ACS line

ELECTRONIC IDENTIFICATION SYSTEM

- ◼ **ATTENDANCE SYSTEM**
- ◼ **ACCESS CONTROL SYSTEM**
- ◼ **CATERING SYSTEM**
- ◼ **ORDER MANAGEMENT**
- ◼ **HOTEL SYSTEMS**

CATALOG

SYSTEMS AND COMPONENTS COMPLETE OVERWIEV

All ACS-line system components are certified. The Declaration of Conformity is available upon request.

ACS-line system is certified by National Security Authority for use in "secret" and "top secret" spaces, based on used components.

Explanation of symbols printed by products:

Symbol	Description
Contact chip DALLAS identification	Device is equipped with ETHERNET interface
Contactless media identification	Device is USB equipped
Fingerprint identification	Device is Wi-Fi equipped
Device contains OS Windows	Device is equipped with RS232 and RS485 interfaces
Certified by National Security Authority	Number refers to number of relays in the device

ELECTRONIC IDENTIFICATION SYSTEM

CONTENTS

ELECTRONIC IDENTIFICATION SYSTEM

ABOUT THE SYSTEM

Electronic Identification System ACS-line is a modern and powerful tool for electronic collection and processing of operational data. Complex system or parts of it cover the needs of enterprises and institutions of all sizes and fields of operation. ACS-line System uses the most advanced technologies for identification of persons, products and raw materials, allowing maximum automation and effective management of human resources.

SINCE 1996

We have been developing this smart system, constantly advancing and developing it based on long-term experience and current needs of customers since 1996. Usage of modern technology in the process of system construction guarantees flawless operation and broad range of possibilities. Main focus of the ACS-line system is given to high technological advancement, openness for further extension and reasonable price.

IT GROWS WITH YOU

The broad range of system components provides for creation of customized solutions according to current needs, with maximized capability of further development in mind. Many years-long users of ACS-line systems are gradually broadening the volume and fields of their operations and ACS-line system offers them almost unlimited possibilities to cover newly identified requirements.

WHERE IS IT HEADED

The development team's goal is to broaden the range of deployment possibilities and to offer as complex services in the field of ID technology as possible. Another goal is further broadening of current integration into enterprise systems (SAP, Elanor Global, Navision, Helios etc.) and interconnection with Building Automation Systems. The main idea of the system has always been to come up with new solutions and thus set up the trends in the identification systems. This strategy leads to further strengthening of the status of the most complex system for person identification and leading position in the market.

BY THE ACS-line SYSTEM IMPLEMENTATION YOU OBTAIN

→ Unifying data from various resources into single agenda
→ Maximum effectiveness in collecting and processing of data
→ Decrease in error rate and higher accuracy of results
→ Fast and detailed outputs with the possibility of export into pay processing and infomation systems
→ Outputs are always in compliance with valid legislation
→ Protection of assets from unauthorized manipulation
→ Effective usage of worktime
→ Work attitude improvement

SYSTEM DESCRIPTION

ACS-line system is a complete solution made up by both hardware and software components to accommodate various activities. Individual systems cooperate including data sharing. In most of the solutions, it is possible to connect them directly to business' information system, which would then merge the collected data with other agenda. It is also possible to employ partial solutions with later upgrade possibility.
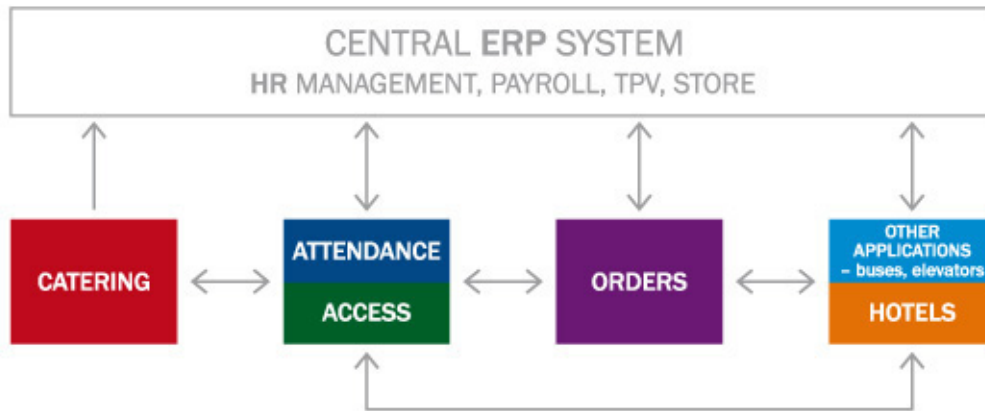
MODULE ARCHITECTURE

ACS-line system is designed as modular puzzle. For each solution, optimal configuration of the systems can be adjusted to individual needs. This unique design offers the users the possibility of maximum comfort for minimum purchase costs. Future upgrades are equally easy, as all they take is a purchase of other necessary modules. There are also packages compiled to accommodate the needs of smaller customers.

OPERATION PRINCIPLES

HARDWARE

Variety of efficient hardware components – terminals, control units and readers are collecting data from identification media. Data are transfered into database and units are carrying out operations according to adjusted access rights.

SINGLE MEDIUM IDENTIFICATION

The same ID medium can be used for various actions:

→ Time recording
→ Food ordering
→ Production records
→ Access control
→ Lift control
  etc.

SOFTWARE

Program equipment for management and evaluation of data in ACS-line system offers fast and transparent results. The software gets installed in the server together with central database. From this point, all the data is available to other users, who can work with it according to their respective access rights.

IDENTIFICATION

IDENTIFICATION POSSIBILITIES

Each user of the system is equipped with an ID medium, which defines his or her identity uniquely. It is an code information medium, with the information being read by the reader. Subsequently, the user is identified and allowed access to carry out operations according to set access rights, e.g. record of passage, door opening, etc.

CONTACT CHIPS

Contact media, used in ACS-line system, are DALLAS chips, metal components placed in durable plastic holders. The chip must be placed to the reader head of the reader in order to allow for conductive connection of metal parts (as short connections as 200 ms are sufficient).

FEATURES

→ High resistance against mechanical damage, cold, moist and grease
→ Good utilization mostly in industrial operations
→ Include plastic holder to be attached on keystraps etc.
→ Varying color modifications of plastic holder

CONTACTLESS MEDIA

The most common form of contactless transponders are cards (ISO - size of a credit card) with optional prints. Contactless media are available also as tags, bracelets, stickers, etc. The reading is carried out by approaching the medium to the reader within reading distance (commonly 10-15 cm for cards, tags a little shorter).

FEATURES

→ No contact with reader needed to identify
→ Cards and tags can be combined within one installation
→ Card faces can be printed upon – company logo and/or photograph
  are the most common applications allowing the media to be used as ID card
→ Contactless tags are manufactured of durable plastics with keyring hole

BIOMETRIC IDENTIFICATION

Biometric identification is a modern and progressive way of person identification and defense against unauthorized entry. The principle of is the scanning and comparison of identified person's fingerprint. Uniqueness of the fingerprint guarantees uniqueness and mistake-free identification.

FEATURES

→ Users do not need any more media
→ Can be combined with PIN entry for higher safety level
→ Speed of scan and evaluation of the fingerprint - < 1s
→ Fingerprint pattern management is fully integrated in service software

ACS-line system offers widest variety of identification means.
It is also possible to use current media used within the organization to other tasks.

Details on ID media and accessories is to be found on p. 41.

ELECTRONIC IDENTIFICATION SYSTEM

APPLICATIONS

ATTENDANCE SYSTEM

ACS-line Attendance System for recording and evaluation of attendance, preparing data for wage processing and monitoring the workplace attendance during worktime. Sophisticated to the maximum and constantly improved thanks to long time experience a always in accordance with current legislation.

DATA PROCESSING

→ Data browsing according to the authorization
→ Editing, corrections, approving
→ Many print templates
→ Creating of graphical outputs, including report editor
→ Exporting in any format for pay accounting purposes
→ Web interface

THE SYSTEM OFFERS BROAD POSSIBILITIES FOR CUSTOMIZED SETTING

→ Any model of work time for each of the employees,
  user-defined calendars and schedules
→ Various options for setting, transferring and approval of work time
  and extra-hours and bonus processing
→ Visitor's evidence system
→ Absence and capacity planning
→ Central management of company branches

BASIC SOFTWARE FOR THE ATTENDANCE SYSTEM

Product Code	Description
ADS25	Attendance and Access SW, max. 25 employees, local installation
ADS50	Attendance and Access SW, max. 50 employees, local installation
ADS25_SQL	Attendance and Access SW, max. 25 employees, SQL network installation
ADS50_SQL	Attendance and Access SW, max. 50 employees, SQL network installation
ADS100_SQL	Attendance and Access SW, max. 100 employees, SQL network installation
ADS+100	Software licence expansion, next more 100 employees No limits for number of employees in system

EXTENSION

Product Code	Description
NET5	Network extension - for 5 PC (5 simultaneously working clients)
NET5+	Network extension - for unlimited number of clients
FINGER	Module for biometric template administration (necessary for all fingerprint systems)
BRANCH	For each detached working place

Software is fully localized for Czech, Slovak, German and Polish languages, including monitoring of each country's legislation. Licensing details are to be found on p. 43.

WORK PRINCIPLE OF THE ATTENDANCE SYSTEM

Data reading is carried out at record terminals via ID media of the employees. Record terminals are located at key places throughout the object, at the main entrances and workplace entry points, where the recording of arrivals and departs as well as optional worktime breaks is carried out. For each operation, the way of processing can be assigned (way of recording, automatic termination or repetition, rounding, etc.) The data of passage, inclusive exact date and time, are stored in the terminal and transferred to the computer, where it is processed and evaluated.

Result evaluation is carried out in monthly periods, or in any other given period of time. Processed attendance sheet can be edited based on access rights and confirmed in several layers. Many pre-set printout layouts are also available for printing or screen viewing, just as well as many export formats for wage and HR systems. Attendance system can also be used as access system to open doors, turnstiles or bars based on access rights.

Attendance Terminal

Detached Workplace

Attendance Software
LAN Network Data Sharing
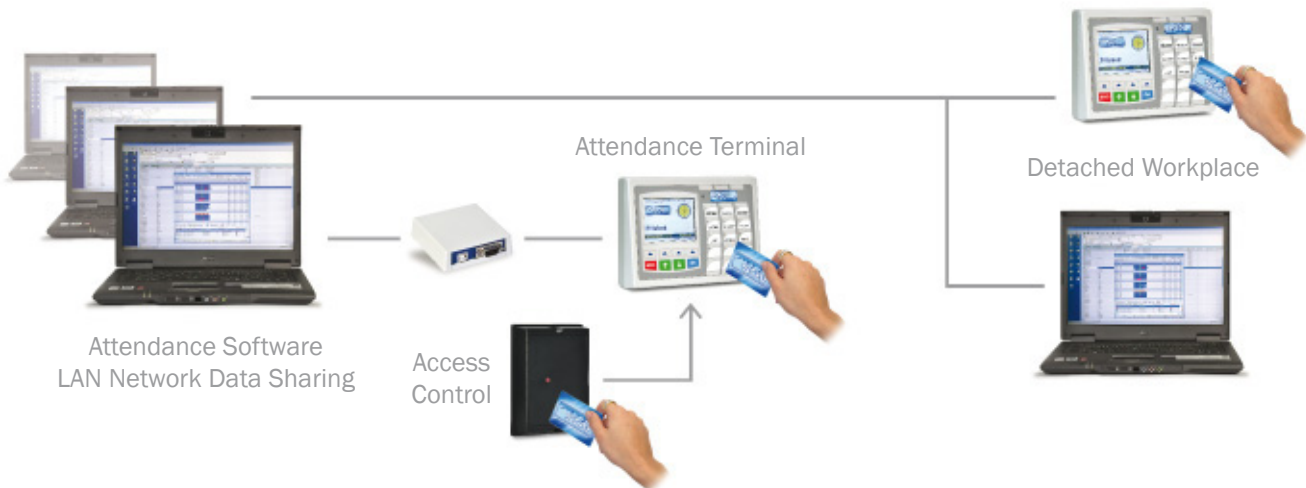
Access
Control

ATTENDANCE SOFTWARE can be extended by other modules, which make work with it easier and more flexible:

Module INTRAWEB	"Light client", allowing to access and monitor attendance via internet browser.
Module VISITOR	Record keeping and control of movements of visitors, including vehicles. Option to make use of personal documents reader.
Module CAPACITY PLANNING	Smooth and transparent planning of workshifts, holidays, etc. in well arranged graphical interface.
Module SERVICE	Used to execute scheduled tasks automatically. Works in a background as a system service.
Module BRANCH	Software to be used in company's branches within a single license, connected via VPN or database replication.
Module EMAIL	Attendance fulfillment control. In case of coming or not coming within a time limit, an e-mail is sent automatically, informing about the event.
Module PDA	Application for mobile attendance terminals based on portable computer (PDA) or PC with touchscreen control.
EXPORTS	Cooperation with both wage and HR management systems. ACS-line is capable of importing information about employees and export processed attendance data.
GPS	Cooperation with GPS system of vehicle monitoring to create records of official travels.

ACCESS CONTROL

ACS-line Access Control System is intended for facilities and spaces, where the necessity arises to limit entry of unauthorized personnel, or disallow their access to specified facility parts. Access System allows not only personnel or vehicles movement management, but their real-time monitoring with the possibility to display graphical map of the facility. Electronic Access System thus serves as a substitution for universal key systems.

THE SYSTEM OFFERS BROAD POSSIBILITIES

→ Each ID media can be equipped with different authorization for the access
→ All of the events are stored in the system, including attempts of unauthorized access
→ ON-LINE real-time monitoring and control of restricted areas can be carried out with graphical plug-in
→ Such plug-in can also be used to monitor and signalize the status of controlled entrance points (forced access, "unlocked", "unshut", etc.)
→ Interconnection with EZS, EPS systems
→ Special solutions for schools, condominiums, parking lots, sporting facilities

EXAMPLES OF OTHER ACCESS SYSTEM IMPLICATIONS

→ Lift control with access rights for individual floors
→ Access to paid sporting facilities (tennis courts, saunas, etc.)
→ Locker control (fitness centers, pools, etc.)
→ Hotel rooms with reception-desk software link
→ Company bus transport recording

Access system can be set on independently or as a part of attendance system, which is capable of allowing the personnel to enter based on either acknowledgment of presence or scheduled work time. All the access software functions are always included in attendance software. For such installations where attendance software is already installed, there is no need to purchase any additional licenses for access functions.

BASIC SOFTWARE FOR THE ACCESS SYSTEM

Product Code	Description
pADS100	Access Software, max. 100 cards, local installation
pADS100_SQL	Access Software, max. 100 cards, SQL network installation
ADS+100	Software licence expansion, next more 100 cards No limits for number of cards in system

EXTENSION

Product Code	Description
NET5	Network extension - for 5 PC (5 simultaneously working clients)
NET5+	Network extension - for unlimited number of clients
FINGER	Module for biometric template administration (necessary for all fingerprint systems)

ACCESS CONTROL SYSTEM WORKING PRINCIPLE

Entry points are equipped with readers and electromechanic devices for blocking them (electric locks, bars, turnstiles, etc.). The actual control of these devices is carried out via outputs provided by all the access and attendance units of ACS-line system. De-blocking the entry point happens based on access right evaluation carried out by service software. The entry points can be controlled one-way or both ways, depending of operation requirements. The door readers allow for door opened/shut status monitoring as well.

All the information about system events are transferred into computer database, where it is monitored and processed by access software. Outputs thereof are overviews of who, where and for how long entered. ON-LINE monitoring, individual entry points passage frequency and log of each person passages can be monitored real-time. The system also records and displays all operation data about unauthorized passages, particular door status, etc.

Converter

Control Unit

ACCESS SOFTWARE
LAN Network Data Sharing

Reader
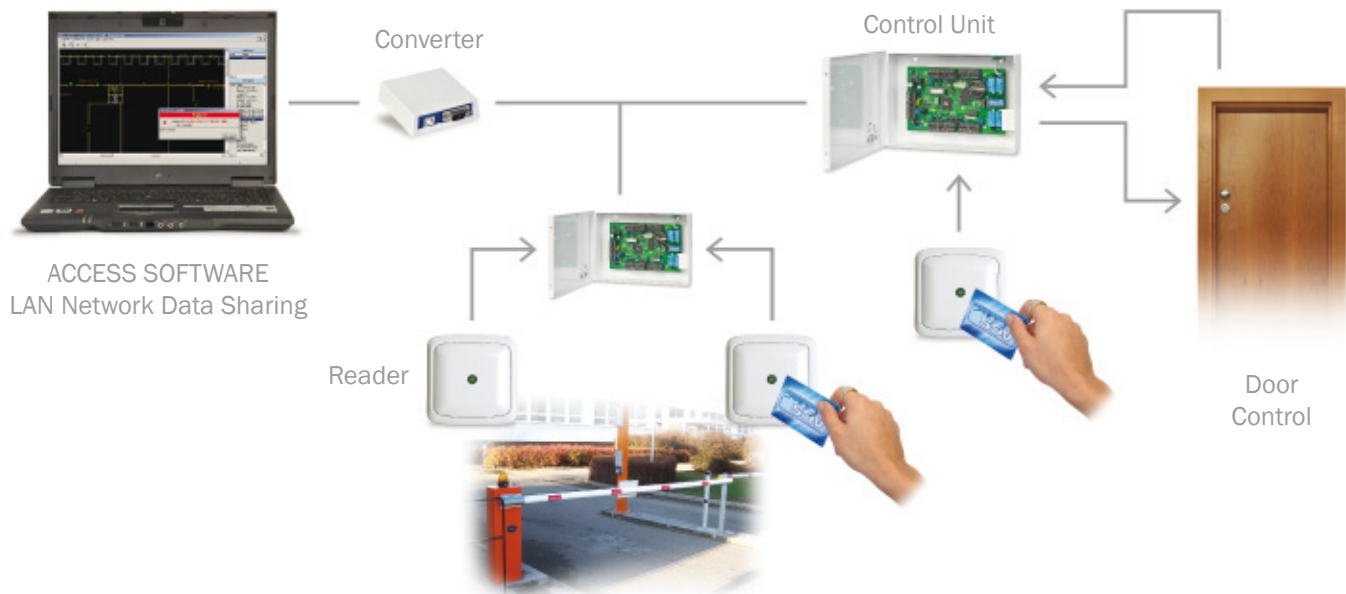
Door
Control

Extending SW module AMO - ACCESS CONTROL

Attendance and access system can be upgraded with module allowing graphically display and monitor opened/shut status of doors, bars, gates, sound alarms,... The object security personnel can watch the status of individual entry points throughout the facility. Depending on used hardware, such monitoring can possibly be carried out in ON-LINE mode, as the system makes immediate detection of unauthorized door opening possible as well as remotely control the door.

Standard features of AMO module include

→ Graphical display of object floorplan (own image)
→ Several different images and easy changing thereof (e.g. separate floors)
→ Displaying of particular devices in the image (terminals, doors, alarms)
→ Alarm display option
→ Separate text can be assigned to each type of alarm (e.g. "Warehouse door is open!")
→ „ON-LINE" display (graphical display of doors being opened and shut)

CATERING SYSTEM

ACS-line Catering System for complex management of food service facilities, company-canteens and school dining-halls, homes for the elderly. System fully eliminates painstaking recording of orders and balancing of catering via vouchers, which often leads to mistakes and unauthorized meal consumption. The system can be run as either credit or debit or restaurant, other modules offer necessary functions for canteen and other related businesses.

IT OFFERS CURRENT INFORMATION ON

→ Number of orders
→ Boarders' accounts (boarding prices, accommodation)
→ Status and consumption of raw materials and goods
→ Economics of the business

THE SYSTEM OFFERS BROAD POSSIBILITIES

→ Ordering can be also done via comfort touch-screen terminals or web browser
→ Accounting of served meals, including calculation of the bonuses based on the attendance record
→ Norm-setting based on boarders' categories
→ Many print templates and export outputs
→ Either debit or credit mode of operation
→ Connection with sandwich and drink vending machines

Fully substitutes the voucher system and thus makes the operation of the whole catering business significantly more effective. Provides data for accounting of boarding, invoicing to external boarders and of supplies consumption. The results can be directly exported into pay processing systems.

BASIC SOFTWARE FOR THE CATERING SYSTEM

| Product Code	Description
JSW100	Catering Software, max. 100 boarders, local installation
JSW100_SQL	Catering Software, max. 100 boarders, SQL network installation
JSW+100	Software licence expansion, next more 100 boarders No limits for number of boarders in system

EXTENSION

Product Code	Description
NET5	Network extension - for 5 PC (5 simultaneously working clients)
NET5+	Network extension - for unlimited number of clients
FINGER	Module for biometric template administration (necessary for all fingerprint systems)
STORE	SW module of stock holding
NORMA	SW module for norm-setting and automatic raw materials stock out
KASA	SW module for sale by card or cash
WEB	Order management via internet browser

Further information and another modules can be found in a separate catalogue.

CATERING SYSTEM WORK PRINCIPLE

Meal ordering takes place at the ordering terminals, LAN-connected computers or via intranet. Both hot and cold meals can be ordered as well as soup, dessert, salad etc. Different price categories for various customer groups can also be set. Account status can be easily controlled any time by the customer at the ordering terminal or via computer. Orders are taken according to pre-set menu for unlimited amount of time in advance and can later be adjusted or cancelled.

Food distribution is carried out in a fully automatic way at the distribution spots by placing ID card or chip against the reader. Information about ordered meal is displayed to the cook. At the distribution spot, double issue of meals is avoided. The issue can also be realized as direct sale with payment through the ID card.

The account is optionally credit or debit. In connection with attendance system, all the meal issues are checked against subsidy entitlement. Total balance and taken meals overview are available to be displayed, printed or exported for wage processing systems.

For **the kitchen**, the system immediately provides the amounts of meals ordered to help with ordering at the supplier or preparation in own kitchen. Scaling module provides information on raw materials (ingredients) needed and their subsequent deduction from the stock. Operation economics evaluation is handled for given period of time via user-defined printouts.

Ordering Terminal

Distribution Display

Converter

Distribution Terminal

CATERING SOFTWARE
LAN Network Data Sharing

Vending Machine

Distribution Reader

MODULAR ARCHITECTURE

Modular architecture of the system allows for its broad usage. It covers all the issues of business diners and school ones alike without any capacity limits. It can be employed in small businesses, where only lunches are issued and food is outsourced. In large companies with workshift operation and own kitchen, the norm setting and stock management modules will find its uses. The system can also be supplemented by module for canteens with direct sale via ID card. It is also possible to operate several distribution spots from one kitchen, with the option to differentiate among customers in different dining-halls. Key processes of the system can also be scheduled for automatic execution.

EVALUATION
BY ATTENDANCE

PAY ACCOUNTING

NORM-SETTING

BASIC MODULE
MENU , ORDERS/DISTRIBUTION

POSTAL ORDERS
INVOICES

STOCK
INPUT/OUTPUT

CANTEEN
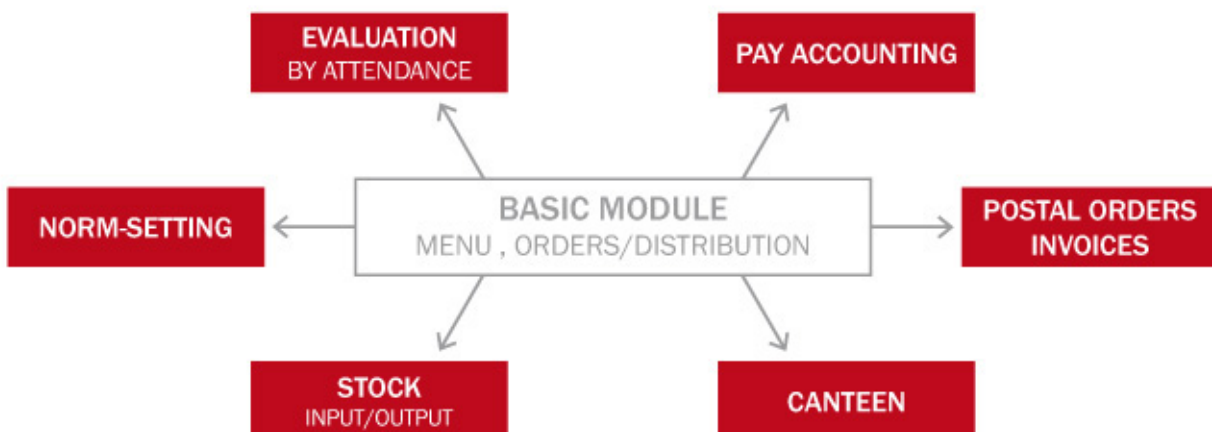
ORDER MANAGEMENT

ACS-line Order Management System provides for monitoring of production processes and logging of time taken on various orders by individual workers. The system is intended for both made-to-order and serial production operations in any field. It allows for order processing monitoring, planning of production capacities and application of technological processes on repeating orders. Order Management System is a very powerful tool to increase and control work effectiveness and rewarding workers according to real performance.

SYSTEM FULLY AUTOMATES THE EVALUATION OF

→ time, each order will consume
→ partial products and processes
→ raw materials consumption for the sake of cost analysis
→ meeting deadlines and standards
→ effectiveness of production facilities
→ planning of human and production resources

THE SYSTEM OFFERS BROAD POSSIBILITIES

→ possibility to monitor made-by-order and serial production
→ stock management (material, products)
→ shipment of products
→ cooperation and subdelivery monitoring
→ possibility to create measures and standards
→ open to be integrated into any higher level system – universal data interface
→ unlimited amount of connected terminals and
→ two solutions – focusing either on small and medium sized enterprises or large businesses with many data collection points

Order management system is closely tied with attendance system, from which it utilizes personal data. At the same time, on production terminals, it is also possible to record attendance operations. Using the ID media of the workers, the presence at the workplace or starting of a machine can be monitored.

BASIC SOFTWARE FOR THE ORDER MANAGEMENT SYSTEM

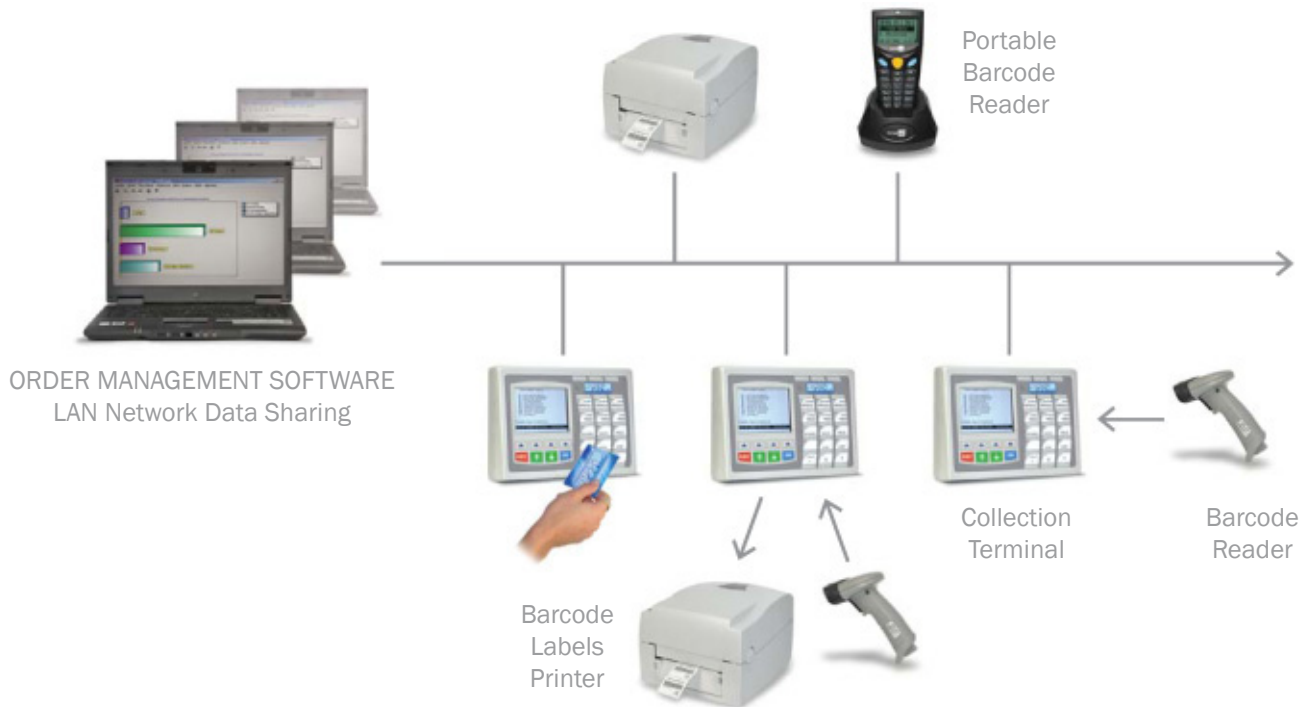| Product Code	Description
WK50	Order Management Software, max. 50 workers, local installation
WK50_SQL	Order Management Software, max. 50 workers, SQL network installation
WK+25	Software licence expansion, next more 25 workers No limits for number of workers in system

SOFTWARE FOR ON-LINE DATA COLLECTION

Product Code	Description
OSD10	Centre Core Software, max. 10 terminals, master system interface
OSD+1	Software licence expansion, every other evidence terminal
OSD_TISK	SW module for rout-sheets and bar codes printing

Further information and another modules can be found in a separate catalogue.

ORDER MANAGEMENT SYSTEM WORK PRINCIPLE

The collection of production data happens through terminals located directly at the workplaces. Each of the workers records his or her activities using this terminal. Depending on logging depth, numbers of orders, operations, workplaces, good and sub-standard products and so on are entered. Each entry is afterwards confirmed by the worker using his or her ID chip. Such data is then transferred into computer and evaluated for further processing.

Portable Barcode Reader

ORDER MANAGEMENT SOFTWARE
LAN Network Data Sharing

Collection Terminal

Barcode Reader

Barcode Labels Printer

BARCODE PROCESSING

Serves to simplify data entry at the terminal. If the system is configured to work with barcodes, print layouts will include barcodes, scanning of which will enter the data in the terminal. Readers are then connected to either attendance terminals or PC workstation intended for income and outcome. Other components allow printing of dispatch notes with barcodes for further reporting or intake of materials and tools using portable readers.

The mean of transfer of data from the terminals and further processing thereof varies based on particular installation:

1) ORDER MANAGEMENT SYSTEM FOR SMALL AND MEDIUM SIZED COMPANIES

All the data is processed by the software, which allows complete records beginning by order acceptance, its evaluation and up to final shipment with proper documents.

2) ON-LINE DATA COLLECTION SYSTEM FOR LARGE BUSINESSES

Terminals are serviced from central server and data is in real time transferred into supervising system. Any information system with integrated TPV module will do.

System's data structures are designed universally and it is solely up to user settings, what kind of logging depth and thus the amount of detail is chosen for each product. This means there are always overviews available concerning the order and its processing status. The processing results take the form of invoicing details, production overview and overview of work effectiveness. All the data systems can be easily viewed, printed in user-defined layouts and exported in various formats.

HOTEL SYSTEM

ACS-line Hotel System covers all the requirements for complete stay of a guest in a hotel or pension and takes care of effective and comfortable hotel operation.

Each guest receives electronic hotel card upon arrival, instead of classic hotel key. This card authorizes and monitors movement of the guest within the hotel and his or her usage of various services. All the information about card usage are processed by the service software and guest's hotel account is accordingly billed. All the permissions of the guest are of course tied with guest's stay in the hotel. If, for example, the guest doesn't return his or her card at the check-out, it is rendered unusable at the check-out moment.

A SINGLE CARD ALLOWS

→ Entrance to the room
→ Control od electric devices in individual room
→ Elevator operating
→ Access to other places and facilities (parking, wellness, sports, etc.)
→ Payment in hotel bars and restaurants
→ Usage of other hotel services (equipment rentals, skipasses, etc.)

Final accounting of the card will then provide quick and transparent information about all the consumed services and billing of the guest.

ELECTRONIC HOTEL SYSTEM PROVIDES

→ Total accounting of all the services in one bill at the point of guest's departure
→ Reservations and planning of the capacities' effectiveness
→ Protection of hotel rooms and other spaces from unauthorized access
→ Energy savings based on room occupancy
→ Employee attendance records

CARD IS HOTEL'S VISIT CARD

Hotel cards are equipped with full color printing, for example with logo, address and picture of the enterprise, serving as a promotion and information card of the accommodation operation. Pools and wellness operations use "wrist watch" instead of cards.

SOFTWARE FOR THE HOTEL SYSTEM

| Product Code	Description
RECEPTION-DESK	Basic Reception-desk Software, according to number of beds Contains Modules: EXCHANGE, PHONE BILLING
CASH REGISTER	Cash Register SW, according to number of places
PDA	SW application for PDA, mobile waiter
KITCHEN	SW module of kitchen facilities
STORE	SW module of stock holding

Further information and another modules can be found in a separate catalogue.

HOTEL SYSTEM WORK PRINCIPLE

Primary function of hotel access system is to accommodate controlled guests' entry in the rooms. Permissions to enter one or more rooms including concerning facilities (main entrance, wellness) are assigned to particular hotel card. Possibility to control electric equipment based on guest's presence is indeed also included. Personnel of the hotel are granted access into other facilities (cleaning closets, warehouses). The permissions are assigned automatically upon guest's check-in to his or her particular room.

Each place, where hotel card usage is to be recorded is equipped with card reader, which scans the card. Based on permissions, entry is allowed and event is logged. All the information about card usage are transferred into central database and stored in order to issue the total account balance. The account can also be billed for phone calls or payments carried out by the card in hotel restaurant.
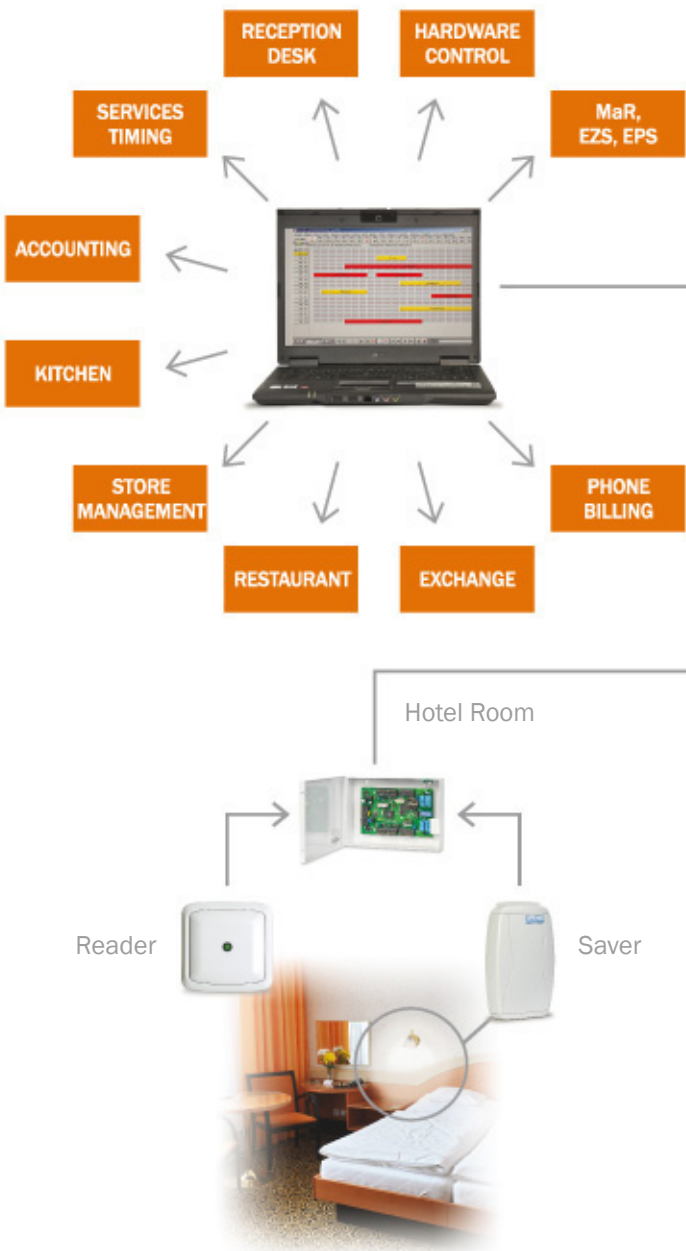
Reception-desk software is also designed in a modular way and its extent can be freely customized to the needs of particular operation. Software modules can be used separately or in an complex cooperating system. Communication with readers happens ON-LINE. This way, the reception-desk can realize e.g. forceful entry into the room. System can also be interconnected with attendance system in order to control the employees.

FULLY OPEN SYSTEM

Several other components can be added into the system to better meet the requirements of this field. This include most of all cashier terminals for restaurants and bars or PDA units for portable billing. Also, barcode scanners, bill printers and other hardware can be added to the system.

By interconnection with other systems, one can further expand the possibilities, such as room heating based on occupancy, cooperation with EZS or EPS, lift control, etc.

OTHER APPLICATIONS OF THE ACS-line SYSTEM

→ Guard Control
→ Client PC Security
→ Printer and Copy Machine Access
→ Lift Control
→ Linkage with Smart House Systems

CUSTOMER SOLUTIONS

ACS-line System offers maximum openedness allowing the creation of specific applications tailored to the needs of customers. Using the modifications and custom components or software development, other branches can be also covered.

→ Bus transport recording
→ Construction site workers control
→ Admission systems for pools and ski lifts
→ Employees' satisfaction voting systems
→ Sporting facilities (access management, service timing, locker control)
→ Keys and tools issuing systems
→ Interconnection to camera systems and EZS
→ Interconnection with GPS vehicle tracking systems
  (automatic duty travel records)

WE HAVE AN EFFECTIVE SOLUTION FOR YOU, TOO!

ELECTRONIC IDENTIFICATION SYSTEM

COMPONENTS

RT300 ATTENDANCE TERMINAL

RT300B

RT300

Features

→ 2 x 16 characters LCD display
   10 mm characters,
   white backlight
→ User-defined displayed texts
→ Worktime balance displaying
→ Membrane keypad
   4 + 12 universal buttons
→ Integrated ID reader
→ Second ID reader
   connection port
→ PIN-entry option
→ Beeper
→ 2 relays for doorlock control
→ 2 input lines for door contact
→ OFF-LINE event log

Most common attendance logging and access management terminal ■ Universally manufactured membrane keypad allows to input user-defined descriptions of the keys to quick-select the option for worktime interruption ■ Large display with high contrast guarantees good readability and simple maintenance ■ Depending on the clients decision, this terminal can work with chips DALLAS or any other contactless media ■ It is possible, to display information about worktime on the display ■ This terminal includes relay to handle the locks and wiring for door contacts.

Product Code	Description
RT300	Contact Attendance Terminal, RS232/RS485
RT300-TCP	Contact Attendance Terminal, ETHERNET interface
RT300B	Contactless Attendance Terminal, RS232/RS485
RT300B-TCP	Contactless Attendance Terminal, ETHERNET interface
RT300W	Attendance Terminal for any reader connection, RS232/RS485
RT300W-TCP	Attendance Terminal for any reader connection, ETHERNET interface

RT310

RT310B

LED101

Features (RT310)

→ 2 x 16 characters LCD display 10 mm characters, white backlight
→ Boarder's credit displaying
→ Membrane keypad 4 + 12 universal buttons
→ Integrated ID reader
→ Second ID reader connection port
→ LED101 display unit connection port
→ 2x input line for confirmation button connection
→ Beeper
→ OFF-LINE operation option

Basic terminal for ordering and issuing of meals ■ **Using this terminal, one can order, change and cancel already ordered meals** ■ **Universally manufactured membrane keypad allows to input user-defined descriptions of the keys to quick-select the order** ■ **It works with both chips DALLAS and contactless media** ■ **When used as the distribution terminal, it accommodates all the necessary distribution management functions** ■ **Terminal controls among others the issue display LED101, which displays the information for the serving personnel in a transparent and clear way.**

Product Code	Description
RT310	Contact Catering Terminal, RS232/RS485
RT310-TCP	Contact Catering Terminal, ETHERNET interface
RT310B	Contactless Catering Terminal, RS232/RS485
RT310B-TCP	Contactless Catering Terminal, ETHERNET interface
RT310W	Catering Terminal for any reader connection, RS232/RS485
RT310W-TCP	Catering Terminal for any reader connection, ETHERNET interface
LED101	Display with LED characters 1x100 mm and 4x38 mm

Anyone of RT310, RT310-TCP, RT310W, RT310W-TCP, equipped with external reader, can be used as distribution terminal.

TERMINALS 19

Features

→ Color TFT display 320 x 240 dots
→ Display layout customization possibility
→ Graphical symbols for operations
→ Worktime information displaying with up to 5 individual data (balance, extra hours, etc.)
→ Membrane keypad with 8 + 15 universal buttons
→ Integrated ID reader
→ Second ID reader connection port
→ PIN-entry option
→ Beeper
→ 2 relays for doorlock control
→ 2 input lines for door contact
→ Universal PGM output
→ Line-out for EZS control
→ OFF-LINE event log

KT600B-TCP

Comfort terminal with color graphical display ■ **It is used among others, to record the attendance or collect the data in production facilities** ■ **The display can be user configured (own logo, text)** ■ **Universally manufactured membrane keypad allows to input user-defined descriptions of the keys to quick-select the desired operation** ■ **Terminal is capable of displaying up to 5 individual data concerning the particular card** ■ **Internal relay can be installed to control internal doorlocks.**

Product Code	Description
KT600B-TCP	Contactless Attendance Terminal, ETHERNET interface RS232/RS485 ports for other peripheries connection
KT600W-TCP	Attendance Terminal for any readers connection, ETHERNET interface RS232/RS485 ports for other peripheries connection
KT600T-TCP	Contactless Collection Terminal for Order Management, ETHERNET interface, RS232/RS485 ports for bar code reader or printer connection

Specific modules for Wi-Fi and/or portable USB flashdisk communication are available (see p. 35 for details).

FT500F-TCP

FT500B-TCP

Ground-breaking solution in attendance terminal field ■ **Various terminal statuses are indicated by changing backlight color of the display, which guarantees fast and clear communication with the user** ■ **Identification is carried out via fingerprint scan or contactless ID media** ■ **Maximum security and reliability of identification provided by combination of fingerprint+card is also available** ■ **Universally manufactured membrane keyboard allows to input user-defined descriptions of the keys to quick-select the desired operation.**

Product Code	Description
FT500B-TCP	Contactless Attendance Terminal, ETHERNET interface
FT500W-TCP	Attendance Terminal for any reader connection, ETHERNET interface
FT500F-TCP	Biometric Attendance Terminal, ETHERNET interface Dual construction (biometric, card)

Terminal always contains RS485 port as well to facilitate the connection of other modules. Module for Wi-Fi connection is optional (see p. 35 for details).

Features

→ Graphical display 168 x 64 dots
→ Multicolor backlight
→ Display layout customization possibility
→ Worktime information displaying
→ 14 universal operations' buttons
→ Separate numeric keypad
→ Integrated ID reader
→ Second ID reader connection port
→ PIN-entry option
→ Dual function – fingerprint+card

GT800 TOUCHSCREEN TERMINALS

PC-TOUCH

GT800

Features

→ Graphical touch screen display 5,7" – 17"
→ 400 MHz – 1 GHz CPU
→ Application stored on either SD card or HDD
→ User-defined design option (GT800)
→ OS Windows
→ Several applications possibility (attendance, meal ordering)
→ Integrated ID reader
→ Many ports for peripherals connection
→ Wall-mounting
→ ON-LINE operation

Modern terminals, based on PC architecture and equipped with card reader ■ Touchscreen display provides broad range of possibilities in user interface creation and simplifies control to touching the function icon on the screen ■ Yet another advantage of these devices is the possibility to run several applications and switch between them ■ The attendance and catering systems are typical implementations, as these need to monitor attendance and order meals using one device for maximum user comfort.

Touchscreen terminals will find their use also in Smart House Systems – as central controlling and visualizing unit.

Product Code	Description
GT800	Attendance PC Terminal with inside contactless reader, ETHERNET CPU 300/400 MHz, display 5,7", Flash or SD memory for applications
GT810	Catering PC Terminal with inside contactless reader, ETHERNET CPU 300/400 MHz, display 5,7",Flash or SD memory for applications
GT830	Attendance and Catering PC Terminal, combination GT800+GT810
PC-TOUCH	Compact PC Touch Terminal with card reader, wall-mounting holder Display 15"-17", CPU/RAM according to actual offer, HDD Used in the catering systems for food order and access to INTRANET, as a cashier terminal with various possibilities of POS equipment connection

PC-TOUCH terminal is supplied with installed operation system only.
Other needed applications are necessary to be ordered separately.

PDA

Features

→ Graphical touch screen display with 4" or more
→ 600 MHz or higher CPU
→ 32+ MB RAM
→ Internal flash memory stored applications
→ OS Windows
→ Wi-Fi or Bluetooth connection to the database
→ Charging power adapter
→ CF or SD slot connected ID reader
→ Both ON-LINE and OFF-LINE operation

CF READER

PDA

Portable PDA terminal, equipped with card reader, serves to record attendance and personnel monitoring in large facilities and campuses ■ Vehicle yards and detached security posts are typical examples of such ■ It is also valuable in such places, where installation of classic terminal is impossible ■ Unit is controlled by the touchscreen display and running application providing ON-LINE link to the system ■ Battery operation and OFF-LINE operation modes accommodate for broad spectrum of field data collection uses.

Optionally usable in hotel system as "mobile waiter".

Product Code	Description
PDA	Mobile PDA Terminal with CF or SD slot, according to actual offer
CF READER	Contactless Reader for CF slot
SD READER	Contactless Reader for SD slot
SW_PDA	Software application for connecting to central database of attendance system

TERMINALS 23

SD110

LOGGING TERMINAL

Features

- → 3 characters LED display
- → Numeric keypad
- → External ID reader port
- → Beeper
- → OFF-LINE event log
- → Memory space indication
- → Either wall or dashboard mounting kit
- → 12-24V power supply

SD110

Special terminal intended to log the employees during bus commuting to work ■ The use as simple distribution point terminal (issuing single meal) for catering systems is also possible ■ Pronounced display providing good readability in any condition ■ Numeric keypad for easy operating.

Bus transport recording work principle: The bus driver enters the current price or fare into the terminal in each stop. Employees are identified by their ID medium and collected data are transferred into wage processing system to realize each employee's wage deduction. It is also possible to pre-charge the cards with credit – such solution allows the ride only to those with sufficient credit balance. Data transfer is carried out by connection with PC or Wi-Fi networking.

Product Code	Description
SD100	Terminal for bus transport recording, RS232 interface, without reader
SD100-WiFi	Terminal for bus transport recording, WiFi connection, without reader
KABEL1	Wiring for connection of terminal and reader through dashboard lighter socket
KABEL2	Wiring for connection to PC through RS232, power supply including
SD110	Distribution Terminal for catering system, RS232/RS485, without

Recommended reader type: EDK2B-LED or EDK2-LED.

RS232
RS485

WiFi

EDK2

EDK2

EDK2B

Both contactless media and contact chip reader for general indoor use. Option to choose color finishing. Fitted onto installation box KU68. Easy wiring connection using hub. Acoustic and optic signalization.

Optional output data format ACS-line or WIEGAND, desired mode is selectable directly on the device.

Readers can also be provided with output for connection via RS485 bus or 1-wire bus DALLAS in order to substitute the sensing head, e.g. GPS unit for vehicle monitoring (EDK2).

Product Code	Description
EDK2	Contact DALLAS chips Reader, white or black
EDK2B	Contactless Reader, white or black
ARD2B	Contactless Reader on DALLAS bus line

CERTIFIKOVÁNO
NBÚ

EDK2-OEM

EDK2B-OEM

EDK2B-OEM-ABB
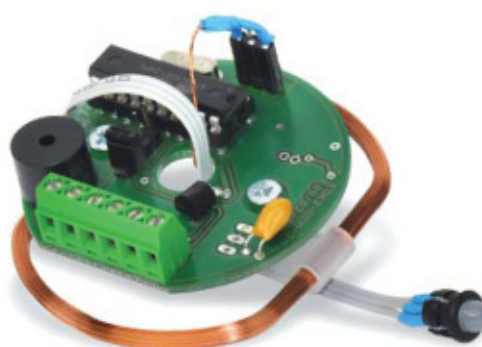
Contactless media reader, intended to be built-in into any casing. It was developed in order to provide total freedom of choice of design to correspond to for example already used facility interior design. It is also possible to build it in covertly into the wall. It keeps all the features of basic EDK2 reader.

In-building examples

Product Code	Description
EDK2-OEM	Contact DALLAS Chips Reader, universal for KU68
EDK2B-OEM	Contactless Reader, universal for KU68
EDK2B-OEM-ABB	Contactless Reader, for ABB casing

Readers can be ordered separately or already built in required casing.

EDK2-KPA VANDAL-PROOF READER

Both contactless media and contact chips reader for outdoor use. Very resistant to damage due to special matter filling the casing of the reader.

Casing IP 56 enables direct use of the reader outdoors. Increased reading distance (up to 20 cm) – device is suitable for parking entries and similar deployment. Fitted on any surface.

Optional output data format ACS-line or WIEGAND, desired mode is selectable directly on the device.

CERTIFIKOVÁNO
NBÚ

EDK2B-KPA   EDK2-KPA

Product Code	Description
EDK2-KPA	Contact DALLAS Chips Reader, vandal-proof construction
EDK2B-KPA	Contactless Reader, vandal-proof construction

OTHER READERS

This assortment of readers is intended for applications, which require higher ID technology in order to provide better security or to make use of existing cards.

They are mounted on any surface and are suitable for both outdoor and indoor use. Data output format is WIEGAND 26-42.

Any ACS-line system unit flagged "W" can host such reader.

HID   LRR-W

Product Code	Description
LRR-W	Contactless Long Range Reader, 0.7 - 6 m, WIEGAND
MIFARE	Contactless Reader MIFARE, WIEGAND
MOTOROLA	Contactless Reader MOTOROLA, WIEGAND
LEGIC	Contactless Reader LEGIC, WIEGAND
HID	Contactless Reader HID, WIEGAND

The list is only an excerpt from the wide range of readers. We are capable of delivering any reader according to either required or already used technology.

BIOMETRIC READER | EDK2-F

EDK2-F

Fingerprint reader for access systems. Optical sensor and advanced algorithm guarantee highly reliable and fast evaluation.

Always works in cooperation with processing unit, such as AL40. Possibly fitted on any surface, solid construction enables outdoor use, device must, however, be protected against water.

Product Code	Description
EDK2-F	Fingerprint Reader
EDK2-F-W	Fingerprint Reader, WIEGAND output

READER WITH KEYPAD | EDK3

EDK3B

We prepare a new version to be launched in fall 2009.

EDK3B

Both contact and contactless media readers, equipped with PIN keypad. In such systems, where higher level of security is required, it is necessary to enter 4 digit PIN code in addition to card identification.

Acoustic and optic signaling. It is mounted on any surface and wiring is handled and connected easily using a terminal board.

Product Code	Description
EDK3	Contact DALLAS Chips Reader with keypad, indoor – white
EDK3B	Contactless Reader with keypad, indoor – white
EDK3-C	Contact DALLAS Chips Reader with keypad, outdoor – black
EDK3B-C	Contactless Reader with keypad, outdoor – black

EDK2-LED — READER WITH DISPLAY

Both contactless media and contact chips reader with double-digit LED display. Terminal is used mainly in catering systems – shows the number of issued meal or distribution point.

In commuting system, it displays current tariff or fare, apart from reading ID media. Fitted using supplied holder.

EDK2B-LED

Product Code	Description
EDK2-LED	Contact DALLAS Chips reader with display
EDK2B-LED	Contactless Reader with display

EHS — ENERGY SAVER

Energy saver is a device, which allows action execution by entering the card into the slot. Such action is then maintained during the time the card is entered in the device. The saver is equipped with card reader and thus cannot be fooled by entering a piece of cardboard, for example.

Typical uses include hotel rooms, where the on status of electric devices is allowed only in presence of the guest, or to control the lights in meeting room based on number of personnel in it. The saver always works with processing unit, such as AL40 and is mounted onto installation frame KU68.

EHS2

EHS3

In-building examples

Product Code	Description
EHS2	Energy Saver with contact and light indication
EHS2B	Energy Saver with card reader
EHS3	Energy Saver with contact, for ABB covering
EHS3B	Energy Saver with card reader, for ABB covering

ACCESS TERMINAL LOG3

LOG3

LOG3

*We prepare a new version
to be launched in fall 2009.*

NBÚ

Module for control and operation of entry points using chips Dallas or contactless media. Compact device for building the access system, as the device is actually a processing unit with built-in reader. Terminal is equipped with relay for direct doorlock control. It is also possible to connect second reader to achieve a both ways operation. Access rights assignment and event log available via service software in computer.

Features

→ Integrated ID reader
→ Second ID reader connection port
→ Indication diodes
→ Beeper
→ Relays for doorlock control
→ Input lines for door contact
→ PC communication
→ OFF-LINE event log

Product Code	Description
LOG3	Contact Access Terminal, RS232/RS485
LOG3B	Contactless Access Terminal, RS232/RS485

STAND ALONE OPENER LOG2

LOG2B

LOG2B

*We prepare a new version
to be launched in fall 2009.*

Autonomous electronic device to control entry points using DALLAS chips or contactless media. Work totally separately without the computer connection. It is programmed using master card or chip, with authorized keys being stored in internal memory. Suitable for offices, workshops, warehouses, even family houses – especially in such places, where computer connection is not possible.

Features

→ Integrated ID reader
→ Second ID reader connection port
→ Indication diodes
→ Beeper
→ Relays for doorlock control
→ Input lines for door contact
→ No PC communication

Product Code	Description
LOG2	Contact Stand Alone Opener
LOG2B	Contactless Stand Alone Opener

AL40 — CONTROL UNIT FOR 4 READERS

Features

→ 2 ports for connection of up to 4 readers
→ Possibility to connect PIN readers
→ Anti-pass-back function
→ Diagnostic LED diodes
→ 4 relays for doorlock control
→ 2 input lines for door contact
→ 2 line in connections for exit button
→ Programmable PGM output
→ Outputs for EZS control
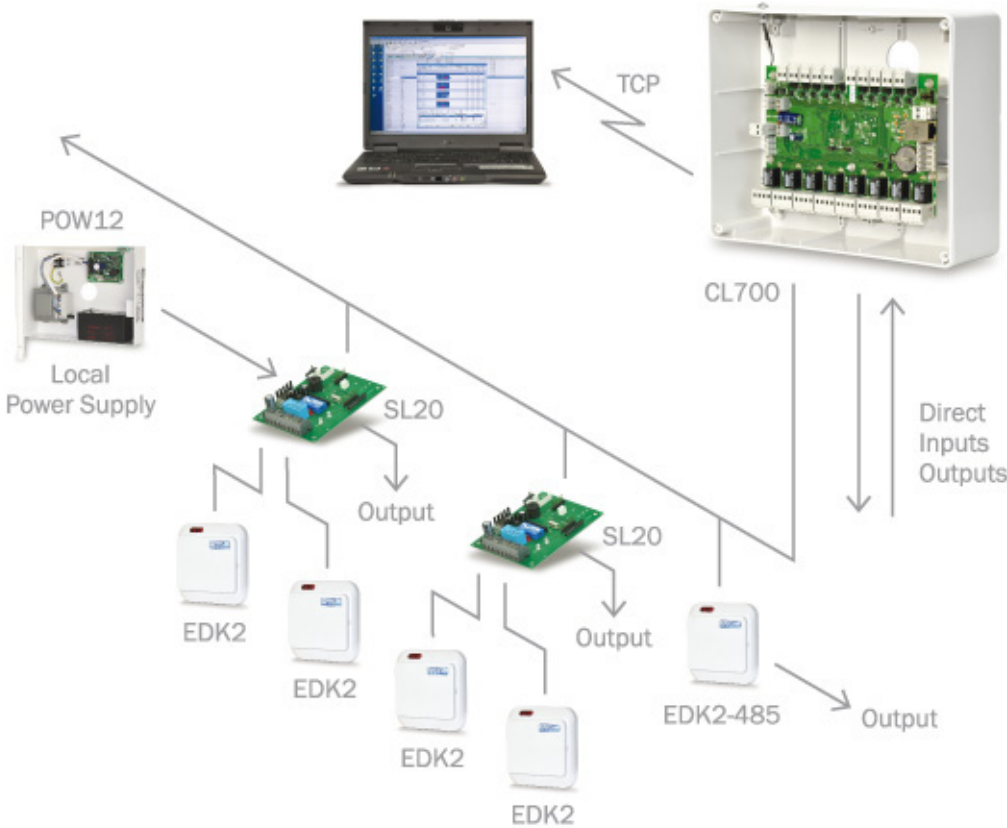→ Tamper contact against case opening
→ OFF-LINE event log

AL40

Operates 2 both ways entrances or up to 4 separate one-way entrances ■ Universal use for building of medium sized access systems ■ Up to 4 EDK2, EDK3 readers or any 2 readers with WIEGAND protocol can be connected ■ Output relays control the doorlocks or turnstiles directly, whereas inputs enable signaling and monitoring of status of doors in question ■ All the configuration and control is handled from the PC ■ Access rights are defined by time windows, providing for limitless access rights assignment possibilities.

Product Code	Description
AL40	Control Unit for 4 readers (EDK2, EDK3), RS232/RS485
AL40-TCP	Control Unit for 4 readers (EDK2, EDK3), ETHERNET interface
AL40W	Control Unit for 2 readers WIEGAND, RS232/RS485
AL40W-TCP	Control Unit for 2 readers WIEGAND, ETHERNET interface
AL40F-TCP	Control Unit for 2 biometric readers, ETHERNET interface

LAN | RS232/RS485
USB | R4
WiFi | CERTIFIKAČNÍ NBÚ

POW12

Local
Power Supply

TCP

CL700

SL20

Output

SL20

Output

EDK2

EDK2

EDK2

EDK2

EDK2-485

Output

Direct
Inputs
Outputs

Features

→ Connection of up to
  32 readers
→ Reader distance
  up to 1,200 m
→ Diagnostic LED diodes
→ Universal internal relay
→ Inputs for door contacts
→ Inputs for exit buttons
→ Programmable PGM outputs
→ Outputs for EZS control
→ Tamper contact against
  case opening
→ Both ON-LINE and OFF-LINE
  operation

Central processing unit for building large scale access systems ■ **Also usable as a controller for minor bus RS485, able to house up to 32 readers** ■ **Doorlock control relays are located in readers or in separate door modules to achieve greater security** ■ **Allows ON-LINE monitoring or remote control for each entry point** ■ **All the configuration is done from PC via LAN network** ■ **Typically used in office buildings with many entrances or hotel access systems** ■ **Works with any ID media according to connected readers.**

Product Code	Description
CL700	Control Unit for 16 readers on RS485 or up to 32 EDK readers via door modules SL20, ETHERNET interface
EDK2B-485	Contactless Reader for connection on RS485 bus, indludes internal relay
SL20	Door Module for connection of 2 EDK readers or 1 WIEGAND reader on RS485 bus, 2 relays, input for door contact, local power supply possible

RS232
RS485

LAN

R8

WiFi

AL20

Features

→ Port for connection of up to 2 readers
→ Diagnostic LED diodes
→ Possibility to connect PIN readers
→ Anti-pass-back function
→ 2 relays for doorlock control
→ Inputs for door contacts
→ Inputs for exit buttons
→ Programmable PGM output
→ Outputs for EZS control
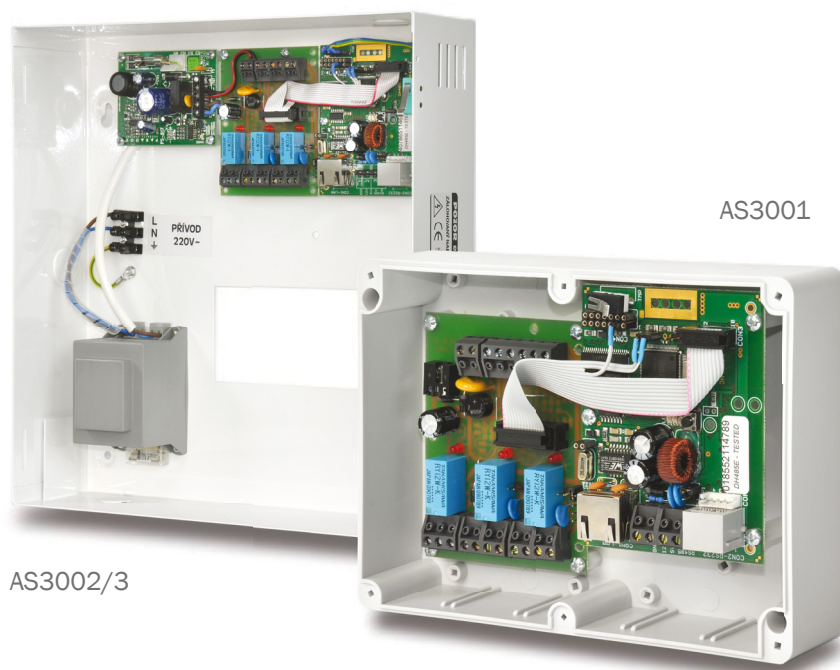→ Tamper contact against case opening
→ OFF-LINE event log
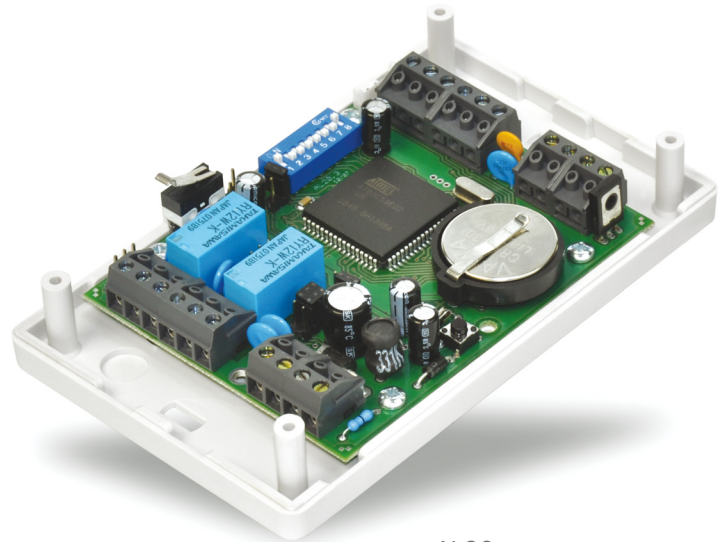
AL20

This processing unit can handle 2 one-way entry points or one both way one and as such is universally usable when designing and building small access systems and large ones as well ■ Two EDK2 readers or one WIEGAND protocol reader can be connected to this unit ■ Output relays control the doorlocks or turnstiles directly, while the inputs allow monitoring and signaling of door status ■ Any configuration happens from the computer ■ Access rights are defined by time windows, providing for limitless access rights assignment possibilities.

Product Code	Description
AL20	Control Unit for 2 readers (EDK2, EDK3) or 1 WIEGAND RS232/RS485 communication
AL20-TCP	Control Unit for 2 readers, ETHERNET interface

When making the order, it is not necessary to differentiate the reader connection.
The selection of connected reader is made at the point of installation by a switch.

LAN R2
RS232 CERTIFIKAČNÍHO
RS485 NBÚ

AS3000

AS3001

AS3002/3

Features

→ Capacity of up to 1,000 users
→ Possibility to connect
   2 readers
→ Various identification
   types (chip, card, fingerprint)
→ Inputs for door contacts
→ Communication
   via ETHERNET
→ Safety case
→ Tamper contact against
   case opening
→ Event log
→ 3x universal relay
→ No need for special SW

Compact electronic system to control entrance into condos and other common spaces ■ **Suitable for houses, offices, driveways or lifts as well** ■ **It is possible to connect up to 2 readers for independent control of two entrances (AS3003)** ■ **Two relays control doorlocks, the third one is for lighting control or for alarm to signal forceful breach, for example** ■ **Integrated web server to allow easy access to card rights assignment and configuration** ■ **Also programmable using master card or chip without the need of computer connection.**

Can be operated with either of two power supply options – 230 V with internal accumulator backup, or 11-20V AC/DC for easy integration into existing doorbell systems.

Product Code	Description
AS3001	One Door Set, contact identification, external power supply necessary, IP56 casing
AS3002	One Door Set, contact identification, including backed-up power supply
AS3003	Two Doors Control Unit, including backed-up power supply, without reader Up to 2 readers EDK2 or 1 any WIEGAND reader can be connected

Wiring for connection to PC is included in the delivery. Backed-up power supply for AS3002, AS3003 is sold separately .
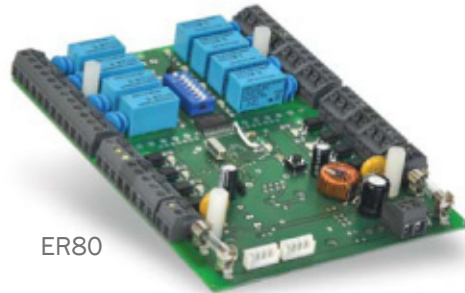
LAN

RS232

R3

ER80 — I/O EXPANDER

Features

→ 8x universal relay
→ 8x universal input
→ Indication diodes
→ Connection
  for tamper contact
→ Board stacking possibility
→ PC communication
  also possible
→ Wiring connection
  is included

Typical usage of the module is to control lifts or lockers.

RS232
RS485

LAN

R8

ER80

Expansion module for either processing units or attendance terminals. Expands the number of inputs and outputs and thus simplifies control. Up to 4 ER80 modules can be connected to each supervising unit expanding the number of input ports and output relays to 32 of each. These ports can be programmed separately and assigned logical functions.

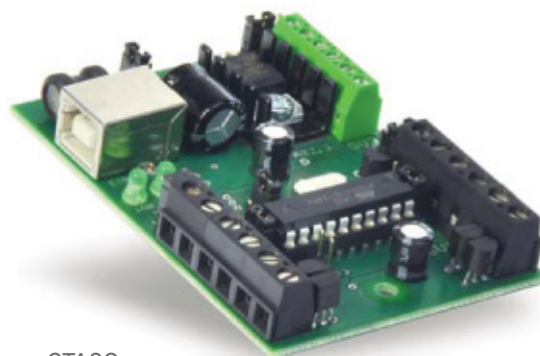| Product Code	Description
ER80	Expander for connecting to master unit (eg.: AL20, AL40, RT300, KT600)
ER81	I/O Module with RS232/RS485 interface, autonomous operation, management through PC
ER81-TCP	I/O Module with ETHERNET interface, autonomous operation, management through PC

CTA02 — READER EXPANDER

Universal module for either connection of several readers to single processing unit's port or data format conversion.

Any 2 readers can be connected to inputs of the module, the ouptut will then provide data in ACS-line formats or for processing in computer via either USB or COM port.

Module is also capable of serving as router on long lines and thus expand the distance between processing unit and readers.

CTA02

Product Code	Description
CTA02	Expander for ACS-line readers, RS232/USB interface
CTA02W	Expander for WIEGAND readers, RS232/USB interface

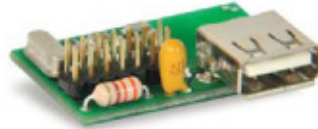Input and output data format can be customized on-demand.

EXTENSION MODULES

WPORT   OTX1   UPORT

Additional modules are aimed to be installed into dedicated slot in attendance terminals or access point units to expand their possibilities in special applications.

Only one extension module can be installed into each terminal. Modules OTX and OEZS cannot be combined with ER80 connection

Product Code	Description
OEZS1	Extension Module to connect EZS via WIEGAND interface. Used to transfer card code into EZS central, where actions along set access rights are executed. E.g., Upon first employee's arrival, the facility is de-securitized. The central must be equipped with WIEGAND reader connection port.
OTX1	Extension Module for data output via RS232C interface. This module can send data about particular ID medium and person's name for further processing. Typical usage: For internal camera system, where it automatically feeds the subtitler the name of passing person. Such person's name is then displayed and recorded to the tape.
OCAM	Extension Module for Attendance Terminals for recording of identified person. This module uses a camera to watch identified person and stores the data in the database for later checking. ON-LINE monitoring via web browser is also available.
UPORT	Extension Module for OFF-LINE USB flash communication. The usage is intended to be in remote facilities, where the attendance has to be recorded without PC. The data from the terminal are stored to the USB flashdisk and later loaded into attendance program running on any available computer.
WPORT	Extension Module for communication via Wi-Fi. Complete module incl. AP-linking antenna for connection to any Wi-Fi AP. Further communication is carried out as if the device was connected via standard TCP protocol.

Examples of Peripheries

MODULES FOR SPECIAL AND CUSTOM APPLICATIONS

Product Code	Description
RDM2	Random employee control generator. The module gets installed between terminal and turnstile and based on pre-set settings, randomly chosen percentage of employees is selected for scrutiny.
GSM	Extension module capable of sending SMS to chosen phone numbers. (The module sends a SMS if the pupil doesn't come to school, for example).

PERIPHERALS

Additional devices for ACS-line systems. Devices to work with barcodes mainly in either catering or stock management applications or in data collection systems.

Available according to actual offer.

Cards, chips and fingerprints Table readers for connection to computer.

They are used to enter ID data into database as well as help with everyday tasks such as fast searching. Issuing visitor's cards or keycards at the front-desks in hotel systems is yet another use for these readers. In catering systems, they can be used to carry out payments for taken meals.

They use the USB or COM port for computer connection.

RD3   RD3B   RD3F

Product Code	Description
RD3	Contact Table Reader, USB connection
RD3B	Contactless Table Reader, USB connection
RD2	Contact Table Reader, RS232, external power needed
RD2B	Contactless Table Reader, RS232, external power needed
RD3F	Biometric Table Reader, USB connection

It is also possible to order SW driver, which allows scanning ID media wherever necessary for further processing.

DATA CONVERTERS

Data converters play a very important role in ACS-line systems. They accommodate system bus signal transfer to standard computer interface signals, allowing ACS-line system modules, which operate on RS485 bus, to be connected directly to the computer or computer network to accommodate data transfer and processing.

If only 1 device is connected over the distance of less than 15 m, there is no need to use a data converter, as the device can be connected to COM port of the computer.

DH485   DU485

Product Code	Description
DL232	Converter RS485 – RS232, with CANON 9 cable
DU485	Converter RS485 – USB, including cable and driver for WINDOWS
DH485	Converter RS485 – ETHERNET

TIP: Any TCP interface device can be also used as DH485 data converter. Such a device is always connected to LAN and other modules can be connected to its internal RS485 port, just like to data converter DH485.

Intended to supply power to all the ACS-line system components. Internal backup accumulator (sold separately) provides for uninterrupted system functioning in the power fail situation. The power supply automatically manages the recharging of the accumulator. Backup energy time is dependant on both capacity of the supply and number of connected devices.Supplies are designed to guarantee reliable functioning of the ACS-line system as well as any other use.

Features

→ Input power supply 230V AC
→ Output 13.8V DC
→ Indication diodes
→ Surge and short circuit protection
→ Automatic charging of the accumulator
→ Tamper contact in cover
→ Possibly equipable with OBZ01 module

POW12-1.7

POW12-6

POW12-1.2

Product Code	Description
POW12-1,2	Backed-up Power Supply 12V-1.2 A Recommended battery 12V/1,3 Ah
POW12-1,7	Backed-up Power Supply 12V-1.7 A Recommended battery 12V/7.5 Ah
POW12-6	Backed-up Power Supply 12V-6 A Recommended battery 12V/18 Ah
TP1213	Maintenance-free Accumulator 12V, 1.3 Ah
TP1275	Maintenance-free Accumulator 12V, 7.5 Ah
TP12180	Maintenance-free Accumulator 12V, 18 Ah
OBZ01	Accessory for power supplies, the battery status checking, remote monitoring, system shut-down in conjunction with EPS

OTHER POWER SUPPLY ELEMENTS

For simple applications or such ones, where no backup is needed, simple power supplies with output voltage 12V and required current capacity can be used.

Product Code	Description
SZ12-4	Power Adapter 12V/200 mA
SYS1196	Power Adapter 12V/500 mA, switched
SYS1308	Power Adapter 12V/2 A, switched
SYS1183	Power Adapter 12V/5,4 A, switched
RM201	Hub Module to RACK for terminals power supply via ETHERNET
CON-RS232	Reduction RJ45 – CANON 9 for power supply connection

TURNSTILES

Features

→ One or bi-directional modes available
→ Robust construction
→ Finish: stainless steel and/or komaxit (RAL)
→ Arms always of stainless
→ Anti-panic function optional
→ Both optical and sound signalization of free passage
→ Signaling of allowed passage direction
→ Equipable with card eater box
→ Possibility to connect coin storage and/or readers for ticket systems.
→ All EU certification

CE

Electromechanical turnstiles and gates are used as a component of attendance and access systems to accommodate controlled person movement. Installed in factory gatehouses, premises entrances or sporting facilities (pools, stadiums, etc.), turnstiles either provide and direct the passage of each individual, or serve as a security elements to deny access.

The function depends on configuration. At the same time, each person's passage is logged using the ID media, providing for collection of complete attendance data.

Turnstiles are controlled via output relays of attendance terminals or access units. This page shows basic options and types of turnstiles and other mechanical security facilities. Mechanical finishing just as well as color is manufactured based on customer's order.

Product Code	Description
ATR8xx	Bidirectional Tripod Turnstile, product line 800
ATR9xx	Bidirectional Tripod Turnstile, product line 900
ATLX	Bidirectional Revolving Turnstile
ATB6xx	Full-height Turnstile
ATR102	Hand railing, stainless or komaxit, section 1,000x900 mm
ATL900	Electromechanical walk-through gate
AG500, AG800	Automatic bar, length of arm up to 9 m

Further information to be found in separate catalogue.

Turnstiles are manufactured in various construction, depending on usage. E.g. full size turnstiles serve to ensure entry without security personnel. Electromechanical gates allow entry for visitors or barrier-less entry. We also supply various types of entry gateway control, including gateway manufacturing, and bars for parking entry.

Various types of mechanical accessories to limit the controlled area are also available. These include various types of railings, fillings and anchoring components, manufactured in either standard proportions or customized to particular situation. Materials: stainless steel, komaxit or safety glass.

| Tripod turnstiles | Revolving turnstiles | Full-height turnstiles | Gates, railings | Bars, pillars |

DOORLOCKS

OCx6541M

OC30102

41N FLEX

Electrical doorlocks (openers) block doorway entry points in access system platform. Doorlocks are installed directly into doorframe or door leaf. Any electronic unit can control the lock (access point reader, phone handle) or simple button control.

Locks are supplied for 12V or 24V DC/AC voltages. Straight or edge install bars in various colors are available for each type.

Product Code	Description
OC30102B, E	Standard Electric Opener (B), low-power (E)
OC34102E	Reverse Electric Opener, low-power
OCx6541M	Higher Strength Electric Opener, 1,000 kg, state of the door signalization
SE00249/1	Electric Opener with state of the door signalization, low-power
41N FLEX	Electric Opener for narrow profile, 16.5 mm
ME400	Electromagnet for door blocking
SZEP	Box Electric Lock (lockers, cabinets)
SZ	Electromechanical Lock, including safety fittings

Basic types of door openers. Complete range can be found in a separate catalogue.

ACCESSORIES

MC110

KRYT_RT

KV50

CXM/G

MP61

PG07

Product Code	Description
CXM/G	Panic Escape Button, green, surface mounting
PG07	Exit Button, metal, half-sunk-mounting, LED backlight
TV80	Confirmation Button for catering systems
MP61	Confirmation Button for catering systems, treading
ART	Key Box with hammer, surface mounting
D21	Build-in DALLAS chips Contact Sensor

D21

MA3

CABLES

Product Code	Description
MC110	Metal Pillar for reader mounting, height 1.2 m, komaxit
MC220	Metal Pillar for reader mounting, height 2.2 m, komaxit
MA3	Holding Set for pillars MCxxx
KRYT_RT	Outside Covering for terminals RT, KT, stainless
KV50	Console for catering terminal mounting, stainless
CABLES	Data cables

STANDARD TYPES

Contactless Tags   Contactless Cards   DALLAS Chips

Product Code	Description
ID_KEY	Contact Chip DALLAS DS1990A-F5, including plastic key holder
ID_KEY_F3	Contact Chip DALLAS DS1990A-F3, including plastic key holder
ID_CARD	Contactless Card EM4102 – 125 KHz, ISO, 0.8 mm, white
ID_CARD_II	Contactless Card EM4102 – 125 KHz, 2 mm, white, hole for attachment
ID_KEYFOB	Contactless Tag EM4102 – 125 KHz, various colours and shapes
ID_WRB	Contactless Bracelet for pools and saunas, various colours and types
ID_LABEL	Contactless Identifier – adhesive foil, various proportions
ID_ABS_TAG	Contactless Tag for guard systems, wall mounting

Various types of contactless media

OTHER AND SPECIAL TYPES

Various shapes and types of contactless ID media can be supplied, equipped with any chip for 125 kHz or 13.56 MHz frequencies, various colors, printing possibilities and e.g. epoxide tags with company logo.

ACCESSORIES

Accessories are available for the ID media to provide easier and/or safer manipulation. These include various sleeves with clip or hole to fit the rope, necklaces with possibility of company-print on it or rollers.

Accessories

CARD CUSTOMIZATION

Suitable card usage expansion is their upgrade to personal pass or company label tag. ID cards are supplied white, without print only with number to differentiate cards. Each card can, however be printed with company logo and information or even employee's picture. The print can also be done via stickers, allowing the card to be used for another employee.

CARD PRINTING FACILITY

For larger installations, the full equipment for setting up and operating of card printing facility is supplied. In other cases, printing is provided as part of delivery and later as external service to manufacture new cards. Ask for complete offer incl. graphical design.
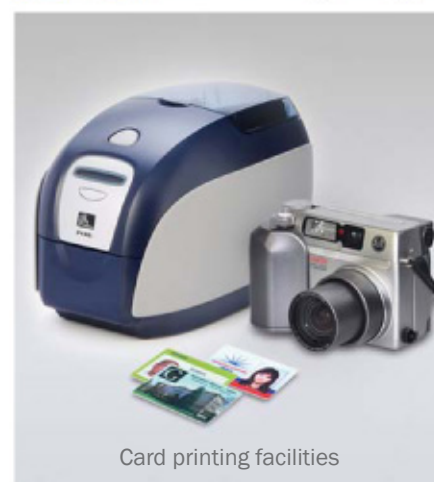
Card printing facilities

TECHNICAL SPECIFICATIONS

Only basic parameters of terminals, processing units and readers of the ACS-line system are listed here. You can find detailed information in separate technical sheet of particular device. Given data is valid for all the devices, unless stated otherwise by the product. The DoC (Declaration of Conformity) and certificates regarding all the components are available at the system manufacturer.

HARDWARE

Power Supply
Power supply of all the products is 12V DC. Power current and other specifications are available in the data sheet of particular product.

Installing
Most of the devices are mounted on the wall or any other surface using screws. If there is a special mount needed, it is always included in the delivery. Some of the readers are intended for half-sunk or sunk mounting. In such case, mount points correspond to standard KU68 mount box.

Operating conditions
All the devices are supposed to operate in temperatures ranging from -20°C to +50°C. Devices can be mounted outdoors, it is however, necessary to protect them from weather effects. Mounting point should be protected by either roofing or special covers from the accessories range of ACS-line system.

Identifier types
Standard: Contactless EM4102 – 125 kHz, contact DS1990A-F5, DS1990A-F3
Optional: Contactless MIFARE (ISO14443 A/B), HID Prox, HID iCLASS, MOTOROLA, LEGIC, HITAG, PosiProx, TIRIS, ISO15693, international standard ISIC is also supported.

Reading distance of common readers ranges from 5 to 20 cm, depending on used type of reader and/or media. Using some of the readers, distances of 1m+ can be achieved.

Capacity
All the devices are equipped with internal memory for OFF-LINE operation. Thus, they can operate without permanent connection to controlling computer. OFF-LINE memory capacity is 10,000 data items. Personnel and access rights storage capacity varies from 500 to 10,000 items, depending on the device type.

Connectivity
Connection between HW units and PC: RS232, RS485, USB, ETHERNET 10/100, WiFi

Various Options of Connection
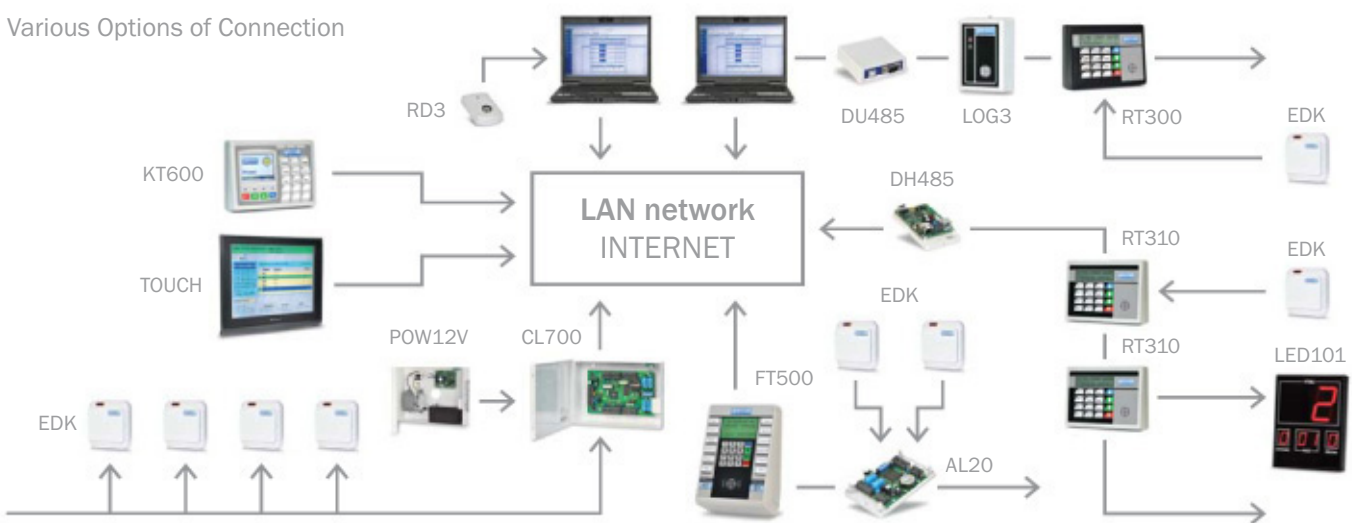
Individual ACS-line system components can be networked to design large systems. It is possible to combine both various terminals and various connections within one installation. The data from the whole system are always stored in central database, where the processing thereof is conducted. It is for example possible to record coming and leaving on two separate terminals. Countless settings allow defining of which passages will affect attendance and which serve just for monitoring.

SOFTWARE

The collection of required software for data management and evaluation is the list of applications working in 2000/XP/Vista operation systems on database platforms:

→ Microsoft Access
→ MSDE 2000, 2005 (Express Edition)
→ Microsoft SQL 2000, 2005 Server
→ Firebird and Interbase for Linux/Win32
→ Sybase
→ Oracle 9, 10

As stated in the beginning of this catalogue, ACS-line system is a set of separate programs implemented for particular application of the system. Each of such programs is a full scale application for independent operation. Thus, if the user runs the catering system only, he or she is not bothered by a number of functionalities needed for attendance system. If, however, there are several modules installed together, they share data on the database level and any data changes affect the whole system directly.

NETWORKED OPERATION

Depending on the installation size, several users can be allowed to work with the software. Programming architecture is client-server. In order to operate in networking environment, the product is installed only once in the central server (or separate dedicated computer). Each of the networked users then executes separate instance using desktop shortcut in his or her workstation. It is also possible to use "light clients" to access the data via web browser within LAN network or even internet.

FUNCTIONAL STRUCTURE OF THE SOFTWARE
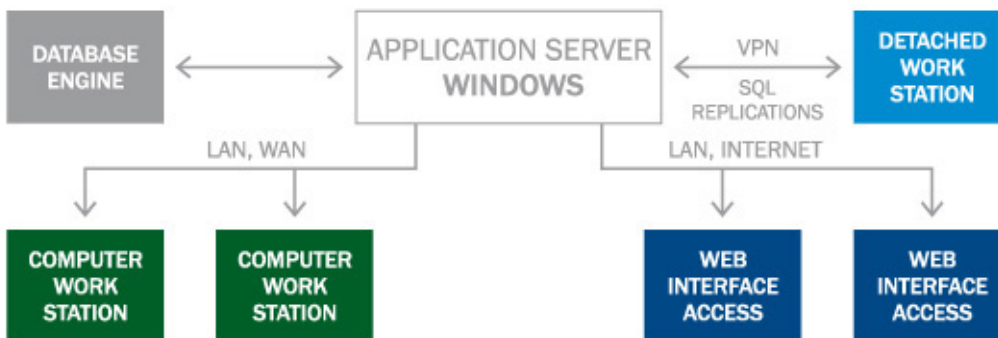
LICENSING

Each program is licensed based on total number of users (amount of cards). Only the active cards are counted against this total. Basic licenses are described in individual systems chapters. In the future, the range can be extended by purchasing license for another users.

Furthermore, the number of licensed network clients is dependent on purchased license. Basic SQL version comes with 2 network licenses, with options to be expanded to either 5 clients or limitless number thereof. We are referring to floating licenses, considering the number of concurrent users. Program access can be assigned for countless users from various computers, it is however possible in case of license for 5 network clients, that only maximum of 5 people work with system at the same time. Number of clients accessing the system from web interface is not limited.

SECURITY

In human resources systems, sensitive personal data of many personnel is processed. That is why the access into program is protected by username and password. Each of the usernames has a set of assigned access rights defining what functionalities he or she can apply to what extent of data (shift leader sees only his shift member's data). Another unique feature of the system is detailed system of access rights to the database, allowing to hide birthdates of people to certain users, for example. Each alteration in the system is recorded and tagged in order to check later who did the change.

SERVICES AND REFERENCES

SERVICES

Providing complex services from designing all the way to final realization of the system, reliable service and consulting is a must. The users of the system can rely on long-term experience with legislation application in order to achieve the best possible configuration of their system. Deliveries and installing of the ACS-line system is carried out by a network of partners and wholesale distributors in all regions of Czech Republic, in Slovakia, Germany and Poland.

REFERENCES

ACS-line system has already been applied in more than 1,500 instances of various focus and scope. Among the important clients of this company, are large multinational corporations, prosperous Czech enterprises, state institutions, offices, city administrations as well as many small and medium companies in various fields.

Up to date overview of reference installations can be found at www.acsline.com.

IMPORTANT ORDERS

State Material Reserve Administration, Praha
300 employees
4 turnstiles + double gate
Attendance recording and vistors evidence
2 branch offices

KNAUF INSULATION, spol. s r.o, Teplice
300 employees
2 turnstiles + gate
Attendance recording and vistors evidence
Access System - 20 entrances

SČVaK a.s., Teplice
2,000 employees
Attendance and Access System
5 branch offices
Card printing workplace

KROMEXIM a. s., Kroměříž
500 employees
2 gate-ways, gatehouse
Attendance and car-entries control,
bars, communication system integration

MAGNETON a.s. Kroměříž
1,300 employees
3 turnstiles + gate
Attendance System

Provincial Archives in Opava
300 employees
Attendance System in 11 branch offices
in North Moravia

EKOM s.r.o., Piešťany
200 employees
Attendance and Catering System
Access System – 30 entrances

ZKL concern, centres: Brno, Hanušovice
1,200 employees
Attendance and Data Collection System
50 control points, SAP interfacing

SEWS Slovakia, s.r.o., Topoľčany
2,500 employees
Attendance System, Catering System
Employee Bus Commuting System

NEMOS Plus s.r.o., Ostrov nad Ohří
Hospital in Ostrov n. O.
500 employees
Attendance System

In case regionally close or in similar field operating reference is needed for you, feel free to contact our colleagues, who will find a suitable reference for you or even arrange a visit for the purpose of presentation.

INVESTMENT TO PURCHASE ACS-line SYSTEM IS BENEFICIAL FOR EVERYDAY OPERATION OF THE BUSINESS AND MOST IMPORTANTLY GREAT SAVING IN THE FUTURE.

DEMO VERSION AND TECHNICAL DOCUMENTATION

Included CD contains demo versions of programs and detailed technical specifications of components shown in this catalogue. After inserting CD into the drive, a wizard will be launched automatically, which will make the process of installation of ACS-line system demo versions simple. If your autorun feature is disabled, execute the Start.exe manually.

www.acsline.com

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