** presenting the number, and after clicking, also the detailed **list of vehicles** currently in the zone. For each zone, a **maximum number of vehicles** may be specified, over which vehicles will not be admitted. Number plates are assigned as identifiers for users, while access to zones is **determined by means of definable access** levels and schedules.



The NOVUS MANAGEMENT SYSTEM AC software has also been equipped with a tool offering a number of functions enabling efficient **management of the car access control**, such as: displaying the **currently recognized license plate numbers** with their miniature **photos** and a detailed **description** of the event, **manual acceptance** of the vehicle entry request, manual modification of the detected license plate number in the event of a reading error (e.g. due to a dirty, unreadable license plate) and others.

The system also supports **ticket printers** with **QR codes** and **QR code readers**. For a single entry, many printers and many buttons can be defined (e.g. when the entrance is one for both passenger cars and trucks and there is a need to install a printer and a low and high button). The ticket may be printed after pressing the button by the vehicle driver or after approval by the operator. The time of validity of the ticket can be defined.

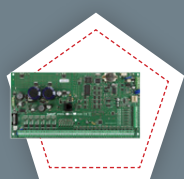
## SCREENSHOTS SAVING

NOVUS MANAGEMENT AC SYSTEM enables **saving the image** from the currently displayed video cameras as **graphic files** in **JPEG, PNG, and BMP** format. Screenshots can be made in both **live** and **playback mode**. This function also enables immediate **printing** of selected **images**



## EXPORT OF VIDEO RECORDINGS

NOVUS MANAGEMENT SYSTEM AC system enables the **export of video recordings** from NOVUS recorders integrated with the software. The available export formats are **AVI** and **MP4**. The export can be carried out both **manually** by the operator, as well as **automatically** in accordance with **defined schedules**. The selection of channels and the range of recordings to be exported can be made from the level of a dedicated menu, as well as in a very convenient way by selecting the selected range on the playback graph.



## ALARM SYSTEM SELECTED FUNCTIONS

### ARMING/DISARMING SYSTEM ELEMENTS

From the level of interface in NOVUS MANAGEMENT SYSTEM AC software, it is possible to **arm and disarm remotely system elements**, such as **zone/partition** or **all the zones/partitions**.



### ALARMS DELETING

From the level of interface in NOVUS MANAGEMENT SYSTEM AC software, it is possible to **delete remotely alarm system elements**, such as **zone/partition** or **all the zones**, as well as to **delete memory history of the alarms**.

### ALARM SYSTEM STATE MONITORING

The system allows for an **advanced monitoring** of an alarm system state thanks to receiving such events as e.g. **burglary, sabotage, anti-masking, triggering entry, forced alarm, fire alarm**, damage with an information about a **defect**, battery **breakdown** or charging, on/off of the exit and many others. In connection with the functionality of system visualisation on panels, as well as defining scenarios of operation, enables **reducing the reaction time** on arised alarm events to the minimum.





# ACCESS CONTROL

## SELECTED FUNCTIONS

### GLOBAL ZONES AND INTERLOCKS

Global zones **visualised on panels** thanks to the connection with **virtual zones** and **anti-passback** function, share the information about **movements** in particular **areas and objects**, enable a **quick localization** of an individual being searched, **transferring individuals** between the zones, **periodical blocking** of the zones or after arming an alarm system. Global interlocks enable **reciprocal monitoring of a state** of doors being opened in the frames of defined groups. Required function in AC system i.a. in prisons.



### BIOMETRIC IDENTIFICATION

NOVUS MANAGEMENT SYSTEM AC supports a **biometric identification**, which is one of the **most secure and the most advanced** methods of **entries/exits control** in the access control system. The system provides a **full integration with controllers** based on a fingerprint pattern or a facial geometry. The **fingerprint pattern** or **facial geometry** is to be assigned in a frame of defining a user of NOVUS MANAGEMENT SYSTEM AC software that is common for all the identifiers- **card, access code, QR-code**. The KZ3000FP controllers integrated biometrically enable such a form of identification.

### TIME AND ATTENDANCE

On-line **registration of entries/exits** enables a **quick preview of the employee presence status** in the company, **calculation of working time** in accordance with the **schedule** assigned to each employee and **generation** various types of **periodic reports**. **Standard access control readers** installed on gates or **T&A terminals** designed for this purpose can be used to register entries/exits. Integration with T&A terminals enables additionally registration and **calculation of exits/ entries** during the working day- **business, private and breaks**. The biometric terminal model enables the usage of a fingerprint for registration. The software also offers the option of **generating T&A reports**- by the operator or automatically, according to the schedule. The report saved as a **CSV file** can be used as an exchange file for integration with HR and payroll programs. Each employee can receive e-mail notification as regards the working time assessment.







# NOVUS MANAGEMENT SYSTEM AC

## SELECTED FUNCTIONS



### MANAGEMENT OF DISTRIBUTED SYSTEMS

NOVUS MANAGEMENT SYSTEM AC software enables building **systems** based on **many distributed servers**. The management of them can be done **centrally** from **one** or **more supervisory centres**. It is an ideal solution for **commercial** and **banking** chains or facilities with a domestic or even **global reach**.

### INTEGRATION WITH NOVUS DEVICES AND OTHERS

NOVUS MANAGEMENT SYSTEM AC software is **integrated with NOVUS cameras and video recorders**. Video streams can be **previewed live** on the panels of an operator. **Playback and export of the video recordings is also available**. Linking an image from VSS devices to the access control system elements and events enables, for example, the implementation of the **access control video verification**.



### DEFINED SCENARIOS

In a simple and quick way, it is possible to create extensive **scenarios** for the **various events in the system**, such as alarms. It is also possible to select multiple elements at once and **assign** them to the **specific reactions**. The schemes of responds to the alarm can be **assigned to one, several or all operator stations**. Automated scenarios **improve operator performance**. The operation of scenarios can be based on **time schedules**. In dependence on the needs, it is enabled to create **many different schedules** related to the day of the week, time of day or specific events.

### ACCESS AFTER CONFIRMATION BY THE OPERATOR

For an additional **security of important passages**, the door can only be opened after **verification and confirmation** by the operator that observes the system work. After placing the validated card on the reader, the system generates a **notification at the operator's workstation**, which **verifies the user's identity** based on the image added to the system and **grants access** by clicking the corresponding button on the screen. If the operator does not see the door directly, a video stream from an integrated NOVUS camera which is monitoring the **controlled passage** can be used to verify the identity of the user, so called **video verification**.



# NOVUS MANAGEMENT SYSTEM AC APPLICATION ON THE EXAMPLE OF LARGE-AREA STORE

1

## PARKING WITH CONTROLLED ENTRANCE MANAGEMENT

The possibility of time management of being around at a parking lot or limitation of entrances to zones for particular vehicle types, as well as visualisation of vehicles being around the zones.

2

## REGISTRATION AND ASSESSMENT OF WORKING TIME

In available readers or specialized time & attendance readers, the software is equipped with a module for an actual working time assesment with reports.

3

## VIDEO VERIFICATION OF ACCESS CONTROL EVENTS

All events in the access control system can be connected to the video surveillance system cameras that are assigned to particular zones and so connect the events altogether.

4

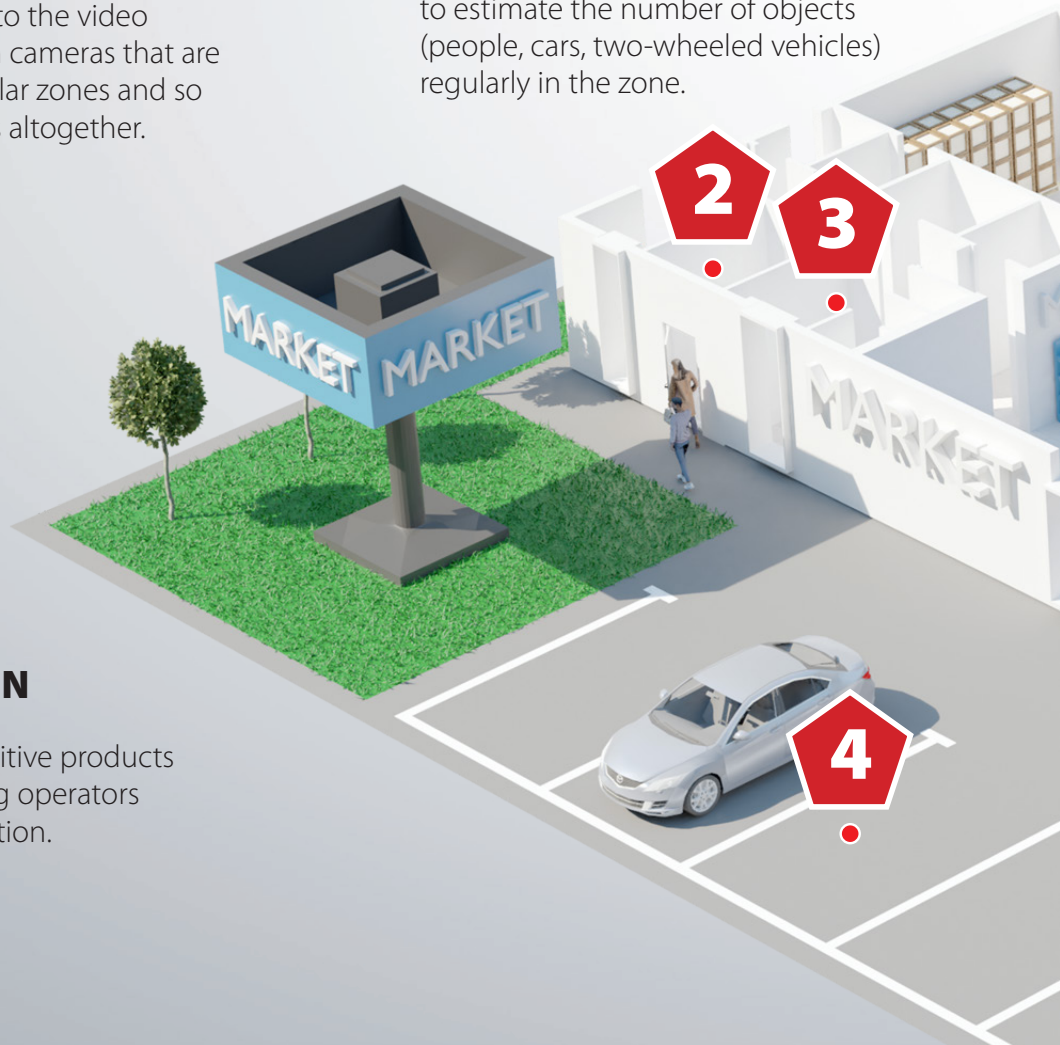
## INFORMATION ABOUT THE NUMBER OF VEHICLES INSIDE THE FACILITY

On the basis of Ingenius+ algorithms implemented in cameras, it is possible to estimate the number of objects (people, cars, two-wheeled vehicles) regularly in the zone.

5

## POS ALARMS WITH VIDEO VERIFICATION

Monitoring of sensitive products within the alarming operators of the system function.





**6**

## ALARM THRESHOLDS FOR THE NUMBER OF PEOPLE IN QUEUE

The system estimates the number of people in the expectation zone and starts the action of notification defined previously.

**7**

## "FISHEYE" TYPE CAMERAS

The usage of „fisheye“ type lens enables carrying out observation of the entire room with the help of one camera. Thanks to that type of lens, the monitoring of „blind spots“ is avoided and supplies saved by using only one camera in one room.

**8**

## IMAGE ANALYSIS

Registration of the video image and analysis on NOVUS video recorders integrated with NOVUS MANAGEMENT SYSTEM AC.

**9**

## ALARM SYSTEM

Visualisation and alarm system support applied in a facility.



# MANAGEMENT OF SECURITY IN BANKS



1

## DISTRIBUTED SYSTEMS MANAGEMENT

The management of AC, VSS, and I&HAS via the connected local servers into the network in bank and multi-client departments on an access server in the central.

2

## GLOBAL ZONES

Quick localization of employees, as well as control of the number of individuals that move around the facility's area via global zones with anti-passback function.

3

## VIDEO VERIFICATION OF THE ACCESS CONTROL EVENTS

Video verification of events in a facility thanks to the defined scenarios, as well as integration of the access control with video surveillance system.

4

## PREVIEW ON MULTIPLE MONITORS PLAYBACK OF RECORDINGS

The function of video recordings playback in NOVUS MANAGEMENT SYSTEM AC software enables preview of archival events recordings from the video recorders. It also enables videoverification of previously triggered alarms from the access control system, as well as the other integrated systems.

5

## REGISTRATION AND ASSESMENT OF WORKING TIME

Registration and assessment of employee working time supported with defined schedules on the basis of card reading or fingerprint on AC system readers or even dedicated terminals. The integration with HR and payroll programs via exchange data file.

6

## BIOMETRIC CONTROL WITH VERIFICATION

High-level of the security of entrances to special rooms via the application of biometric controllers, as well as cameras that are installed above the reader and that make a foto of an individual after getting or not the access.

7

## VISUALISATION AND OPERATION OF ALARM SYSTEM

The management of alarm system, as well as visualisation of the state of its particular elements.



# MANAGEMENT OF SECURITY IN OFFICE BUILDINGS



1

## ACCESS CONTROL TO LIFTS

Access control to selected floors via the controller installed in the lift.

2

## FRIENDLY USERS IMPORT/EXPORT

Quick card users data creation by using the option of data import from a file. Exchange of data with HR and payroll programs.

3

## VIDEO VERIFICATION OF ACCESS CONTROL EVENTS

Video verification of events in a facility thanks to the defined scenarios, as well as integration of the access control with video surveillance system.

4

## EVACUATION REPORT

Evacuation control with the use of report option in the connection to global zones control.

5

## REGISTRATION AND ASSESSMENT OF WORKING TIME

Registration and assessment of employee working time supported with defined schedules on the basis of card reading or fingerprint on AC system readers or even dedicated terminals. The integration with HR and payroll programs via exchange data file.

6

## PARKING WITH ENTRANCE CONTROL OPERATION, LPR ZONES

Quick control of cars entrance/exit at a company parking lot via cameras system that recognize number plates (LPR). The operation of guests vehicles, as well as printers of tickets with QR codes.

7

## PREVIEW, PLAYBACK AND EXPORT OF VIDEO/AUDIO RECORDINGS

Preview of on live stream video, playback recordings from the video recorders on several monitors at the same time, export of video recordings.

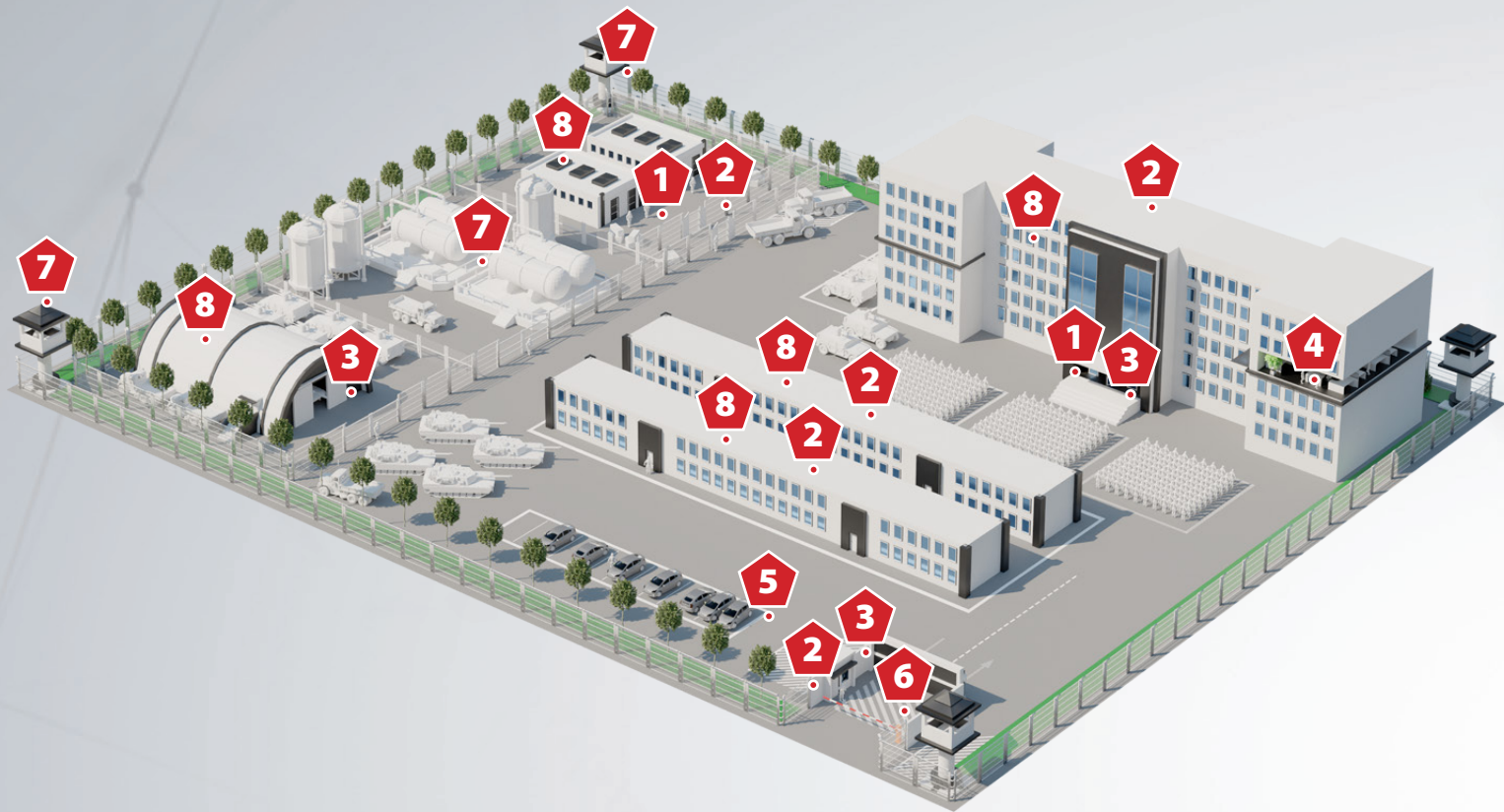
8

## SYSTEM ALARM VISUALISATION AND OPERATION

Alarm system management, as well as visualisation of its particular elements.



## MANAGEMENT OF SECURITY IN **MILITARY** UNITS



1

### BIOMETRIC CONTROL WITH VERIFICATION

High security degree of entrances to the special rooms via the application of biometric controllers, as well as cameras installed above the readers that make a foto of a person after getting or not an access.

2

### GLOBAL ZONES

Quick localization of employee, as well as control of individuals number being around the area of an object via global zones with anti-passback function.

3

### ACCESS CONTROL EVENTS VIDEOVERIFICATION

Video verification of events in a facility thanks to the defined scenarios, as well as integration of the access control with video surveillance system.

4

### PREVIEW, PLAYBACK AND EXPORT OF VIDEO/AUDIO RECORDINGS

Preview of on live stream video, playback recordings from the video recorders on several monitors at the same time, export of video recordings.

5

### PARKING WITH ENTRANCE CONTROL OPERATION, LPR ZONES

Quick control of cars entrance/exit at a company parking lot via cameras system that recognize number plates (LPR). The operation of guests vehicles, as well as printers of tickets with QR codes.

6

### MINIMUM INDIVIDUAL STATE CONTROL IN THE FACILITY

The function enables defining the minimum number of the stuff required to stay in alert.

7

### THERMOVISION

Temperature measurement, object detection in harsh weather conditions.

8

### ALARM SYSTEM VISUALISATION AND OPERATION

Alarm system management and the state of particular elements visualisation.

# MANAGEMENT OF SECURITY IN **MANUFACTURING PLANTS**



**1**

## REGISTRATION AND ASSESSMENT OF **WORKING TIME**

Registration and assessment of employee working time supported with defined schedules on the basis of card reading or fingerprint on AC system readers or even dedicated terminals. The integration with HR and payroll programs via exchange data file.

**2**

## ACCESS CONTROL EVENTS **VIDEO VERIFICATION**

Video verification of events in a facility thanks to the defined scenarios, as well as integration of the access control with video surveillance system.

**3**

## FRIENDLY USERS **IMPORT/EXPORT**

Quick card users data creation by using the option of data import from a file. Exchange of data with HR and payroll programs.

**4**

## EVACUATION REPORT

Evacuation control with the use of report option in the connection to global zones control.

**5**

## PARKING WITH ENTRANCE CONTROL OPERATION, **LPR ZONES**

Quick control of cars entrance/exit at a company parking lot via cameras system that recognize number plates (LPR). The operation of guests vehicles, as well as printers of tickets with QR codes.

**6**

## COMFORTABLE OPERATION

Operation of the system from many operator workstations and on multiple monitors.

**7**

## PREVIEW, PLAYBACK AND EXPORT OF VIDEO/AUDIO RECORDINGS

Preview of on live stream video, playback recordings from the video recorders on several monitors at the same time, export of video recordings.

**8**

## ALARM SYSTEM

visualisation, as well as alarm system operation.

**9**

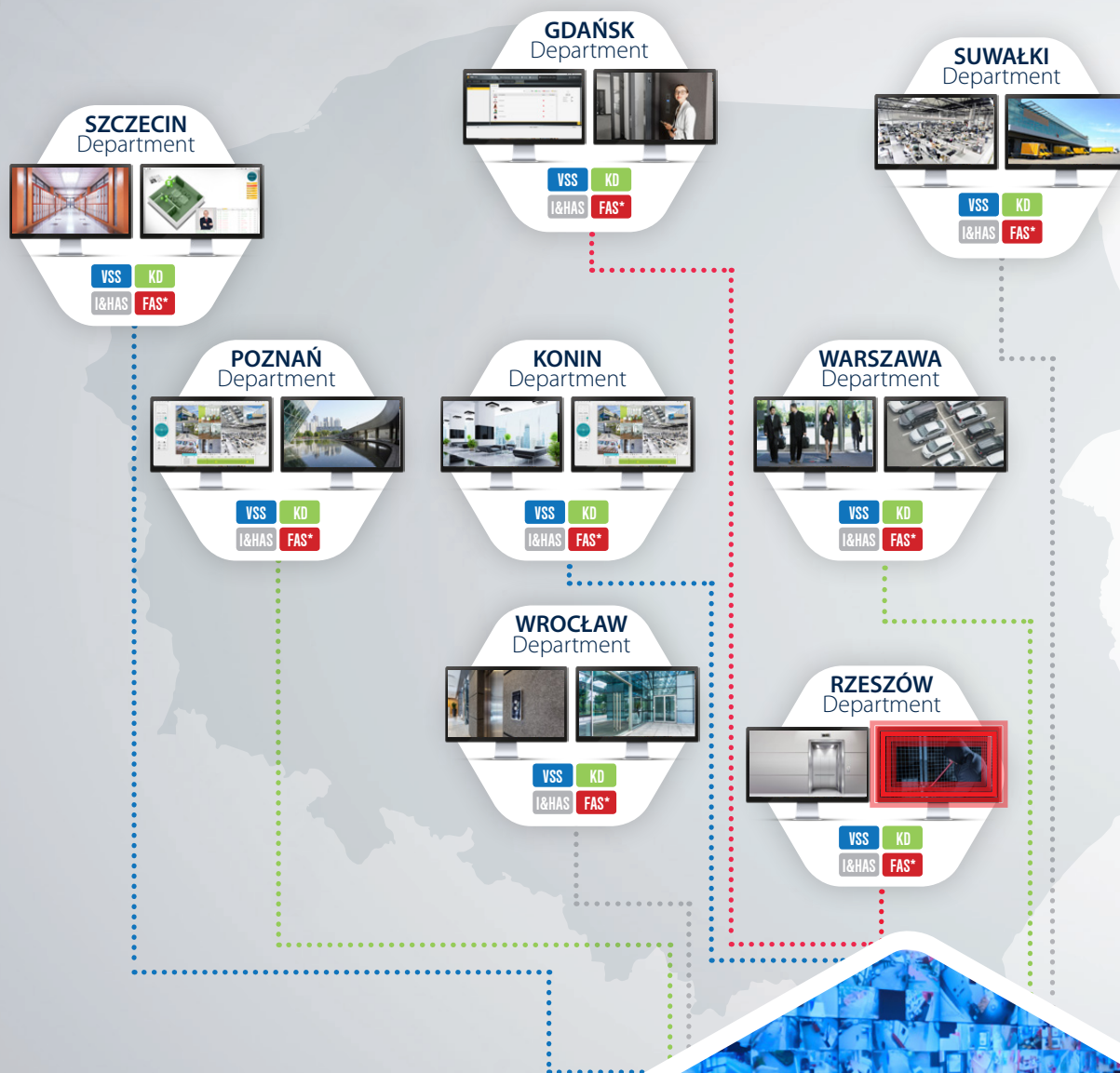
## MEASUREMENT OF TEMPERATURE, HUMIDITY AND ELECTRICITY

Monitoring of important parameters for industrial processes, such as temperature, humidity, current flow.



# The application of NOVUS MANAGEMENT SYSTEM AC in distracted objects

NOVUS MANAGEMENT SYSTEM AC software enables building the systems on the basis of distracted servers. The management can take place in a centralized way from single or multiple monitoring centres. This is a perfect solution for chain stores, banks, as well as for objects in a domestic or even global range.



**VSS**

VIDEO SURVEILLANCE SYSTEM

**KD**

ACCESS CONTROL SYSTEMS

**I&HAS**

INTRUSION AND HOLD-UP ALARM SYSTEMS

**FAS**

FIRE ALARM SYSTEMS  
\*available soon





# Selected functions available for installer and operator



[www.nmsac.aat.pl](http://www.nmsac.aat.pl)

## BE UP TO DATE WITH THE NEWEST UPDATES



- **fast system configuration thanks to the built-in researcher of controllers and IP cameras, as well as their automatic addressing.**
- comfortable verification of a communication state in the system and visual assessment of particular elements after turning on and configuring the system
- defining of varied privileges for the operator groups.



- monitoring state of the system with the help of icons of the system elements on panels with the object maps on a synoptic board. The monitoring via notifications displayed on the event stack
- **displaying users image after using the card within the camera frame installed above the reader**
- displaying images from the localized cameras near the controlled entrances automatically after an event/alarm or after clicking an icon on the camera



- access control to floors via reader installed in the lift - to 69 floors
- access control to locks in a cloakrooms - to 69 doors with the help of one reader
- **defining scenarios that react automatically on events and alarms in the system**



- **import of users data from the file in accordance to defined pattern**
- generating filtrated event reports (automatically or on request) and saving in csv or html (with print to pdf option) format
- save of the system back-up file (automatically or on request) in a safe data base to quickly recreate system configuration after the server breakdown

Distribution:



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