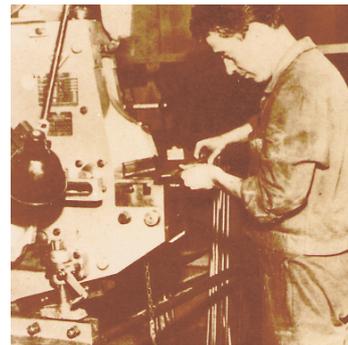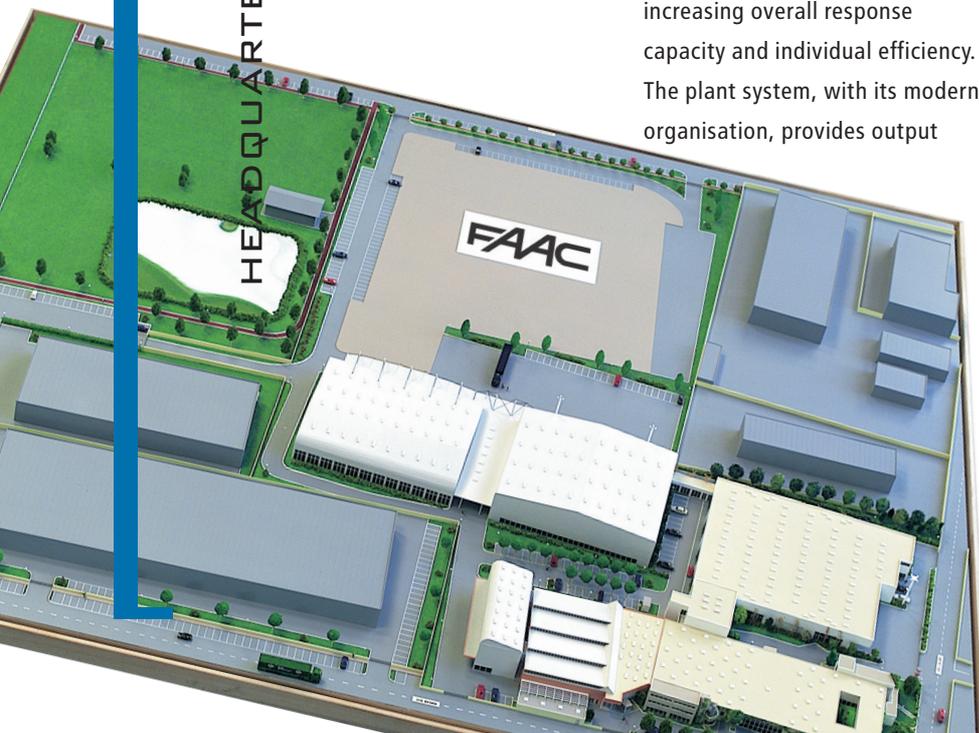# FAAC

FAAC

PARKING SYSTEMS-ACCESS CONTROL

THE BOLOGNA HEADQUARTERS AND PLANT

Since 1965, year of foundation, the company's headquarters and production plant are in Zola Predosa, in the industrial area of Bologna. Here, the operators for automating accesses are designed, built and tested.

FAAC is organised in keeping with the model of leading modern industrial companies, and its internal architecture too meets space functionality needs.
A highly developed IT system manages all important aspects - technical, production, administrative and control - thus increasing overall response capacity and individual efficiency. The plant system, with its modern organisation, provides output capacity of over six hundred thousand operators per year. FAAC's research in mechanics, hydraulics, and digital electronics enables it to implement on-going technical and technological renewal, assuring its undisputed position at the forefront of its sector.

Plastic model headquarters expansion

THE FAAC ELECTRONICS LTD PLANT IN DUBLIN

FAAC ELECTRONICS Ltd is based in Dublin, Eire. Here, its modern plant is addressed to research, design and production of electronic equipment on the leading-edge of technology. FAAC ELECTRONICS Ltd became an integral part of the FAAC group at the end of the Eighties, specialising in the production of electronic access control units: microprocessor control equipment, infra-red ray photocells, radio controls and coded opening systems. Close co-operating between the Bologna and Dublin design and research departments enables FAAC to offer systems with maximum integration of components and products, thus further enhancing overall quality and reliability.

FAAC ALL OVER THE WORLD

More then 600 employees and workers, two production plants, two electronic and one mechanical research departments, nine foreign associated companies, plus sixty-five distributors in as many countries: FAAC is the undisputed leader in automated systems for opening gates and garages, and is a very important company in the European industrial system. 60% of the production is allocated to the foreign markets.

FAAC has always given maximum attention to accident prevention and safety for gate and door automated systems. This awareness is proven by our "historic" choice of hydraulic technology, defined as the safest, and by conformity of our products to very latest European norms and regulations for the CE mark.

Before putting the CE mark on its products, FAAC arranged for an independent laboratory to test them, not just individually, but in all their possible combinations in an installation. This means that, in FAAC's case, observing the European standards is not just paying lip-service through mere self-declaration, but something evaluated by a recognised organisation.

In 1965 we introduced hydraulics in the gate opening sector, and, through the years, we have perfected this technology, adapting it to a multiplicity of needs. Today, FAAC automated systems satisfy both intensive use - just think of the millions of manoeuvres per year of motorway barriers - and economic use, as in the case of the 402 residential operator. We began making our own electronic equipment at the end of the Eighties: these include control equipment, radio controls, as well as safety and signalling systems.

FAAC is always a step ahead in electronics too: we were the first to use microprocessors in control units, SMT technology as well as simplified self-learning in radio controls.
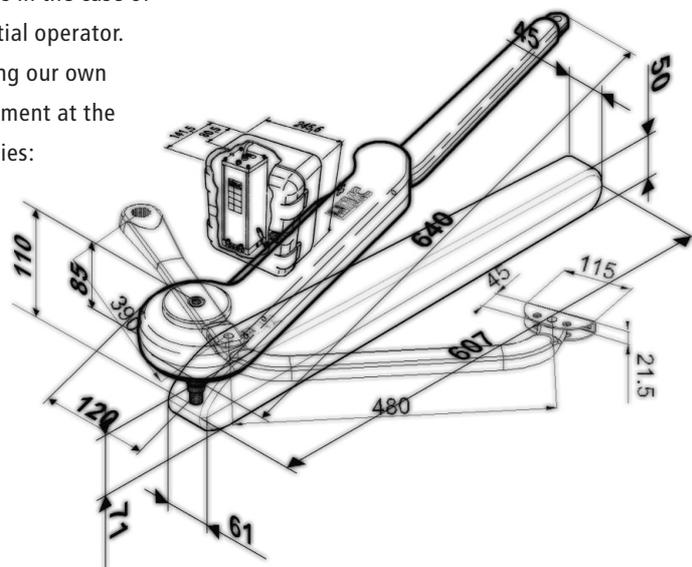
THE PRODUCTS

We have a very wide range of products:
- operators for swing-leaf gates
- gearmotors for sliding gates
- operators for up-and-over doors
- barriers
- automatic doors
- parking systems
- access control systems
- operators for window shutters
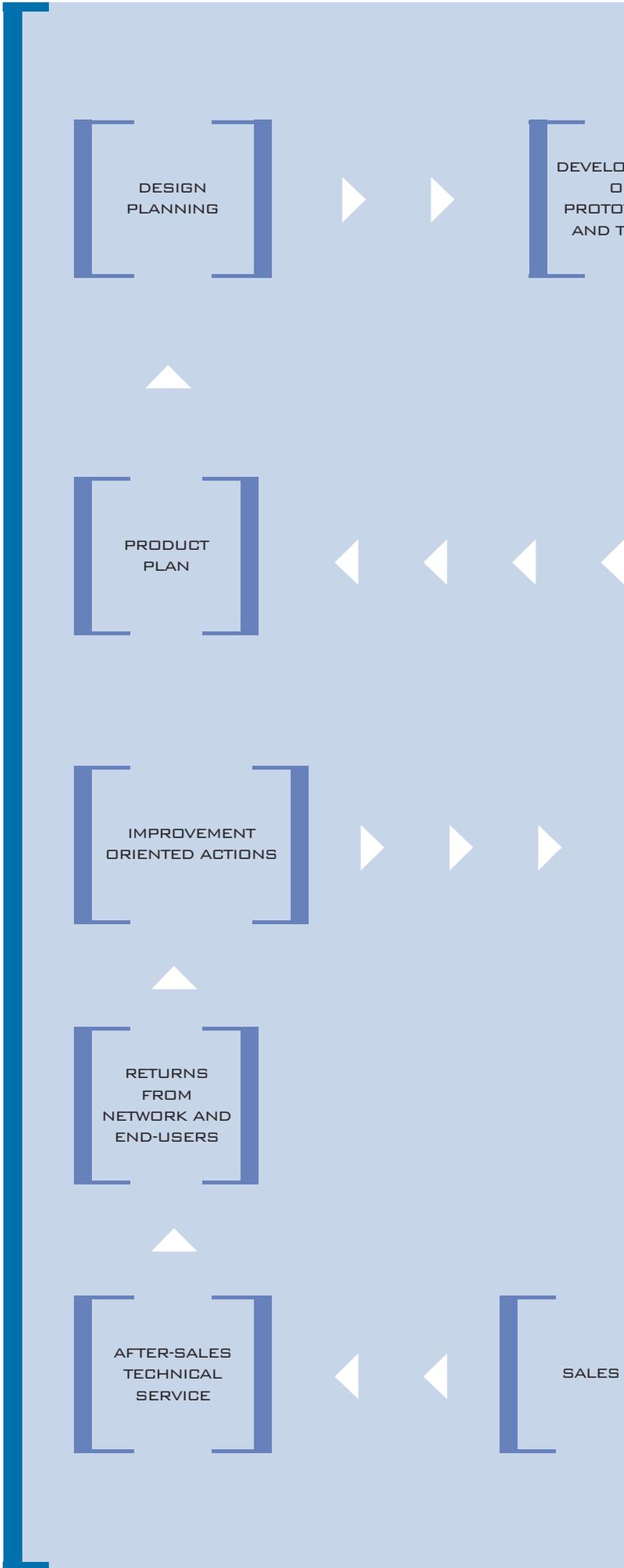- concealed traffic bollards
- alarm systems

ORGANIZATION

FAAC has strengthened itself through the years also in terms of in-house organisation, with the aim of guiding and anticipating the development of the company, through its evolving organisation structure.

The lay-out of company divisions/posts and the creation of integrated company policies derive from various factors, which include: development of complex sales networks in over seventy countries, formation and refresher courses covering the complete range of products, applications and standards for installers, commercial investments in communication.

Quality is the bottom-line
of FAAC's philosophy.
In February 1996, FAAC obtained
UNI EN ISO 9001 certification.
Having the certificate means
we have taken on a continuing
commitment to achieve increasingly
ambitious client-satisfaction
aims, by producing at competitive prices
within planned time.

CERMET

QUALITY SYSTEM CERTIFICATE

THIS IS TO CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OF THE COMPANY

FAAC S.p.A.

Via Benini, 1 - Zola Predosa BO – Italia

REGISTRATION No. 085- A

CONFORMS TO THE

ISO 9001:2000 STANDARD

FOR THE FOLLOWING PRODUCTS/SERVICES:

**DESIGN, DEVELOPMENT, MANUFACTURE AND ASSISTANCE
OF ACCESS AUTOMATION SYSTEMS BY MEANS OF HYDRAULIC
AND ELECTROMECHANICAL DRIVES AND CONTROL
AND SAFETY DEVICES, ALARM SYSTEMS**

This certificate consists of 2 pages. The enclosed data sheet supplies details
on the field of application. The continuance of possession of the certification is subject to annual
survey and dependent upon the observance of CERMET regulations.

certificate issuance date: 1996-02-28
last modification date: 2005-04-29
following renewal date: 2008-04-12

General Manager
Rodolfo Trippodo, Engineer

SINCERT

CERMET

DESIGN
PLANNING

DEVELO
O
PROTO
AND T

PRODUCT
PLAN

IMPROVEMENT
ORIENTED ACTIONS

RETURNS
FROM
NETWORK AND
END-USERS

AFTER-SALES
TECHNICAL
SERVICE

SALES

MPMENT
OF
TYPES
ESTS

QUALIFICATIONS
OF
SUPPLIERS

SUPPLY
OF MATERIALS
AND
ASSEMBLY LINES

DESIGN
VERIFICATIONS

Market research

DESIGN
VALIDATION

PRODUCTION
WITH 100%
FINAL-TESTS

SERVICING
FOR SALES
NETWORK

TRAINING
FOR SALES
NETWORK

INDEX

Parking
systems

620 STANDARD

CE

free or pay parking areas
with single-stay user management
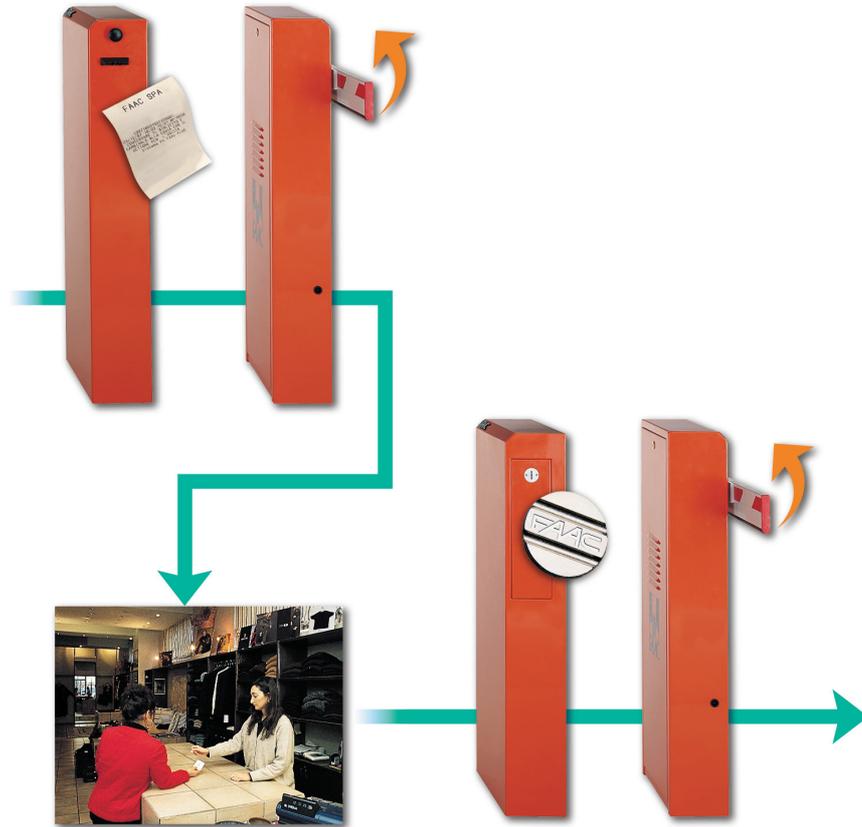
- **Max configuration 4 entrance and 4 exit lanes**
- **Management, control and signalling of occupancy status**
- **Entrance ticket with date and time in alphanumeric characters**
- **Parking parameters configured by CTM 170 programming unit**
- **Manual calculation of parking fees**
- **Display and printing of entered/present/exited vehicles plus alarm display.**
- **Printing of daily statistical data**
- **Exit by token in case of remote toll-booth**
- **Operating system in five languages (I - GB - F - D - ES)/non standard languages (optional)**

Entrance lane/s consisting of:

"Spaces/full" panel signalling the occupancy status.

Management with CPU (T.D.) card

Structure in stainless steel (double-face) and aluminium (one-face)

Plexiglas panels

Luminous, double-face and one-face

Traffic lights with two lights: one red (car park full) and one green (parking available)

Power supply: 230V/50Hz

Wall-mounted or on a support pole

Ticket Dispenser 620, designed for issuing tickets with alphanumeric characters.

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Front panel with ticket request button and ticket collection opening

Heating device piloted by a thermostat to ensure operation even in severe weather conditions

Alphanumeric ticket dispensing unit, fed by continuous paper strip and equipped with self-sharpening cutter

High resolution thermal printer

Ticket dimensions and weight : 86 x 60 mm - 75 gr/sqm

Ticket dispensing capability: 3000 max per ticket roll

Ticket dispensing speed: 19/min max

Data coded on ticket: date/hour/minutes/dispensing unit number/ticket sequential number

Spare paper signal by optical sensor

Electronics controlled by a microprocessor, designed for connection to CTM170

Operational parameters under buffer battery

Optoisolated interfacing with lane elements (traffic lights, barriers, detector)

Vehicle presence detector, and barrier closure command

Weight: 34 kg

Power supply: 230V/50Hz

Max absorbed power: 100 W

Operating ambient temperature: -20° C +50° C

Lane traffic lights, to manage vehicle flow (vehicle stop or go)

Structure in polycarbonate with two lights: red/green, 200 mm diameter

Incandescent lamps 70W/230V

Wall-mounted or on a support pole

620 Rapid barrier for parking area access control

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Hydraulic automation device with control unit and plunger pistons

Balancing spring with adjustable compression

By-pass valves for adjusting opening and closing torque

Use frequency: 100%

Opening time: 2-3 s

Cooling fan piloted by thermal probe

Travel-limit electronic deceleration

Electronic control equipment with microprocessor

Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.

Weight: 73 kg

Power supply: 230V/50Hz

Max absorbed power: 220 W

Operating ambient temperature: -20°C +55°C

CTM 170 programming console

For configuring parking area parameters and displaying certain data in real-time

Functions

Configuration and display of number of vehicles in parking area/total number of vehicles entered in parking area/maximum capacity of parking area/date and time/ticket dispenser number/ticket heading/with or without title

Language selection

Alarms display: jammed ticket/ticket requested but uncollected/ spare roll of thermal paper/ clock battery discharged

Exit lane/s consisting of:

Token acceptor, for exiting parking area with a token.

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Electro-mechanical equipment preventing insertion of token if no vehicle present

Token acceptance time: 2 s max

Vehicle presence detector, and barrier closure command

Weight: 22 kg

Operating ambient temperature: -20°C +50°C

Absorbed power: 12 W

Power supply: 24 Vdc

Lane traffic lights, to manage vehicle flow (vehicle stop or go).

Structure in polycarbonate with two lights: red/green, 200 mm diameter

Incandescent lamps 70W/230V

Wall-mounted or on a support pole

620 Rapid barrier for parking area exit control

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Hydraulic automation device with control unit and plunger pistons

Balancing spring with adjustable compression

By-pass valves for adjusting opening and closing torque

Use frequency: 100%

Opening time: 2-3 s

Cooling fan piloted by thermal probe

Travel-limit electronic deceleration

Electronic control equipment with microprocessor

Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.

Weight: 73 kg

Power supply: 230V/50Hz

Max absorbed power: 220 W

Operating ambient temperature: -20° C +55° C.

620 PLUS

$C \epsilon$

pay parking areas with single-stay user management
(remote or in-lane manned toll-booth)

- **Max configuration 4 entrance and 4 exit lanes**
- **Management, control and signalling of occupancy status**
- **Entrance ticket with barcodes**
- **Configuration of parking parameters and setting of tariffs from manned toll-booth/data controller**
- **Automatic calculation of parking fees by optical scanner reading**
- **Cash payment**
- **Illegible or lost ticket functions**
- **Receipt dispensing**
- **General and shift end accounting summary print-outs**
- **Display of entered/present/exited vehicles, paid tickets and alarms**
- **Exit by token in case of remote toll-booth**
- **Operating system in five languages (I-GB-F D-ES)/non standard languages (optional)**

Entrance lane/s consisting of:

"Spaces/full" panel signalling the occupancy status.

Management with CPU (T.D.) card

Structure in stainless steel (double-face) and aluminium (one-face)

Plexiglas panels

Luminous, double-face and one-face

Traffic lights with two lights: one red (car park full) and one green (parking available)

Power supply: 230V/50Hz

Wall-mounted or on a support pole

Ticket Dispenser 620 PLUS, designed for issue of barcoded tickets; it functions on the data network by means of a personal computer.

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Front panel with ticket request button and ticket collection opening

Heating device piloted by a thermostat to ensure operation even in severe weather conditions

Barcoded ticket dispensing unit, fed by continuous paper strip and equipped with self-sharpening cutter

High resolution thermal printer

BARCODE 2/5 INTERLEAVED printing system

Ticket dimensions and weight : 86 x 60 mm - 75 gr./sqm

Ticket dispensing capability: 3000 max per ticket roll

Ticket dispensing speed: 19/min max

Data coded on ticket: date/hour/minutes/seconds/ park code/ dispensing unit number/ticket type

Spare paper signal by optical sensor

Microprocessor controlled electronics, designed for connection to network

Operational parameters under buffer battery

Optoisolated interfacing with lane elements (traffic lights, barriers, detector)

Stand-alone operation in case of a fault on the data controller or interruption on connecting line

Vehicle presence detector, and barrier closure command

Weight: 34 kg

Power supply: 230V/50Hz

Operating ambient temperature: -20° C + 50° C

Max absorbed power: 100 W.

Lane traffic lights, to manage vehicle flow (vehicle stop or go).

Structure in polycarbonate with two lights: red/green, 200 mm diameter

Incandescent lamps 70W/230V

Wall-mounted or on a support pole

620 Rapid barrier for parking area access control

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Hydraulic automation device with control unit and plunger pistons

Balancing spring with adjustable compression

By-pass valves for adjusting opening and closing torque

Use frequency: 100%

Opening time: 2-3 s

Cooling fan piloted by thermal probe

Travel-limit electronic deceleration

Electronic control equipment with microprocessor

Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.

Weight: 73 kg

Power supply: 230V/50Hz

Operating ambient temperature: -20° C +55° C

Absorbed power: 220 W.

Manned toll-booth/Data controller

Used for configuring all hardware and software parameters of the parking system, in addition to executing all payment operations.
The system's equipment:

Central unit

Pc Celeron 1,5 Ghz min

WINDOWS ME operating system

Hard disk 30 Gb

Floppy disk 1,44 Mb 3"1/2 - Cd Rom 52X

14" SVGA colour video

Standard keyboard (102 keys)

Serial ports: RS 232 (No.2)

Converter: RS 232 - 422 (No.1)

Parallel ports: CENTRONICS (No.1)

Power supply: 230V/50Hz

Optical scanner

Keyboard emulation CCD technology

Manual ticket processing

Powered by PC

DP 24 desk printer

Impact printer (8 needles)

Connection to PC (Centronics)

Dispensed ticket: user's receipt/accounting summaries

Absorbed power: 30W - Power supply: 230V/50Hz

Operating ambient temperature: 0°C +45°C

Weight: 1 Kg

User display

Fluorescent technology

20 characters x 2 lines

Support pedestal

Absorbed power: 2W - 24 Vdc power supply

Connection to PC via RS 232 serial port

Data controller software function

- configuration of system hardware parameters: type, capacity, free places, etc.
- configuration of system software parameters: tariff tables, tolerances, lists, etc.
- transmission of parameters to peripheral units: date, time, tariffs, operating mode, etc
- peripheral units alarm management
- management and monitoring of occupancy status
- management of parking operator priority levels
- printing of general and shift end accounting summaries
- printing of user movement reports

Toll-booth software functions

- single-stay user payments
- illegible or lost ticket functions
- cash payment
- use as exit lane

Exit lane/s consisting of:

Token acceptor for exiting parking area with a token.

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Electro-mechanical equipment preventing insertion of token if no vehicle present

Token acceptance time: 2 s max

Vehicle presence detector, and barrier closure command

Weight: 22 kg

Operating ambient temperature: -20°C +50°C

Absorbed power: 12 W

Power supply: 24 Vdc.

Lane traffic lights, to manage vehicle flow (vehicle stop or go)

Structure in polycarbonate with two lights: red/green, 200 mm diameter

Incandescent lamps 70W/230V

Wall-mounted or on a support pole

620 Rapid barrier for parking area exit control

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Hydraulic automation device with control unit and plunger pistons

Balancing spring with adjustable compression

By-pass valves for adjusting opening and closing torque

Use frequency: 100%

Opening time: 2-3 s

Cooling fan piloted by thermal probe

Travel-limit electronic deceleration

Electronic control equipment with microprocessor

Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.

Weight: 73 kg

Power supply: 230V/50Hz

Operating ambient temperature: -20° C +55° C

Absorbed power: 220 W.

FAAC

620 DIGIPLUS

$\text{C}\,\epsilon$

pay parking areas with single-stay user management and subscriber (remote or in-lane manned toll-booth)

- **Max configuration 4 entrance and 4 exit lanes**
- **Management, control and signalling of occupancy status**
- **Entrance ticket with barcodes**
- **Configuration of parking parameters and setting of tariffs from manned toll-booth/data controller**
- **Automatic calculation of parking fees by optical scanner reading**
- **Cash payment**
- **Illegible or lost ticket functions**
- **Receipt dispensing**
- **General and shift end accounting summary print-outs**
- **Display of entered/present/exited vehicles, paid tickets and alarms**
- **Exit by token in case of remote toll-booth**
- **Users archive management**
- **Card users validity management**
- **Anti pass-back card management**
- **Operating system in five languages (I-GB-F D-ES)/non standard languages (optional)**

Entrance lane/s consisting of:

"Spaces/full" panel signalling the occupancy status.

Management with CPU (T.D.) card

Structure in stainless steel (double-face) and aluminium (one-face)

Plexiglas panels

Luminous, double-face and one-face

Traffic lights with two lights: one red (car park full) and one green (parking available)

Power supply: 230V/50Hz

Wall-mounted or on a support pole

Ticket Dispenser 620 PLUS, designed for issue of barcoded tickets; it functions on the data network by means of a personal computer.

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Front panel with ticket request button and ticket collection opening

Heating device piloted by a thermostat to ensure operation even in severe weather conditions

Barcoded ticket dispensing unit, fed by continuous paper strip and equipped with self-sharpening cutter

High resolution thermal printer

BARCODE 2/5 INTERLEAVED printing system

Ticket dimensions and weight : 86 x 60 mm - 75 gr./sqm

Ticket dispensing capability: 3000 max per ticket roll

Ticket dispensing speed: 19/min max

Data coded on ticket: date/hour/minutes/seconds/ park code/ dispensing unit number/ticket type

Spare paper signal by optical sensor

Microprocessor controlled electronics, designed for connection to network

Operational parameters under buffer battery

Optoisolated interfacing with lane elements (traffic lights, barriers, detector)

Stand-alone operation in case of a fault on the data controller or interruption on connecting line

Vehicle presence detector, and barrier closure command

Weight: 34 kg

Power supply: 230V/50Hz

Operating ambient temperature: -20° C + 50° C

Max absorbed power: 100 W.

Swipe magnetic reader DIGIPASS 100

Cabinet for outdoor use

Swipe reader

Magnetic coding system: ISO2

Signaling LED red/green

Max distance controller reader 15 m

Digipass controller

Microprocessed unit with RS 422 protocol

Anti-pass-back management

Occupancy management

Up to 10.000 cards management

Up to 3.000 cards in black list

White list update

Black list update

Date/hour update

Power supply 220 VAC (+/- 10%) 50 Hz 12W

Operating ambient temperature -20° C +55° C

Lane traffic lights, to manage vehicle flow (vehicle stop or go).

Structure in polycarbonate with two lights: red/green, 200 mm diameter

Incandescent lamps 70W/230V

Wall-mounted or on a support pole

620 Rapid barrier for parking area access control

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Hydraulic automation device with control unit and plunger pistons

Balancing spring with adjustable compression

By-pass valves for adjusting opening and closing torque

Use frequency: 100%

Opening time: 2-3 s

Cooling fan piloted by thermal probe

Travel-limit electronic deceleration

Electronic control equipment with microprocessor

Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.

Weight: 73 kg

Power supply: 230V/50Hz

Operating ambient temperature: -20° C +55° C

Absorbed power: 220 W.

Manned toll-booth/Data controller

Used for configuring all hardware and software parameters of the parking system, in addition to executing all payment operations.

The system's equipment:

Central unit

Pc Celeron 1,5 Ghz min

WINDOWS ME operating system

Hard disk 30 Gb

Floppy disk 1,44 Mb 3"1/2 - Cd Rom 52X

14" SVGA colour video

Standard keyboard (102 keys)

Serial ports: RS 232 (No.2)

Converter: RS 232 - 422 (No.1)

Parallel ports: CENTRONICS (No.1)

Power supply: 230V/50Hz

Optical scanner

Keyboard emulation CCD technology

Manual ticket processing

Powered by PC

DP 24 desk printer

Impact printer (8 needles)

Connection to PC (Centronics)

Dispensed ticket: user's receipt/accounting summaries

Absorbed power: 30W - Power supply: 230V/50Hz

Operating ambient temperature: 0°C +45°C

Weight: 1 Kg

User display

Fluorescent technology

20 characters x 2 lines

Support pedestal

Absorbed power: 2W - 24 Vdc power supply

Connection to PC via RS 232 serial port

Data controller software function

- configuration of system hardware parameters: type, capacity, free places, etc.
- configuration of system software parameters: tariff tables, tolerances, lists, etc.
- transmission of parameters to peripheral units: date, time, tariffs, operating mode, etc
- peripheral units alarm management
- management and monitoring of occupancy status
- management of parking operator priority levels
- printing of general and shift end accounting summaries
- printing of user movement reports

Toll-booth software functions

- single-stay user payments
- illegible or lost ticket functions
- cash payment
- use as exit lane
- subscriber issuing

Exit lane/s consisting of:

Token acceptor for exiting parking area with a token.

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Electro-mechanical equipment preventing insertion of token if no vehicle present

Token acceptance time: 2 s max

Vehicle presence detector, and barrier closure command

Weight: 22 kg

Operating ambient temperature: -20°C +50°C

Absorbed power: 12 W

Power supply: 24 Vdc.

Note: for DIGIPASS reader and controller same as entry lane

Lane traffic lights, to manage vehicle flow (vehicle stop or go)

Structure in polycarbonate with two lights: red/green, 200 mm diameter

Incandescent lamps 70W/230V

Wall-mounted or on a support pole

620 Rapid barrier for parking area exit control

Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint

Hydraulic automation device with control unit and plunger pistons

Balancing spring with adjustable compression

By-pass valves for adjusting opening and closing torque

Use frequency: 100%

Opening time: 2-3 s

Cooling fan piloted by thermal probe

Travel-limit electronic deceleration

Electronic control equipment with microprocessor

Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.

Weight: 73 kg

Power supply: 230V/50Hz

Operating ambient temperature: -20° C +55° C

Absorbed power: 220 W.

FAAC

BC

CE

pay parking areas with single-stay user management only
(remote or in-lane manned toll-booth)

SINGLE-STAY CLIENTS PATH

WP3

- ■ **Management, control and signalling of occupancy status**
- ■ **Entrance ticket with barcodes**
- ■ **Entrance and exit columns with information display for users and intercom with call push-button**
- ■ **Configuration of parking parameters and setting of tariffs from manned toll-booth/data controller**
- ■ **Automatic calculation of parking fees by optical scanner reading**
- ■ **Payment by cash, value coupons or credit card (optional)**
- ■ **Fee collection by automatic pay-station (optional)**
- ■ **Illegible or lost ticket functions**
- ■ **Dispensing of exit receipt with franchise time**
- ■ **Dispensing of exit receipt with franchise time**
- ■ **Printing of statistics plus general and shift end accounting summaries**
- ■ **Display of entered/present/exited vehicles, paid tickets and alarms**
- ■ **Management of operator priority levels and shift changes**
- ■ **Remote assistance and invoicing software (optional)**
- ■ **WP3 software management under Windows 2000 Professional environment with SQL database**

Entrance lane/s consisting of:

"Parking available /full" panel signalling the occupancy status.
Management with CPU card (Entrance unit)
Structure in stainless steel (double-face) and aluminium (one-face)
Plexiglas panels
Luminous, double-face and one-face
Traffic lights with two lights: one red (car park full) and one green (parking available)
Power supply: 230V/50Hz
Wall-mounted or on a support pole
BC entrance control unit, designed for issue of barcoded tickets, it functions on the data network by means of a personal computer.
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Front panel in stainless-steel equipped with ticket request push-button, ticket collection opening, information display for users, and intercom device with call key
Thermostat piloted heat-ventilation device able to operate in severe weather conditions
Motorised barcoded ticket dispensing unit, fed by a continuous paper strip and supplied with self-sharpening cutter.
High resolution thermal printer
BARCODE 2/5 INTERLEAVED printing system
Ticket dimensions and weight : 86 x 60 mm - 140 gr./sqm
Ticket dispensing capability: 3300 max per ticket roll
Ticket dispensing speed: 19/min max
Data coded on ticket: punched day/hour/minutes/seconds/ park code/dispensing unit number/ticket type
Data printed on ticket: date/hour/minutes/number of dispensed ticket/dispensing unit number/title
Spare paper signal by optical sensor
Information display for users LCD 16x2 characters
SOS intercom device, with talk-listen facility and call push-button
Microprocessor controlled electronics, designed for connection to network
Operational parameters under buffer battery
Optoisolated interfacing with lane elements (traffic lights, barriers, detector)
Stand-alone operation in case of a fault on the data controller or interruption on connecting line
Vehicle presence detector, and barrier closure command
Weight: 62 kg
Power supply: 230V/50Hz
Max absorbed power: 350 W
Operating ambient temperature: -20° C + 50° C
Lane traffic lights, to manage vehicle flow (vehicle stop or go)
Structure in polycarbonate with two lights: red/green, 200 mm diameter
Incandescent lamps 70W/230V
Wall-mounted or on a support pole
620 Rapid barrier for parking area access control
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Hydraulic automation device with control unit and plunger pistons
Balancing spring with adjustable compression
By-pass valves for adjusting opening and closing torque
Use frequency: 100%
Opening time: 2-3 s
Cooling fan piloted by thermal probe
Travel-limit electronic deceleration
Electronic control equipment with microprocessor
Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.
Weight: 73 kg
Power supply: 230V/50Hz
Max absorbed power: 220 W
Operating ambient temperature: -20° C + 55° C

Manned toll-booth/Data controller

Used for configuring all hardware and software parameters of the parking system, in addition to executing all payment operations.
The system's equipment:
Central unit
Pc Celeron 1,7 Ghz min
Windows 2000 Professional operating system
Hard disk 30 Gb
Floppy disk 1,44 Mb 3"1/2 Cd Rom 48X
15" colour video (17" optional - LCD - Touch Screen)
Standard keyboard (102 keys)
Serial ports: RS 232 (No.4)
Converter RS 232 - 422 (No. 1)
ISDN Modem
Parallel ports: CENTRONICS (No.1)
Power supply: 230V/50Hz.
Optical scanner
Keyboard emulation CCD technology
Manual ticket processing
Powered by PC
Toll-booth module
Exit ticket dispensing
High resolution thermal printer

Motorised barcoded ticket dispensing unit, fed by continuous paper strip and equipped with self-sharpening cutter
BARCODE 2/5 INTERLEAVED printing system
Ticket dimensions and weight : 86 x 60 mm - 140 gr./sqm
Ticket dispensing capability: 3300 max per ticket roll
Data coded on ticket: punched day/hour/minutes/seconds/ park code/dispensing unit number/ticket type
Data printed on ticket: date/hour/minutes (entrance)/date-hour-minutes-seconds (payment)/amount payable
Absorbed power: 40W - Power supply: 230V/50Hz
Operating ambient temperature: 0°C +45°C
Weight: 17 Kg
User display
Fluorescent technology
20 characters x 2 lines
Support pedestal
Absorbed power: 2W
24 Vdc power supply
Connection to PC via RS 232 serial port
Intercom control unit
Power supply: 230V/50Hz
6 user channels with selection key (12 channels optional)
Data controller software function
- configuration of system hardware parameters: type, capacity, free places, etc.
- configuration of system software parameters: tariff tables, tolerances, lists, etc.
- transmission of parameters to peripheral units: date, time, tariffs, operating mode, etc
- peripheral units alarm management
- management and monitoring of occupancy status
- management of client details database
- management of parking operator priority levels
- printing of general and shift end accounting summaries
- printing of user movement reports
Toll-booth software functions
- single-stay user payments
- illegible or lost ticket functions
- payment by cash, value coupons or credit card (optional)
- dispensing of exit receipt with franchise time
- dispensing of stay ticket and value coupon
- ticket checking and re-enabling procedures
- printing of shift end accounting summaries

Exit lane/s consisting of:

BC exit control unit, designed for reading barcoded tickets, it functions on the data network by means of a personal computer.
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Front panel in stainless-steel equipped with receipt request push-button, ticket reading opening, information display for users, and intercom device with call key.
Thermostat piloted heat-ventilation device able to operate in severe weather conditions
Motorised barcoded ticket reading unit with franchise time check facility (record)
Barcode type: 2/5 INTERLEAVED
Information display for users LCD 16x2 characters
SOS intercom device, with talk-listen facility and call push-button
Microprocessor controlled electronics, designed for connection to network
Operational parameters under buffer battery
Optoisolated interfacing with lane elements (traffic lights, barriers, detector)
Stand-alone operation in case of a fault on the data controller or interruption on connecting line
Vehicle presence detector, and barrier closure command
Weight: 62 kg
Power supply: 230V/50Hz
Max absorbed power: 350 W
Operating ambient temperature: -20°C + 50°C
Lane traffic lights, to manage vehicle flow (vehicle stop or go)
Structure in polycarbonate with two lights: red/green, 200 mm diameter
Incandescent lamps 70W/230V
Wall-mounted or on a support pole
620 Rapid barrier for parking area exit control
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Hydraulic automation device with control unit and plunger pistons
Balancing spring with adjustable compression
By-pass valves for adjusting opening and closing torque
Use frequency: 100%
Opening time: 2-3 s
Cooling fan piloted by thermal probe
Travel-limit electronic deceleration
Electronic control equipment with microprocessor
Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.
Weight: 73 kg
Power supply: 230V/50Hz
Max absorbed power: 220 W
Operating ambient temperature: -20°C + 55°C

BM

CE

pay parking areas with magnetic card holders management only
(remote manned toll-booth)

WP3

- ■ **Management, control and signalling of occupancy status**
- ■ **Configuration of parking parameters and setting of tariffs from mannedn toll-booth/data controller**
- ■ **Antipass-back and black-list controls**
- ■ **Entrance and exit columns with information display for users and intercom with call push-button**
- ■ **Card coding: set-value/time expiry subscription/token/visitors and congress participants/passe-partout/operator**
- ■ **Payment by cash and pre paid card**
- ■ **Printing of statistics plus general and shift end accounting summaries**
- ■ **Display of entered/present/exited vehicles and alarms**
- ■ **Management of client details database and card archive**
- ■ **Management of operator priority levels and shift changes**
- ■ **Remote assistance and invoicing software (optional)**
- ■ **WP3 software management under Windows 2000 Professional environment with SQL database**

Entrance lane/s consisting of:

"Spaces/full" panel signalling the occupancy status.
Management with CPU card (Entrance unit)
Structure in stainless steel (double-face) and aluminium (one-face)
Plexiglas panels
Luminous, double-face and one-face
Traffic lights with two lights: one red (car park full) and one green (parking available)
Power supply: 230V/50Hz
Wall-mounted or on a support pole
BM entrance control unit, designed for reading magnetic cards, it functions on the data network by means of a personal computer.
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Front panel in stainless-steel equipped with magnetic card acceptance opening, information display for users, and intercom device with call key
Thermostat piloted heat-ventilation device able to operate in severe weather conditions
Motorised card reader (front insertion)
Magnetic coding system: ISO STANDARD track 2
Information display for users LCD 16x2 characters
SOS intercom device, with talk-listen facility and call push-button
Microprocessor controlled electronics, designed for connection to network
Operational parameters under buffer battery
Optoisolated interfacing with lane elements (traffic lights, barriers, detector)
Stand-alone operation in case of a fault on the data controller or interruption on connecting line
Vehicle presence detector, and barrier closure command
Weight: 62 kg
Power supply: 230V/50Hz
Max absorbed power: 350W
Operating ambient temperature: -20° C + 50° C
Lane traffic lights, to manage vehicle flow (vehicle stop or go)
Structure in polycarbonate with two lights: red/green, 200 mm diameter
Incandescent lamps 70W/230V
Wall-mounted or on a support pole
620 Rapid barrier for parking area access control
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Hydraulic automation device with control unit and plunger pistons
Balancing spring with adjustable compression
By-pass valves for adjusting opening and closing torque
Use frequency: 100%
Opening time: 2-3 s
oCooling fan piloted by thermal probe
Travel-limit electronic deceleration
Electronic control equipment with microprocessor
Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.
Weight: 73 kg
Power supply: 230V/50Hz
Max absorbed power: 220 W
Operating ambient temperature: -20° C + 55° C

Manned toll-booth/Data controller

Used for configuring all hardware and software parameters of the parking system, in addition to executing all payment operations.
The system's equipment:
Central unit
Pc Celeron 1,7 Ghz min
Windows 2000 Professional operating system
Hard disk 30 Gb
Floppy disk 1,44 Mb 3"1/2 - Cd Rom 48X
15" SVGA colour video (17" - LCD - Touch Screen optional)
Standard keyboard (102 keys)
Serial ports: RS 232 (No.4)
Converter RS 232 - 422 (No.1)
ISDN modem
Parallel ports: CENTRONICS
Power supply: 230V/50Hz
Toll-booth module
Motorised card reader (front insertion)
Magnetic coding system: ISO STANDARD track 2
Absorbed power: 40W
Power supply: 230V/50Hz
Operating ambient temperature: 0°C +45°C
Weight: 10 Kg
DP 24 desk printer
Impact printer (8 needles)
Connection to PC (Centronics)
Dispensed ticket: user's receipt/accounting summaries
Absorbed power: 30W
Power supply: 230V/50Hz
Operating ambient temperature: 0°C +45°C
Weight: 1 Kg

User display
Fluorescent technology
20 characters x 2 lines
Support pedestal
Absorbed power: 2W
Power supply: 24Vdc
Connection to PC via RS 232 serial port
Intercom control unit
Power supply: 230V/50Hz
6 user channels with selection key (12 channels optional)
Data controller software function
- configuration of system hardware parameters: type, capacity, free places, etc.
- configuration of system software parameters: tariff tables, tolerances, lists, etc.
- transmission of parameters to peripheral units: date, time, tariffs, operating mode, etc
- peripheral units alarm management
- management and monitoring of occupancy status
- management of client details database
- management of parking operator priority levels
- antipass-back and black-list controls
- printing of general and shift end accounting summaries
- printing of user movement reports
Toll-booth software functions
- pre paied card
- payment by cash, pre paid card or credit cards (optional)
- coding of subscription cards, set-value cards, tokens, visitors and congress participators, passe-partout
- ticket checking and re-enabling procedures
- printing of shift end accounting summaries

Exit lane/s consisting of:

BM exit control unit, designed for reading magnetic cards, it functions on the data network by means of a personal computer.
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Front panel in stainless-steel equipped with magnetic card acceptance opening, information display for users, and intercom device with call key
Thermostat piloted heat-ventilation device able to operate in severe weather conditions
Motorised card reader (front insertion)
Magnetic coding system: ISO STANDARD track 2
Information display for users LCD 16x2 characters
SOS intercom device, with talk-listen facility and call push-button
Microprocessor controlled electronics, designed for connection to network
Operational parameters under buffer battery
Optoisolated interfacing with lane elements (traffic lights, barriers, detector)
Stand-alone operation in case of a fault on the data controller or interruption on connecting line
Vehicle presence detector, and barrier closure command
Weight: 62 kg
Power supply: 230V/50Hz
Max absorbed power: 350W
Operating ambient temperature: -20° C + 50° C
Lane traffic lights, to manage vehicle flow (vehicle stop or go)
Structure in polycarbonate with two lights: red/green, 200 mm diameter
Incandescent lamps 70W/230V
Wall-mounted or on a support pole
620 Rapid barrier for parking area access control
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Hydraulic automation device with control unit and plunger pistons
Balancing spring with adjustable compression
By-pass valves for adjusting opening and closing torque
Use frequency: 100%
Opening time: 2-3 s
Cooling fan piloted by thermal probe
Travel-limit electronic deceleration
Electronic control equipment with microprocessor
Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.
Weight: 73 kg
Power supply: 230V/50Hz
Max absorbed power: 220 W
Operating ambient temperature: -20° C + 55° C

BCM

CE

pay parking areas for single-stay users and magnetic
card holders management (remote or in-lane manned toll-booth)
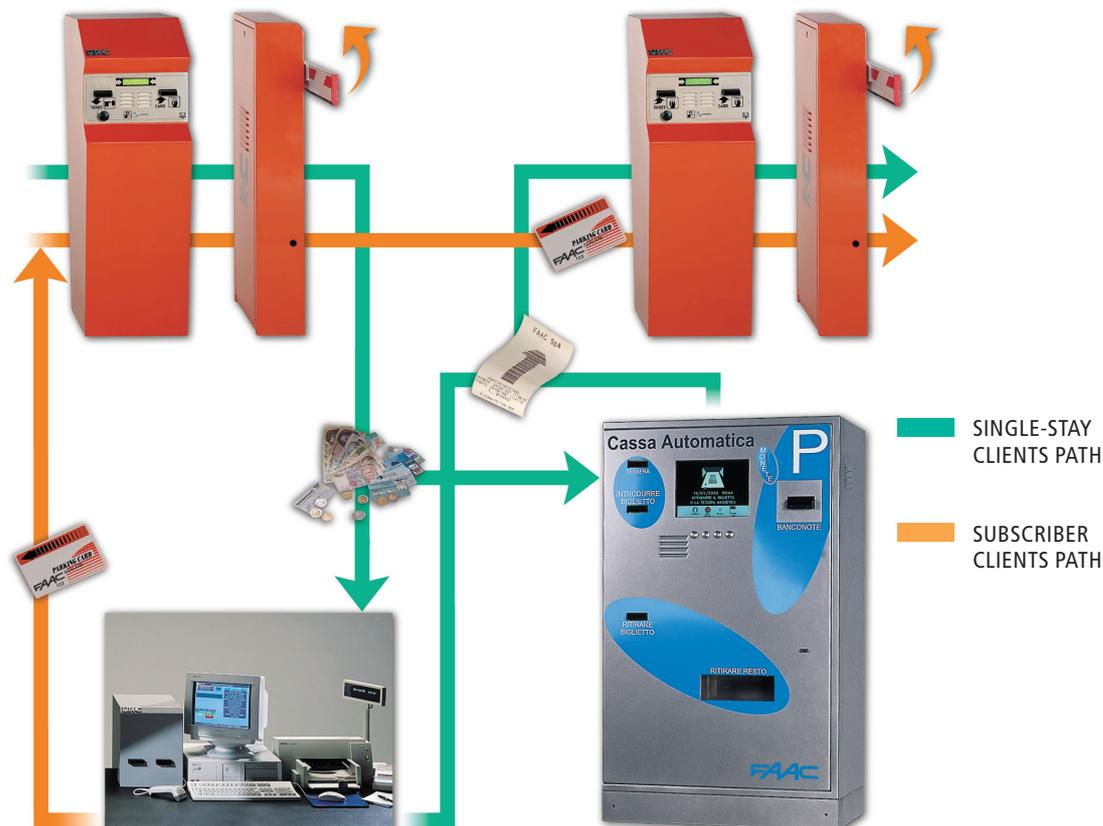
■ SINGLE-STAY
CLIENTS PATH

■ SUBSCRIBER
CLIENTS PATH

WP3

- ■ **Management, control and signalling of occupancy status**
- ■ **Entrance ticket with barcodes**
- ■ **Entrance and exit columns with information display for users and intercom with call push-button**
- ■ **Configuration of parking parameters and setting of tariffs from manned toll-booth/data controller**
- ■ **Automatic calculation of parking fees by optical scanner reading**
- ■ **Antipass-back and black-list controls**
- ■ **Card coding: set-value/time expiry subscription/token/visitors and congress participants/passe-partout/operator**
- ■ **Payment by cash, pre paid card, value coupons or credit card (optional)**
- ■ **Fee collection by automatic pay-station (optional)**
- ■ **Illegible or lost ticket functions**
- ■ **Dispensing of exit receipt with franchise time**
- ■ **Dispensing of value coupons**
- ■ **Printing of statistics plus general and shift end accounting summaries**
- ■ **Display of entered/present/exited vehicles, paid tickets and alarms**
- ■ **Management of client details database and card archive**
- ■ **Management of operator priority levels and shift changes**
- ■ **Remote assistance and invoicing software (optional)**
- ■ **WP3 software management under Windows 2000 Professional environment with SQL database**

Entrance lane/s consisting of:

"Spaces/full" panel signalling the occupancy status.
Management with CPU card (Entrance unit)
Structure in stainless steel (double-face) and aluminium (one-face)
Plexiglas panels
Luminous, double-face and one-face
Traffic lights with two lights: one red (car park full) and one green (parking available)
Power supply: 230V/50Hz
Wall-mounted or on a support pole
BCM entrance control unit, designed for dispensing of barcoded tickets and reading of magnetic cards, it functions on the data network by means of a personal computer.
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Front panel in stainless-steel equipped with ticket request push-button, ticket collection opening, magnetic card acceptance opening information display for users, and intercom device with call key
Thermostat piloted heat-ventilation device able to operate in severe weather conditions
Motorised barcoded ticket dispensing unit, fed by continuous paper strip and equipped with self-sharpening cutter
High resolution thermal printer
BARCODE 2/5 INTERLEAVED printing system
Ticket dimensions and weight: 86 x 60 mm - 140 gr./sqm
Ticket dispensing capability: 3300 max per ticket roll
Ticket dispensing speed: 19/min max
Data coded on ticket: punched day/hour/minutes/seconds/ park code/dispensing unit number/ticket type
Data printed on ticket: date/hour/minutes/number of issued ticket/dispensing unit number/title
Spare paper signal by optical sensor
Motorised card reader (front insertion)
Magnetic coding system: ISO STANDARD track 2
Information display for users LCD 16x2 characters
SOS intercom device, with talk-listen facility and call push-button
Microprocessor controlled electronics, designed for connection to network
Operational parameters under buffer battery
Optoisolated interfacing with lane elements (traffic lights, barriers, detector)
Stand-alone operation in case of a fault on the data controller or interruption on connecting line
Vehicle presence detector, and barrier closure command
Weight: 63 kg
Power supply: 230V/50Hz - Max absorbed power: 350 W
Operating ambient temperature: -20° C + 50° C.
Lane traffic lights, to manage vehicle flow (vehicle stop or go)
Structure in polycarbonate with two lights: red/green, 200 mm diameter
Incandescent lamps 70W/230V
Wall-mounted or on a support pole
620 Rapid barrier for parking area access control
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Hydraulic automation device with control unit and plunger pistons
Balancing spring with adjustable compression
By-pass valves for adjusting opening and closing torque
Use frequency: 100%
Opening time: 2-3 s
Cooling fan piloted by thermal probe
Travel-limit electronic deceleration
Electronic control equipment with microprocessor
Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.
Weight: 73 kg
Power supply: 230V/50Hz
Operating ambient temperature: -20° C + 55° C
Max absorbed power: 220 W

Manned toll-booth/Data controller

Used for configuring all hardware and software parameters of the parking system, in addition to executing all payment operations.
The system's equipment:
Central unit
Pc Celeron 1,7 Ghz min
Windoes 2000 Professional operating system
Hard disk 30 Gb
Floppy disk 1,44 Mb 3"1/2 - Cd Rom 48X
15" SVGA colour video (17" - LCD - Touch Screen optional)
Standard keyboard (102 keys) - Note: Indicative values: 5 B1
Serial ports: RS 232 (No.4)
Converter RS 232 - 422 (No.1)
ISDN modem
Parallel ports : CENTRONICS (No.1)
Power supply: 230 V / 50 Hz
Optical scanner
Keyboard emulation CCD technology
Manual ticket processing
Powered by PC
Toll-booth module
Exit ticket dispensing
High resolution thermal printer
Motorised barcoded ticket dispensing unit, fed by continuous paper strip and equipped with self-sharpening cutter
BARCODE 2/5 INTERLEAVED printing system
Ticket dimensions and weight : 86 x 60 mm - 140 gr./sqm

Ticket dispensing capability: 3300 max per ticket roll
Data coded on ticket: punched day/hour/minutes/seconds/ park code/dispensing unit number/ticket type
Data printed on ticket: date-hour-minutes-seconds (entrance)/date-hour-minutes-seconds (payment)/amount paid
Motorised card reader (front insertion)
Magnetic coding system: ISO STANDARD track 2
Absorbed power: 40W - Power supply: 230V/50Hz
Operating ambient temperature: 0°C +45°C
Weight: 18 Kg
User display
Fluorescent technology
20 characters x 2 lines
Support pedestal
Absorbed power: 2W - Power supply: 24Vdc
Connection to PC via RS 232 serial port
Intercom control unit
Power supply: 230V/50Hz
6 user channels with selection key
Data controller software function
- configuration of system hardware parameters: type, capacity, free places, etc.
- configuration of system software parameters: tariff tables, tolerances, lists, etc.
- transmission of parameters to peripheral units: date, time, tariffs, operating mode, etc
- peripheral units alarm management
- management and monitoring of occupancy status
- management of client details database
- management of parking operator priority levels
- antipass-back and black-list controls
- printing of general and shift end accounting summaries
- printing of user movement reports
Toll-booth software functions
- single-stay user payments
- illegible or lost ticket functions
- payment by cash, magnetic cards, value coupons and credit cards (optional)
- dispensing of exit receipt with franchise time
- dispensing of stay ticket and value coupon
- coding of subscription cards, set-value cards, tokens, visitors and congress participators, passe-partout
- ticket checking and re-enabling procedures printing of shift end accounting summaries
- use on exit lane

Exit lane/s consisting of:

BCM exit control unit, designed for reading of barcoded tickets and reading of magnetic cards; it functions on the data network by means of a personal computer.
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Front panel in stainless-steel equipped with receipt request push-button, ticket reading opening, magnetic card acceptance opening, information display for users, and intercom device with call key.
Thermostat piloted heat-ventilation device able to operate in severe weather conditions
Motorised barcoded ticket reading unit with franchise time check facility (record)
Barcode type: 2/5 INTERLEAVED
Motorised card reader (front insertion)
Magnetic coding system: ISO STANDARD track 2
Information display for users LCD 16x2 characters
SOS intercom device, with talk-listen facility and call push-button
Microprocessor controlled electronics, designed for connection to network
Operational parameters under buffer battery
Optoisolated interfacing with lane elements (traffic lights, barriers, detector)
Stand-alone operation in case of a fault on the data controller or interruption on connecting line
Vehicle presence detector, and barrier closure command
Weight: 63 kg
Power supply: 230V/50Hz - Max absorbed power: 350 W
Operating ambient temperature: -20° C + 50° C
Lane traffic lights, to manage vehicle flow (vehicle stop or go)
Structure in polycarbonate with two lights: red/green, 200 mm diameter
Incandescent lamps 70W/230V
Wall-mounted or on a support pole
620 Rapid barrier for parking area exit control
Housing in steel sheet with protective cataphoresis treatment, painted with RAL 2004 polyester paint
Hydraulic automation device with control unit and plunger pistons
Balancing spring with adjustable compression
By-pass valves for adjusting opening and closing torque
Use frequency: 100%
Opening time: 2-3 s
Cooling fan piloted by thermal probe
Travel-limit electronic deceleration
Electronic control equipment with microprocessor
Aluminium beam (max length 4 m) painted white, with red reflective strips, and impact-proof rubber profile on lower edge.
Weight: 73 kg
Power supply: 230V/50Hz
Operating ambient temperature: -20° C + 55° C
Max absorbed power: 220 W.
Operating ambient temperature: -20° C + 55° C

WP 3

$\boxed{C\!E}$

the third generation of car park management software

The parking systems management software has reached its third generation.
WP3 is the new multitasking application system developed by FAAC, based on Windows 2000.
Its maximum configuration modularity means it can satisfy the requirements of both large, complex and small car park management systems.
Connection capability to telecommunications systems such as modems, as well as local and geographic networks enables monitoring and remote management of parks.

You can now easily do the following jobs either from the central control point of from an authorised point: update configurations and tariffs, view the system as a whole, and control economic situation as well as operational efficiency.

You can also centralise takings and transactions received from a set of car parks in different places, or produce tickets and the like such as subscriber cards from a single remote manned point.

Use of the software as a whole is facilitated by easy-to-understand graphics and by an on-line help function you can put into operation at any time.

The WP3 system consists of four different application programs as described below:

WP3-Basic Module/Report Manager
The Basic Module contains the system database - an SQL reporting database.
It contains all the system data required for the operation and configuration of the car park.
The report manager resident in the module makes it possible to view, print and export transactions.

WP3-Pay Station Module/Park Desk
The Pay Station Module is used for managing the car park's pay station and, therefore, all the payment and interaction modes between cashier and Customer.
This module enables payment of occasional parking, or the sale of tickets and the like such as subscriber cards, prepaid set-value cards and value coupons.
Various types of payment are possible: cash, set-value cards, and credit cards.
Tariff management is highly configurable, with up to 99 different tariff profiles possible.
Moreover tariffs can be distinguished according to vehicle category, or parking area, e.g. car area, bus area.

WP3-Controller Module/Park Explorer

The Controller Module enables data communication between the central unit and the park's peripheral units. Peripheral units can be:

- entry terminals/ticket dispenser BC/BCM
- exit terminals/ticket reader BC/BCM
- payment terminals/automatic pay station E7000
- modules for activating a manned pay station on the exit lane
- door-opener and gate-opener readers Digipass 100
- vehicle counting units according to parking areas or floors

Access to the Controller module is possible via 4 authorisation levels. With this module you can configure peripheral units, authorise access by entry and exit ticket holders, and receive the resulting transactions.
The Controller module enables you to:
- manage the park areas and sub-areas and the relevant vehicle count, indicating occupancy status and level;
- configure: a single area, two or more separate areas, two or more areas with a passage or passages common to them, and concentric sub-areas;
- view the operational status of the peripheral units in general and of the tickets management modules in particular, thus providing speedy information also during transactions with the Customer.

WP3-Invoicing Module/Invoice
The Invoicing Module is a completely new program introduced with WP3. It enables issue of immediate invoices for each sale or cumulative invoices deferred to end of month, i.e. referring to a series of transactions for the same requesting body or person.
This software can operate both as a stand-alone application for issuing invoices for any type of activity carried out by the Customer, and in integrated mode with WP3, for issuing invoices for tickets and cards linked to parking area management.
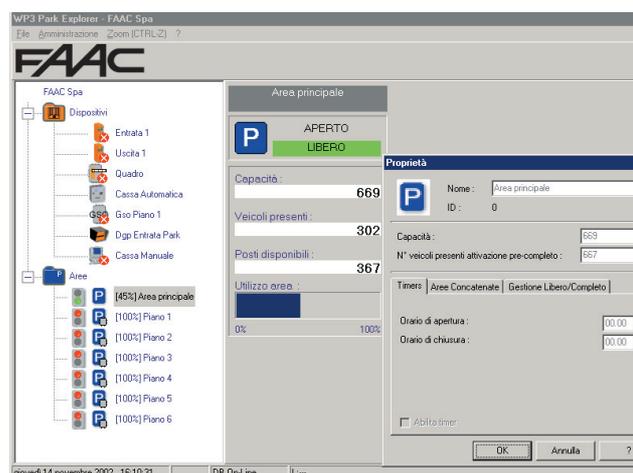
FUNCTION CHARACTERISTICS OF THE WP3-INVOICE

Simultaneous management of several Companies - With WP3-Invoice, the same hardware and database can be shared for simultaneously managing several companies. By using separate park-codes, all information concerning different parks (or other types of companies) can be kept separate.

Customer Management Functions - Customer management is based on a table shared with the other WP3 modules. Therefore, all information about Customers can be managed both from this module and from the others. A 'group-head' Customer can be associated with a Customer, and all invoices concerning the latter are attributed to the 'group-head'.

Management Functions for items/services and relevant parametering - The software manages the database for the available services/items. The following are indicated for each item/service: code, description, cost, VAT to apply, and three possible classification values, useful for producing periodic statistics. For example, a relevant cost centre, as well as a goods category and type can all be associated.
Furthermore, one or more input parameters, to be requested at invoice issue, can be defined. For example, if a 'car hire' service is concerned, the system can be set up so that, when the invoice is generated, the vehicle number plate and the driver's licence number are always requested.

User Management Functions - IThe software makes it possible to manage Users in line with the latest privacy regulations. In particular, System Users can be defined, and their relevant access 'level' to the system can be assigned. Furthermore, the most recently effected connections can be monitored so that Users who have not been connected for some time may be disabled.

Invoicing of Transactions for issue of Tickets and the like - WP3-Invoice is able to invoice transactions for the issue of tickets and the like in two different ways.

a) Immediate invoicing of transactions for issue of tickets and the like WP3: Invoice can be activated directly from the Pay Station management program in order to immediately issue and print the invoice for the current transaction.

b) Deferred invoicing of transactions for issue of tickets and the like: Alternatively, the Pay station program can be used to just record the transaction and mark it suitably so that the relevant invoicing can be done at the User's request during a subsequent start of WP3-Invoice.

Invoicing of services and items - In addition to the transactions concerning the issue of tickets and the like, WP3-Invoice can also invoice further items and services. The program can of course be used even if there are no 'pending' transactions, and, therefore, it can be used also independently of park management. For each invoiced item, a percentage discount can be specified, in addition to the quantity of course.

Invoice Numbering Management - The number of the invoice being issued is calculated to enable:
· management of several series, for those with several accounting systems;
· a start of numbering digit other than number one, for those wishing to use the software during an accounting period already under way;
· management of financial year closure at a date other than 31/12.

Bill-book and Reminders - Information is available at any time on which invoices are due or overdue, so that payment can be urged.

Payments crosscheck - WP3-Invoice manages settlement of invoices not paid immediately, to enable to crosscheck the relevant bank transfers (of other types of delayed payments). This also provides information, by means of statistics, about the status of receivables.

Invoice Printing/Reprinting - The issued invoices can be printed/reprinted by means of reports that can be customized by the User. The following are possible:

· specify if you wish to input a heading or not;
· define the logo and the heading lines;
· correctly position the invoice recipient's name, to adapt the print format to the type of window envelope being used.

Periodic Statistics according to Customer/Period - WP3-Invoice is able to produce statistical reports summarising the invoice situation according to Customer and Period. You can specify if you wish to group data firstly per Customer and then per month or vice versa. You can also filter data, specifying a given period interval or just paid or payable invoices.

Periodic Statistics according to Category - The WP3-Invoice statistical reports summarise the invoices situation according to the specified re-classification (e.g.: Cost centre or goods area). You can specify if you wish to group data firstly per Category and then per month or vice versa. Data can also be filtered, specifying a given period interval.

E7000

CE
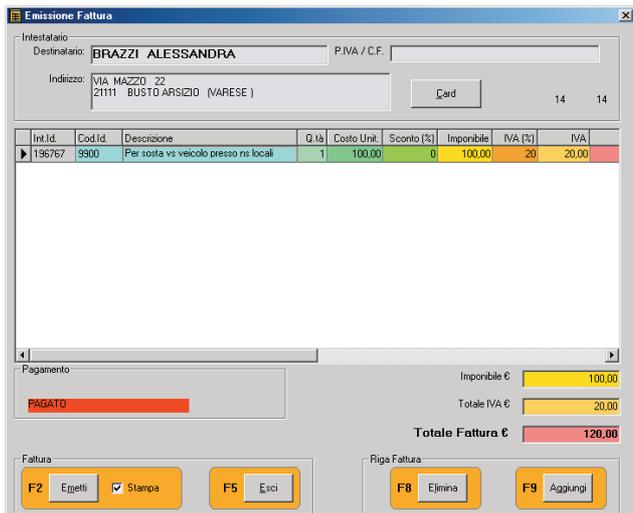
automatic pay-station

- **Acceptor for barcode type single-stay tickets**
- **Subscriptions renewal and recharging of set-value cards**
- **Coin acceptor with automatic recharging of change giver devices**
- **Facility for wide-ranging configuration of solutions according to type of change to be given**
- **Lost ticket management**
- **Facility for expanding the machine configuration by optional modules (credit card acceptor, banknote readers, banknote change giver, coin change giver)**
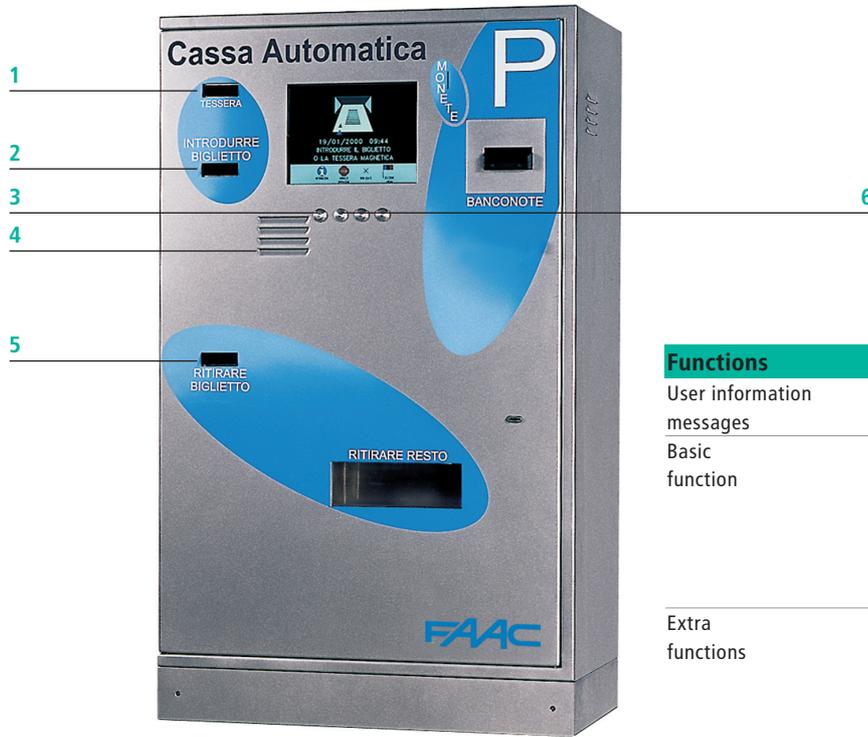
□ LCD graphic display, 9.4"

■ SRM coin selector

■ SB banknote selector

■ Money collection tray

Cassa Automatica

1 Coder/decoder for prepaid magnetic cards and credit cards - MAG
2 Entrance ticket barcode reader - LBO
3 Intercom push-button
4 Intercom
5 Exit ticket dispenser - EMIT
6 Multi-function push-buttons

| Technical specifications	E7000
Power supply	230 Vac (+6% -10%) 50 (60) Hz
Absorbed power	Min 1000W - max 1500W
Cabinet	External structure in 2.5 mm gauge stainless steel sheet
Dimensions	Height 1245 mm Width 800 mm Depth 475 mm
Weight	200 Kg min - 320 Kg max
Operating ambient temperature	+15 °C +50 °C without heater -20 °C +50 °C with heater
Front panel	User interface by display Voice interface by intercom 3 multi-function push-buttons activated by software 1 intercom push-button Easy-to-understand symbols
LBO module (basic configuration)	Motorised optical reader Decoded barcode, 2/5 interleaved 86 x 60 mm tickets handling Ticket reading speed: 20 pcs/minute
EMIT module (basic configuration)	High resolution thermal printer Barcode printed in 2/5 interleaved Self-sharpening cutter Spare paper sensor Basic ticket weight: 140 g/m2 Ticket dispensing capacity: 3300 pcs. per ticket roll
SRM module (basic configuration)	Selector handling up to 10 coins types Coin diverting to recharge hoppers Coin safety box
MAG module (optional)	Magnetic coder-reader/encoder ISO standard cards handling Card reading speed: 13 pcs/minute
RM Module (optional)	Coin change-giver from 1 to 8 coins of which 4 are automatically self refilled
SB Module (optional)	Banknote selector for 4 to 13 different sizes 4-ways reading Escrow capabilities (up to 16 pcs.) Banknote safety cash collector
RB Module (optional)	Change giver of 1 banknote denomination

Functions	E7000
User information messages	LCD graphic display, 12,1″ color
Basic function	Language selection Automatic reading of barcode ticket Parking fees calculation Payment by means of coins Operation cancelling facility Dispensing of exit ticket
Extra functions	Payment by banknotes Coin change givers from 1 to 8 coins; 4 of them are automatically self refilled Banknote change giver 1 denomination Set-value cards recharging Set-value cards finished credit card processing Subscriptions renewal (WP3 only) Lost ticket
Data councentrator functioning (BC only)	Occupancy status Area opening - closing Setting vehicles present Peripherals monitoring Barrier opening - closing Lists and parameters setting to peripherals System access by password Fee collection for illegible tickets
Operator function	Fee collection for lost tickets Recharging coin hoppers and banknotes Removing of coins-banknotes safe boxes Printing of shift statement

Options
Banknote selector (**TYPE A**)
Accepts 13 banknotes in 4 ways
Acceptance rate: 97%
Escrow capabilities
Banknote selector (**TYPE C**)
Accepts 6 banknotes in 4 ways
Acceptance rate: 90%
Without escrow capabilities
Indoor use only
Banknote selector (**TYPE D**)
Accepts 7 banknotes in 4 ways
Acceptance rate: 90%
Without escrow capabilities
Banknotes selectro (**TYPE E**)
Accepts 13 banknotes in 4 ways
Acceptance rate: 97%
Without escrow capabilities
Change-giver from 1 to 8 coins (4 of them are automatically self refilled)
Banknotes change giver of 1 denomination
Base plinth
Self-powered siren with vibration detector
Heater
Magnetic reader/encoder for card handling (set-value cards recharging/credit cards/subscriptions renewal)
Fan
5° to 8° change giver support

G.S.O.

management unit for occupancy status of single parking areas and multi-tier parking sectors (BC - BM – BCM Systems)

CE

FAAC
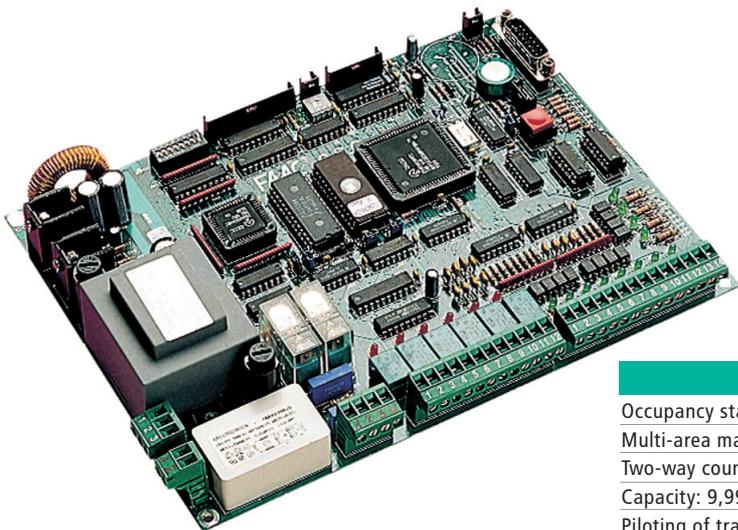
G.S.O.
Occupancy status
Multi-area management
Two-way count (with two magnetic loops)
Capacity: 9,999 car places
Piloting of traffic lights or "parking available /full" panel.
Memory with buffer battery
Equipped with RS 422 serial line for connection to data controller
Data set from keyboard or Personal Computer
Installation of outside detectors (12 max)
Operating system in five languages (I – GB – F – D – ES)/non standard languages (optional)

MANAGED TICKETS

CE

entrance tickets, exit tokens, exit tickets with franchise time, magnetic cards (set-value cards, time expiry subscriptions, etc....)

Ticket with alphanumeric characters (620 STANDARD system)
Printed data: Date/Hour/Minutes/issuing unit number/ticket sequential number
Ticket dimensions: 89 x 60 mm
Printing on high resolution thermal paper
Ticket weight: 75 g
Paper roll with issuing capacity of: 3,000 tickets
Customising facility

Token (620 STANDARD system)
Diameter: 22 mm
Customising facility

Barcode Ticket (620 PLUS - DIGI PLUS - BC – BCM systems)
Coded data: Month/Day/Hour/Minute/Second/Park Code/issuing unit number/ticket type
Ticket dimensions: 89 x 60 mm
Printing on high resolution thermal paper
Barcode: 2/5 interleaved
Ticket weight: 75 g/m2 (620 PLUS/DIGIPLUS) - 140 g/m2 (BC/BCM)
Paper roll with issuing capacity of: 3.000 tickets (75 g/m2) 3.300 tickets (140 g/m2)
Customising facility

Magnetic Card (DIGI PLUS - BM – BCM systems)
Magnetic coding system: ISO STANDARD track 2
Customising facility

ACCESSORIES

light signalling, command and safety
devices, plus installation accessories

CE

FAAC

Space full pannel		
Characteristics	**Single face**	**Double faces**
Case	Aluminium	Stainless steel
Pannel/s P Blu	Plexiglass back lit by neon lamp	Plexiglass back lit by neon lamp
Dimensions	650x1050x360 mm (wxhxd)	620x1100x590 mm (wxhxd)
Installation	Wall-mounted or on a support pale	Wall-mounted or on a support pale
Light	**Spaces** with green light	**Spaces** with 2 green lights
signalling	**Full** with red light	**Full** with 2 red lights
Space full inscription	In 5 languages (I, F, GB, E, D)	In 5 languages (I, F, GB, E, D)
Power supply	220/230 vac 50 Hz	220/230 vac 50 Hz

Lane traffic lights

Structure in polycarbonate with two lights: red/green, 200 mm
diameter

Incandescent lamps 70W/230V

Other accessories

To complete the equipment in the parking systems, FAAC can
offer a wide range of accessories to satisfy all requirements of
clients. The accessories include safety and command devices,
plus installation accessories, including:

Safety photocells

Control button-boards (for in-lane toll-booth PLUS or DIGI PLUS)

BCM exit lane control unit

Emergency release devices for barriers

Articulated beams

Skirt kit for beams

Support poles for L/C panel and lane traffic lights

Foundation plates for columns and entrance/exit barriers

DIGIPASS 100 door opener readers and DIGIPASS management
units

PARKING METER HK

the HK parking meter is an efficient, cost-effective device for managing parking stay It issues a ticket to be placed inside the vehicle against payment that can be by coins, prepaid magnetic cards or chipcards.

Its design is innovative, using corrosion-proof materials. Access to the money collection and maintenance parts is rational and simple, with security keys.

Power can be obtained from 220 Vac mains, public lighting line, rechargeable battery or solar panels.

Complete reports including: totals cashed for the different tariff systems, coin or electronic card acceptance statistics, alarms or faults recorded by the system, as well as opening operations for technical or administrative purposes

Technical specifications	Parcometro HK
Cabinet	Structure in 4 mm anodised aluminium
	Base in 4 mm galvanised steel
	Access compartment with 4-block security lock
	IP 44 protection class
Electronics	16-bit processor and real-time control clock
	RAM 128 Kbytes
	Lithium batteries for data protection
	(8-year life)
	Buzzer to sound during printing
	6 serial interfaces for data transmission
	1 parallel interface for memory card
Display	Backlit liquid crystals
	Time (15 mm) and amount (11 mm) indications
LED indications	Red LED: Out of service
	Orange LED: Battery low
	Green LED: Paper low
Function keyboard	Touch-sensitive, piezoelectric
Printer	Thermal printer, 24 characters per line
	Roll of neutral thermal paper sufficient for
	about 6000 tickets
Cutter	Self-sharpening, for total or partial cuts
Coin insertion collection	Electronic selector for 16 different types of and coin or token
	Security shutter with coin recognition inductive sensor
	Preliminary coin-box for 30 pcs max.
	Coin-box with capacity of 4000/4500 coins, with shut-down device to prevent over-filling
Power supply to Parking meter	220 Vac mains (+10% - 15%)
	Public lighting line
	Rechargeable batteries 12 V DC 65 Ah
	Solar panel
Operating temperature	-20°C +60°C (max humidity 95%)
Weight	80 Kg
Dimensions	1595 mm x 405 mm x 311 mm
Optional items	
Prepaid service management	Magnetic card readers
	Chipcard readers

SECURCASH

armoured box for comfortable, secure electronically controlled cash management
Has a front housing with compartments for orderly separation of banknotes, and a protected rear housing for inserting excess cash through a slit. Immediate access to front housing, but timed access to protected housing

Comfortable and secure cash management
Securcash is an anti-theft appliance consisting of an armoured box with two timed openings, with built-in control keyboard.
Secure, practical and flexible, it is the ideal solution for handling and storing cash.

Anti-theft security
The armoured structure is in 2 and 3 mm thick steel, reinforced in the possible attack points, thus ensuring high resistance to any break-in attempt.
A special method for securing the box to the counter makes quick removal impossible.

Easy to install and ergonomic
Thanks to its special shape and compact size, it easily adapts to and fits in perfectly with any type of station.

Technical specifications

Securcash does not require connection to the electrical mains. Operation is guaranteed by a 12V 1.9 Ah rechargeable lead battery, and Securcash is supplied with a stand-by function enabling longer charge life. When the battery is below a critical threshold, a message is shown on the display advising the user to recharge. Recharging is by a power feeder supplied as an accessory. **To increase deterrent effect, Securcash is supplied with a sticker to be placed on the shop entrance.**

Power supply	Self-powered on rechargeable lead battery
Operation mode	Stand-alone
Operator interface	Alphanumeric LCD display and 16-key keyboard.
On-panel controls and functions	Keyboard and LCD display with communication menu and buzzer
Temporary functions	Can be activated by password (P.I.N)
User levels	Two with primary code and cashier code
Delay time	Programmable from 1 a to 99 min
Type of delay	Electronic and mechanical
Time lock	Can be activated with 0 to 99 minute disabling time
Paint	Powder paint with textured finish
Colour	Grey RAL 7032
Degree of resistance	2-3 mm thick steel reinforced in critical points
Banknote carrier	Extractable, with key-closing lid
Weight	Kg 45
Outer dimensions	Mod 600: L 600 x P480 x H 150 mm Mod 500: L 500 x P600 x H 150 mm
Accessories	Battery charging power unit 220 V

ACCESS CONTROL

FAAC

MAGNETIC READER

MAG/MAG100

CE

FAAC

the MAG/MAG100 insertion magnetic card reader, makes it possible to create access control systems for both vehicles and pedestrians

MAG

MAG100

MAGNETIC CARDS

Magnetic Card
n° 00020
FAAC
Controls

Technical specifications	MAG	MAG100
Enclosure	In ABS	Metal
Power supply	12 Vdc (from management card Viper-Cobra)	
Magnetic track reading	Insertion type	Swipe
Format	ISO STANDARD track 2	
Magnetic track reading	60% of track	100% of track
Electrical connections	5 x 0,5 mm2 multi-pole shielded cable	
Distance max between reader and control unit management (Viper-Cobra)	100 metres	
Operating ambient temperature	- 20° C ÷ + 55° C	
Installation	On-wall or on-column	
Heater	Managed by thermostat	Not present
Signalling light	N.1 Two-colour multi-function LED	
Buzzer	Can be disabled	
Shutter	Mechanical	Not present

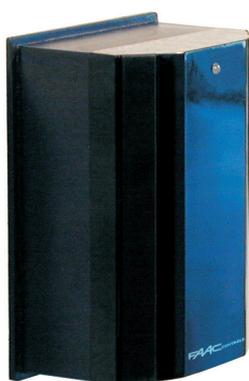Compatible with VIPER card or COBRA management unit

Use
Vehicle or pedestrian access control systems, including outdoor installations

TAG10/TAG5/TAG3

CE

TAG-10/TAG-5/TAG-3 proximity readers for passive transponders make it possible to create access control systems with an extremely high security level. They are easier to use thanks to long range detection and as they have absolutely no moving mechanical parts, they require virtually no maintenance

TAG5

TAG10

TAG3

PROXIMITY CARDS

TRANSPONDER

Technical specifications	TAG10	TAG5	TAG3
Enclosure	Plastic	Plastic	Parts in kit to built-in
Power supply	12 Vdc (from management card)		
Reading distance	~10 cm	~5 cm	~3 cm
Protection class	IP 54	(indoor type)	(indoor type)
Electrical connections	5x0,5 mm2 shielded cable type)		
Max distance between reader and management unit	100 metres		
Operating ambient temperatre	-20°C ÷ +55°C		
Two-colour multi-function LED	YES	YES	YES (can be disabled)
Buzzer	YES (can be disabled)	YES (can be disabled)	NO
Installation	On-wall or on-column	GEWISS cont.	Box 503
Dimensions	70 x 95 x 44 mm (L x H x P)	46 x 45,5 x 23 mm (L x H x P)	see fitting dimensions

Compatible with VIPER card or COBRA management unit

Use of TAG10
Vehicle or pedestrian access control systems,including outdoor installations

Use of TAG5
Access control systems, especially pedestrian, for indoor installations

Use of TAG3
Access control systems, especially pedestrian, for indoor installations

FRUTTO

CE

FAAC

these devices are composed by magnetic and proximity reader using the standard 503 box.

They are suitable for any civil constructions as houses, offices, hotels, schools, etc.

The available devices are the following:

Frutto-STR   ISO magnetic card swipe reader (100% of track)
Frutto-INS   ISO magnetic card reader by insertion (60% of track)
Frutto-INT   ISO card presence detection only
Frutto-INT-PS   ISO proximity card reader with card presence detection

FRUTTO-STR

FRUTTO-INS
FRUTTO-INT
FRUTTO-INT-PS

Description	STR	INS	INT	INT-PS
Device/reader	Swipe magnetic reader (100% of track)	Insertion magnetic reader (60% of track)	Card presence only	Proximity reader and card presence
Card type	ISO magnetic	ISO magnetic	ISO size card only	ISO proximity
Reading distance	No	No	No	Card inserted
Two colours LED	No	On front side		
Buzzer	Can be silenced	Can be silenced	Not provided	Can be silenced
Fixing	On box 503			
Wiring with management units Viper/Cobra	Cable 5x0,5 mm shielded (max 100 mt)	Cable 5x0,5 mm shielded (max 100 mt)	Depend on the site	Cable 5x0,5 mm shielded (max 100 mt)
Power source	From manag.units Viper/Cobra	From manag.units Viper/Cobra	Non powered	From manag.units Viper/Cobra
Adsorbed current	Max 90 mA	Max 90 mA	None	Max 90 mA
Operating temperature	(Indoor type)			
Case	Gewiss Playbus			
Dimensions (mm)	44 x 75 x 58 (HxWxD)	44 x 75 x 90 (HxWxD)		

RESIST

CE

FAAC

Resist range of readers and keyboards, has been conceived for both, pedestrian and vehicular gates. Metallic casing case structure with stainless steel front panel covered by polycarbonate layer.
It consists of the following devices:

Resist-T   Numeric keyboard to digit PIN codes only
Resist-PS   Passive proximity reader
Resist-TPS   Passive proximity reader with Numeric keyboard
Resist-COL   Column support for all kind of Resist devices

RESIST-T   RESIST-PS   RESIST-TPS   RESIST-COL

Description	Resist - T	Resist - PS	Resist - TPS
Device/reader	12 keys keyboard	Proximity	Proximity and keyboard
Reading distance	–	Max 5 cm	Max 5 cm
Tag (125Khz) reading	–	Card/key ring	Card/key ring
Case structure	Casting aluminium		
Dimensions (mm)	100x100x42 (H x W x D)		
Front panel	Fiber glass with polycarbonate layer		
IP degree	IP 55		
Keys	Stainless steel mechanic keys	–	Stainless steel mechanic keys
Interface LED	Two colours 3 mm		
Buzzer	Can be silenced		
Power source	From management unit Viper		
Adsorbed current	Max 60 mA	Max 100 mA	Max 160 mA
Operat. temperature	-10°C ÷ +55°C		
Fixing	To wall or supp. column		
Wiring	Cable 5x0,5 mm shielded (max 100mt)		

Description	Resist - COL
Case	Steel
Painting	Black powder coated
Dimensions	1100x100x100 mm

DECODER TTR
PROGRAMMABLE FOR 433 SLH

CE

the DECODER TTR interface makes it possible to create access controlsystems using the FAAC 433 SLH radio control. The system is highly recommended for outdoor vehicle set-ups too since the user can remotely open the access while comfortably seated in the car

DECODER TTR

TML4 433 slH

TML2 433 slH

PLUS 1 433

Technical specifications	PLUS 1 433	TML2 433 SLH	TML4 433 SLH
Power supply voltage	20÷30 Vdc 24 Vac ±10%	12V Battery	12V Battery
Work frequency		433,92 MHz	
Reading distance	/	~50 m	~50 m
Protection class	IP 44	/	/
Transmission channels	/	2	4
Available codes	/	72 millions of billions	
Operating ambient temperature	-20°C ÷ +55°C	-10°C ÷ +55°C	-10°C ÷ +55°C
Compatibility	with VIPER 400 card or COBRA 1500 - 5000 management unit		

DECODER TTR
PROGRAMMABLE FOR 868 SLH

CE

DECODER TTR

DL2 868 SLH   DL4 868 SLH

T2 868 SLH

T4 868 SLH

TML2 868 SLH LR   TML4 868 SLH LR

PLUS 1 868

Technical specifications	PLUS1 868	T2/DL2 868 SLH	T4/DL4 868 SLH	TML2 868 SLH LR	TML4 868 SLH LR
Power supply voltage	20÷30 Vdc 24 Vac ±10%	2 lithium batteries 5V	2 lithium batteries 5V	12V battery	12V battery
Work frequency			868,35 MHz		
Reading distance	/	~50 m	~50 m	~50 m	~50 m
Protection class	IP 44	/	/	/	/
Transmission channels	/	2	4	2	4
Available codes	/	72 millions of billions			
Operating ambient temperature	-20°C ÷ +55°C	-10°C ÷ +55°C	-10°C ÷ +55°C	-10°C ÷ +55°C	-10°C ÷ +55°C
Compatibility	with VIPER 400 card or COBRA 1500 - 5000 management unit				

VIPER 400

the VIPER 400 independent management card is designed for stand-alone mode (without personal computer) access control systems. It is the ideal solution wherever a simple, secure system is required

Technical specifications VIPER 400

The **VIPER 400** management card was designed for pedestrian and vehicle access control systems in stand-alone mode (without use of a personal Computer)

Facility for connecting the following: maximum of 2 **MAG/MAG 100** magnetic readers, **TAG-10/TAG-5/TAG-3** transponders or **433 SLH-868 SLH** transmitters with the **DECODER TTR**

N.B. Two readers can be connected in parallel to the same input by using the MIXER card.

Memory capacity for up to 400 users

Can manage a single gateway or two programmable gateways:
- Single gateway:
  Entrance reader / exit push-button
  Entrance reader / exit reader
  Facility for managing door status with possible alarm activation
- Two gateways:
  Reader on gateway A
  Reader on gateway B
  (on gateway A can be installed an exit push-button and door status management with alarm activation)

Facility for inputting access password

1 three-Digit Display for programming and displaying card status

5 programming push-buttons

Available programs:
- Card management (storage, deletion and modification)
- Operational settings (single-gataway management, double-gateway management, etc...)
- Time settings
- Exits activation
- Archive export/import

The additional memory, which can be supplied as an optional item, enables users to export/import "card data" from one card to another or to make security copies.

12÷24 Vac/Vcd power supply

Compatible with Mod. **E - L - LM** enclosures.
The Mod. **E** enclosure can house the following for combined use:
- **VIPER 400** card
- Power-supply unit on DIN bar
- **DECODER TTR** on DIN bar
- **MIXER** card on DIN bar
The Mod. **L** enclosure can house the following for combined use:
- **VIPER 400** card
- **MINISERVICE** power-supply unit on DIN bar with installation accessories
The Mod. **LM** enclosure can house the following for combined use:
- **VIPER 400** card
- **MINISERVICE** power-supply unit on DIN bar with installation accessories
- **DECODER TTR** on DIN bar
- **MIXER** card on DIN bar

N.B.: In case a Miniservice unit is used to control an electric lock (12 Vac), the same power-supply unit can be used to supply the Viper board (24 Vdc). In this case there is no need of Viper power supply unit. Not alla electric lock are compatible with the Miniservice unit.
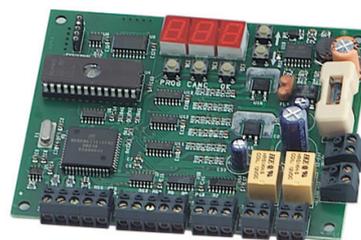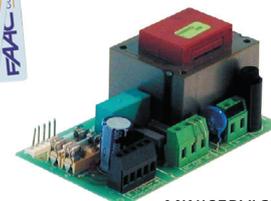

VIPER 400

Mod. L

VIPER 400
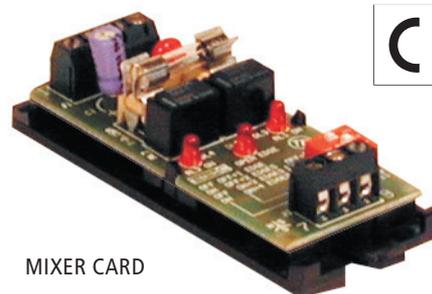POWER SUPPLY UNIT

TRANSPONDER

PROXIMITY CARDS

MINISERVICE

MAGNETIC CARDS

MIXER

with the MIXER card, two readers can be combined on the same input, even of different technology

MIXER CARD

Characteristics

The **MIXER** card enables users to combine two readers (of different technology too) on the same gate managed by **VIPER 400/COBRA**

This makes possible to create pedestrian or vehicle access control systems with double entrance and exit readers (e.g. magnetic and **DECODER TTR** or magnetic and transponder, etc.) managed by management unit **VIPER 400/COBRA**

The **MIXER** card is supplied with a DIN-bar applicable support and is, therefore, compatible with Mod. E-L-LM racks.

TAG 10 SA

CE

TAG-10-SA is an access control device able to store proximity cards. Manages door by controlling its status (open or closed). It may generates an alarm in case of not authorized opening. It works autonomously ("SA" means Stand Alone) with no external management board or programming PC. Cards archives, can be copied by a removable memory (option).
TAG-10-SA (reader A, master) is able to be manage a second TAG-10 (reader B, slave). This configuration allows area management having one entry/exit gate with Anti-Pass-Back feature. Configuring and learning of cards are managed by self learning mode with Cards Kit

Technical specifications	TAG 10 SA
Device/reader	Proximity
Management unit	Built in
Reading distance	Max 10 cm
Tag reading (125 khz)	Card/key ring
Case structure	Plastic
Dimensions (mm)	95 x 70 x 44 (H x W x D)
Front panel	Plastic
IP degree	IP 54
Interface Led (by three coloured LEDS)	a) programming
	b) reading OK
Buzzer	Codes recognising, error status
Input	n.1 door status input
	n.1 open door input
Output	n.2 relay outputs
	n.1 open collector output (alarm door status/tamper)
Codes	500 cards
Door control (one door)	n.1 master reader
	n.1 slave reader
Door control (two door)	n.1 master reader (door n.1)
	n.1 slave reader (door n.2)
	n.1 alarm door status (door n.1)
	n.1 door status input (door n.1)
Configuring and cards learning of codes	Self learning mode with Cards Kit
Power supply	12/24 Vdc - 12/21 Vac
Adsorbed current	Max 180 mA
Operating temperature	-10°C ÷ +55°C
Fixing	To wall or column
Wiring master-slave (max 100 mt)	Cable 5x0,5 mm shielded

RESIST SA

$C \varepsilon$

RESIST-SA is an access control device able to store codes or/and cards. Manages door by controlling its status (open or closed). It may generates an alarm in case of not authorized opening. It works autonomously ("SA" means Stand Alone) with no external management board or programming PC. Codes/cards archives, can be copied by a removable memory (option).
RESIST-SA (reader A, master) is able to be manage a second RESIST (reader B, slave). This configuration allows area management having one entry/exit gate with Anti-Pass-Back feature. Configuring and learning of codes or/and cards are managed by keypad or/and self learning mode with Cards Kit

RESIST-T-SA   RESIST-PS-SA   RESIST-TPS-SA

Technical specifications	Resist - T - SA	Resist - PS - SA	Resist - TPS - SA
Device/reader	12 keys keypad	Proximity	Proximity and keypad
Management unit	Built in		
Reading distance	-	Max 5 cm	Max 5 cm
Tag reading (125 khz)	-	Card/key ring	Card/key ring
Case structure	Casting aluminium		
Dimensions (mm)	100x100x42 (H x W x D)		
Front panel	Fiber-Glass		
IP degree	IP 55		
Keys	12 keys 0-9, Enter, Space (backlit)	-	12 keys 0-9, Enter, Space (backlit)
Interface Led (by three coloured LEDS)	a) programming b) reading OK		
Buzzer	Codes recognising, error status	Card recognising, error status	Codes/card recognising, error status
Input	n.1 door status input n.1 open door input		
Output	n.2 relay outputs n.1 open collector output(alarm door status/tamper)		
Codes	500 (cards / PIN codes)		
Door control (one door)	n.1 master reader n.1 slave reader		
Door control (two door)	n.1 master reader (door n.1) n.1 slave reader (door n.2) n.1 alarm door status (door n.1) n.1 door status input (door n.1)		
Configuring and learning of codes or/and cards	By keypad	Self learning mode with Cards Kit	By keypad or/and self learning mode with Card Kit
Power supply	12/24 Vdc - 12/21 Vac		
Adsorbed current	Max 180 mA		
Operating temperature	-10°C ÷ +55°C		
Fixing	To wall or column		
Wiring master-slave (max 100 mt)	Cable 5x0,5 mm shielded		

BIOMETRIC HAND READER

BIOKEY

CE

FAAC

BIOKEY is the biometric hand reader that recognises hands geometry as unique characteristic for persons identification.
96 hand significant characteristics are acquired from a digital camera, processed and compressed.
The reference shape (template) thus obtained is put on file archive. Identification is done by user code already registered and a new hand reading.
This new reading is compared to the one of template on archive with the evaluation of differences in between.
If such difference is on the set range (tuned according to needed security level), BIOKEY confirm identification enabling the output defined.
As alternative, the unit can be used in badge reader emulation, by sending to central system, relevant infos to local transaction in mag-stripe format.
BIOKEY is able to operate, in addition to reader configuration with COBRA , with network 485 or LAN, in Master-Slave configuration, if there's a link on 2 or more BIOKEY. In this way, only once is needed to collect hands images from the master reader and then transfer them to remaining readers by simple command. User code can be sent by build in keyboard or by badge reader.
BIOKEY is user friendly and reliable.
It makes an ideal unit for a lot of applications such as, restricted area where high security level is required, time attendance, security revolving doors management, opening for safes, unlocking system for archives, enabling security alarm/anti intrusion systems, etc.

Technical specifications	BIOKEY
Reader	Biometric - Hand geometry
Data format	Magnetic stripe
Installation	On wall
Link to Cobra	Multiwire cable 5x0,5 mm with screen
Distance from reader to Cobra	100 mt max.
Power supply	12/24 V cc/ca (not supplied)
Case	Pre cast aluminium
Dimensions (HxWxD)	223x217x295 mm
Use	Pedestrian access control and time attendance

Applications
Access to restricted areas
Presence recording
Multifunctional management of inner archives
Management opening of safes and strongboxes
Access and management of automatic archives
Management and coordination of alarm systems

BIOFINGER

CE

BIOFINGER reader recognises
finger prints; it is compact and
easy to install.
It checks the finger print by optical
sensor.
The reader is in need of
identification code that address
the reader to recognise only a set
finger print pre-stored on the
memory.
It is recommended for use in
restricted area.
The reader manages two finger
prints for each user to grant an
high level of security.
A special feature is available to
exclude the finger print
recognition in case that is not possible or finger is injured.
A standard serial port is available for PC link as alternative to link with COBRA unit.
In case of more readers on the same site, the self learning of fingers is done by one
master unit and exported to slave readers (max 32), by serial link

Technical specifications	
Reader	Optical check of finger print after PIN addressing.
Finger print image memory.	2 x 400 bytes
Sensor	Optic
Processing time	Less than 2″
Memory capacity	50 users (can be improved)
User PIN code	From 1 to 15 digits
Output data format	Magnetic stripe
Installation	On wall
Electric wiring with Cobra unit	5x0,5 mm schielded
Max distance from reader to Cobra	100 mt.
Power supply	12 V cc (not provided)
Ambient temperature (indoor use only)	0°C ÷ + 45°C
Dimensions mm	128 x 135 x 78 (H x W x D)

DIGIMAG/DIGITAG CAR

the DIGIMAG and DIGITAG readers, supplied with keyboards and displays, are particularly suitable for pedestrian control with presence detection

Technical specifications	DIGITAG/DIGITAG-2	DIGIMAG
Type of reader	passive proximity	magnetic swipe
Format	/	ISO STANDARD track 2
Reading distance	~10 cm	contact
Numeric keyboard	16-key membrane	
Magnetic track reading	/	100% of track
LCD display	16 x 2 character, back-lit	
Installation	on-wall	
Electrical connections	9x0,5 mm2 multi-pole shielded cable	
Power supply	by COBRA management unit	
Max distance between reader and management unit	40 metres	

N.B.: **DIGITAG-2** enables the detections of entrance and/or exit thanks to 2 different readers in the same device.

Use
Access control systems (especially pedestrian) installed indoors and managed by COBRA UNIT and Personal Computer.
The following can be input with the keyboard: - codes associated with the card being used (double security) - system activation codes - justifying codes - codes for activating-de-activating other systems (e.g. alarm system)
The following information can be viewed on the display: - calendar with date and time - messages regarding cards being used (valid card, invalid card, off time band, etc.) - messages concerning assigned codes - information messages sent via Personal Computer

DIGIMAG
MAGNETIC
READER

DIGITAG
PROXIMITY
READER

DIGITAG2
PROXIMITY
READER

CAR SERIES

the CAR series control units are designed for vehicle systems, including outdoor installations

Technical specifications	CAR M	CAR P	CAR MP
Housing	steel sheet with cataphoresis treated, painted with RAL 2004 polyester paint		
Rear door	key lock protected		
Front panel	in stainless-steel		
Reader of magnetic insertion cards	YES	NO	YES
Proximity reader for passive transponders	NO	YES	YES
Reading distance	contact	~10 cm	contact ~10 cm
16x2 character back-lit LCD display	YES		
Backlit keyboard in silicon rubber	YES		
Intercom	YES		
"Traffic light" LED	YES		
Master versions	with pre-wired COBRA 1500 management unit		
Overall dimensions	Height 1250 mm, width 400 mm, depth 425 mm		
Designed to install	DETECTOR, DECODER TTR, MIXER CARD		
Electrical supply	230 Vac (+6% -10%)		
Max distance between Master and Slave unit	40 m		
Operating ambient temperature	-20°C ÷ +55°C		

CAR/TAG

CE

the CAR/TAG control reader is designed for vehicle accesses requiring long range detection. Thanks to an active transponder, it reads while the user sits in the car

Technical specifications	CAR/TAG
Housing	Steel sheet cataphoresis treated, painted with RAL 2004 polyester paint
Rear door	Key lock protected
Detection antenna	In tubular stainless-steel
Electronic control equipment	For active transponder
Reading distance	~120 cm
Front panel	In stainless-steel
LCD display	16 x 2 character, back-lit
Keyboard	In silicon rubber
Intercom	With call push-button
Traffic light LED	YES
Master versions	With pre-wired COBRA management unit
TAG	Active type, self-powered by lithium battery
Overall dimensions (without antenna)	Height 1250 mm Width 400 mm
Designed to install	Depth 425 mm DETECTOR, DECODER TTR, MIXER CARD
Electrical supply	230 Vac (+6% -10%)
Max distance between Master and Slave unit	40 m
Operating ambient temperature	-20°C ÷ +55°C

CAR/TAG

TAG ACTIVE TRANSPONDERS

AT-8

CE

the AT-8 control unit is designed for identifying vehicles by reading TAGs active at 2.45 GHz, fitted by suction cup on the vehicle windscreen.
Double identification facility - vehicle and driver - by COMBI-BOOSTER reading

Technical specifications	AT-8
Reading unit	For detection up to 8m
Detection speed	Max 200 Km/h
TAG reader	aActive at 2.45 GHz
Structure	In stainless-steel on flexible support
Installation	On-wall or on-rod
Front panel	In plastic
Overall dimensions	310 x 250 x 100 mm
Weight	5 kg
Operating ambient temperature	-20°C ÷ +55°C
Power supply	230 Vac~ (+6% -10%) 50 (60) Hz
Absorbed current	125 mA
Protection class	IP 65
Compatibility	COBRA
Interface	By RS232 or OMROM ISO 7811/2
Identification signalling	Buzzer

AT-8

COMBI-BOOSTER

WINDOW BUTTON

WINDOW TAG

N. 001

FAAC Controls

| Use |
|---|
| Designed for identifying vehicles by reading TAGs active at 2.45 GHz fitted by a suction cup on the car windscreen |
| TAG powered by lithium battery (minimum 5 years) |
| Double identification facility (vehicle and driver) by COMBI-BOOSTER reading. |
| The COMBI-BOOSTER contains the vehicle activation active TAG and is designed to house a passive proximity card (125 KHz). The device transmits the card code at 2.45 GHz to enable detection by the AT-8 reader. |
| This solution is ideal for managing "fleets" of municipal agencies, hospital agencies, etc, where both vehicle and driver must be "recognised" (COMBI-BOOSER TAG code and PROXIMITY CARD code). |

COBRA

CE

FAAC

the COBRA management unit combined with WINCONTROL software makes it possible to create access control systems of all types and sizes; at the very top end over 500 readers can be connected to "WIN-NET". All reading technologies can be applied by the MAG magnetic reader, right up to the LONG RANGE AT-8 active transponder. Memory capacity of up to 65,000 users. Management of 999 time bands on weekly basis and of annual calendar including holidays
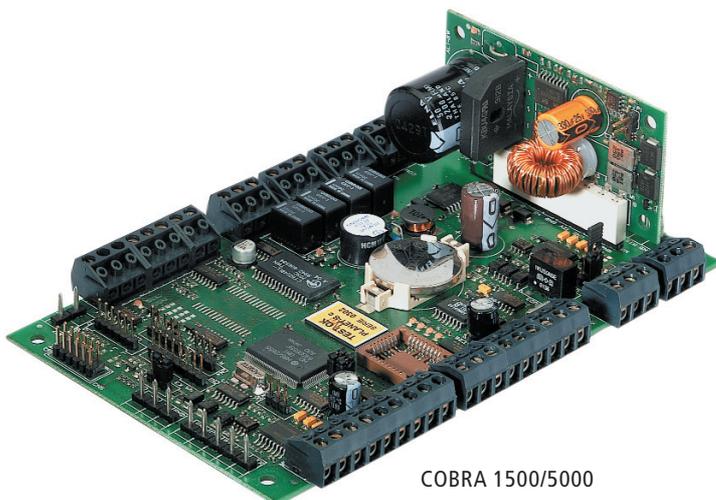
COBRA 1500/5000

Mod. LM

Technical specifications	COBRA 1500	COBRA 5000
Access control system	Pedestrian and vehicle	
CPU	16/32 bit	
Program memory	512 Kbyte Flash updatable via serial port containing all function variations	
Tables + transactions memory	Buffered 128 Kbyte RAM	Buffered 512 Kbyte RAM
Serial ports	1 RS 232 Serial 1 additional RS 232 Serial 1 RS 485 Serial	1 additional RS 232 Serial 1 RS 485 Serial 1 RS 485 serial for sub-network management
Operation mode	Operates stand-alone if configured by a portable PC or on-network with a PC	
Reader management	Max 2 readers (4 with MIXER board)	
User (stand-alone) management	Variable from 10 to 3,500 Pre-set at 1,500	Variable from 10 to 15,000 Preset at 5,000
Readings archive (stand-alone) management	Variable from 200 (3,500 cards) to 12,000 (10 cards) Preset at 6,972 with 1,500 users	Variable from 200 (15,000 cards) to 51,000 (10 cards) Preset at 34,189 with 5,000 users
Hour band (stand-alone) management	255	
Parking lane	1 o 2 programmable	
Single door management	Entry reader Exit push-button Entry reader Exit reader Possibility of managing door status with alarm activation if necessary	
Double door management	Reader on gateway A Reader on gateway B Exit push-buttons and door plus alarm status management can be inserted on both gateways	
PIN management	By connection to a reader with display and keyboard (pin and pin+card)	
Inputs and outputs	6 inputs 1 anti-tampering 4 relay outputs	
Power supply voltage	230 Vac (+ 6% ÷ 10%) 50 (60) Hz	
Battery	12 Volt 1,2 Ah	

PC-SOFTWARE

$C \in$

HP Vectra 366 MHz or higher - RAM 32 MB or higher – 4.3 GB Hard Disk or higher 15″ monitor WINCONTROL 1P management software for direct connection to RS 232 serial port of PC and a COBRA unit

PC

FAAC Controls

Technical specifications	WINCONTROL
Operating System	Microsoft Windows (95/98/NT/2000/XP)
Access	Confidential password
Communication	Serial port
Identification	Transponder cards
	Magnetic card
	PIN code
User associations	Unlimited access level
Logistic controls	Enabled zones
	Movements
	Anti-pass back
	Typing in of amounts
Time controls	999 hour bands/week
Opening conditions	Accesses level
	Hour bands
	PIN codes
	Temporary disabling

RS 232/RS 485
INTERFACE
CONVERTER
(FOR ONE LINE)

WINCONTROL 1P MANAGEMENT
SOFTWARE (FOR 1 **COBRA**)
Can be connected directly
to RS 232 serial port
of a Personal Computer

RS 232/RS 485
INTERFACE
CONVERTER
(for four lines)

WINCONTROL 5P
MANAGEMENT SOFTWARE
(FOR 2 **COBRA**)
Operates on WinNet
by means of a line converter

WINCONTROL 10P
MANAGEMENT SOFTWARE
(FOR 10 **COBRA**)
Operates on WinNet
by means of a line converter

WINCONTROL 255P
MANAGEMENT SOFTWARE
(FOR 255 **COBRA**)
Operates on WinNet
by means of a 4-line converter

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P PARKING SYSTEMS

620 STANDARD

The system essentially consists of a ticket dispenser and a token acceptor respectively on the entrance and exit lanes. The use of the CTM 170 programming console enables parking parameters to be configured. The system is completed with automatic barriers at entrance/exit, signalling devices such as "parking spaces/full" panel and lane traffic lights. If the lanes include pedestrian transit points, we advise installing safety photocells with FSW card.

620 PLUS

The system consists of a data controller enabling configuration of parking parameters and transmission via network to peripheral units. The standard system is completed with automatic barriers at entrance/exit, signalling devices such as "spaces/full" panel and lane traffic lights. If the lanes include pedestrian transit points, we advise installing safety photocells with FSW card.

620 DIGIPLUS

The system consists of a data controller enabling configuration of parking parameters and transmission via network to peripheral units. The standard system is completed with automatic barriers at entrance/exit, signalling devices such as "spaces/full" panel and lane traffic lights. If the lanes include pedestrian transit points, we advise installing safety photocells with FSW card.

BC

The system consists of a data controller enabling configuration of parking parameters and transmission via network to peripheral units. Peripheral units are: entrance/exit control units, manned toll-booth and automatic pay-station (optional) and floors counting unit G.S.O. (optional). The standard system is completed with automatic barriers at entrance/exit, signalling devices such as "spaces/full" panel and lane traffic lights. If the lanes include pedestrian transit points, we advise installing safety photocells with FSW card.

BM

The system consists of a data controller enabling configuration of parking parameters and transmission via network to peripheral units. Peripheral units are: entrance /exit control units and manned toll-booth, floors counting unit G.S.O. (optional) and reader for pedestrian door/gate DIGIPASS 100 (optional). The standard system is completed with automatic barriers at entrance/exit, signalling devices such as "spaces/full" panel and lane traffic lights. If the lanes include pedestrian transit oints, we advise installing safety photocells with FSW card.

BCM

The system consists of a data controller enabling configuration of parking parameters and transmission via network to peripheral units. Peripheral units are: entrance/exit control units, manned toll-booth and automatic pay-station (optional), floors counting unit G.S.O. (optional) and reader for pedestrian door/gate DIGIPASS 100 (optional). The standard system is completed with automatic barriers at entrance/exit, signalling devices such as "spaces/full" panel and lane traffic lights. If the lanes include pedestrian transit points, we advise installing safety photocells with FSW card.

CONCEALED
TRAFFIC BOLLARDS

CONCEALED TRAFFIC BOLLARD

FAAC CITY

CE
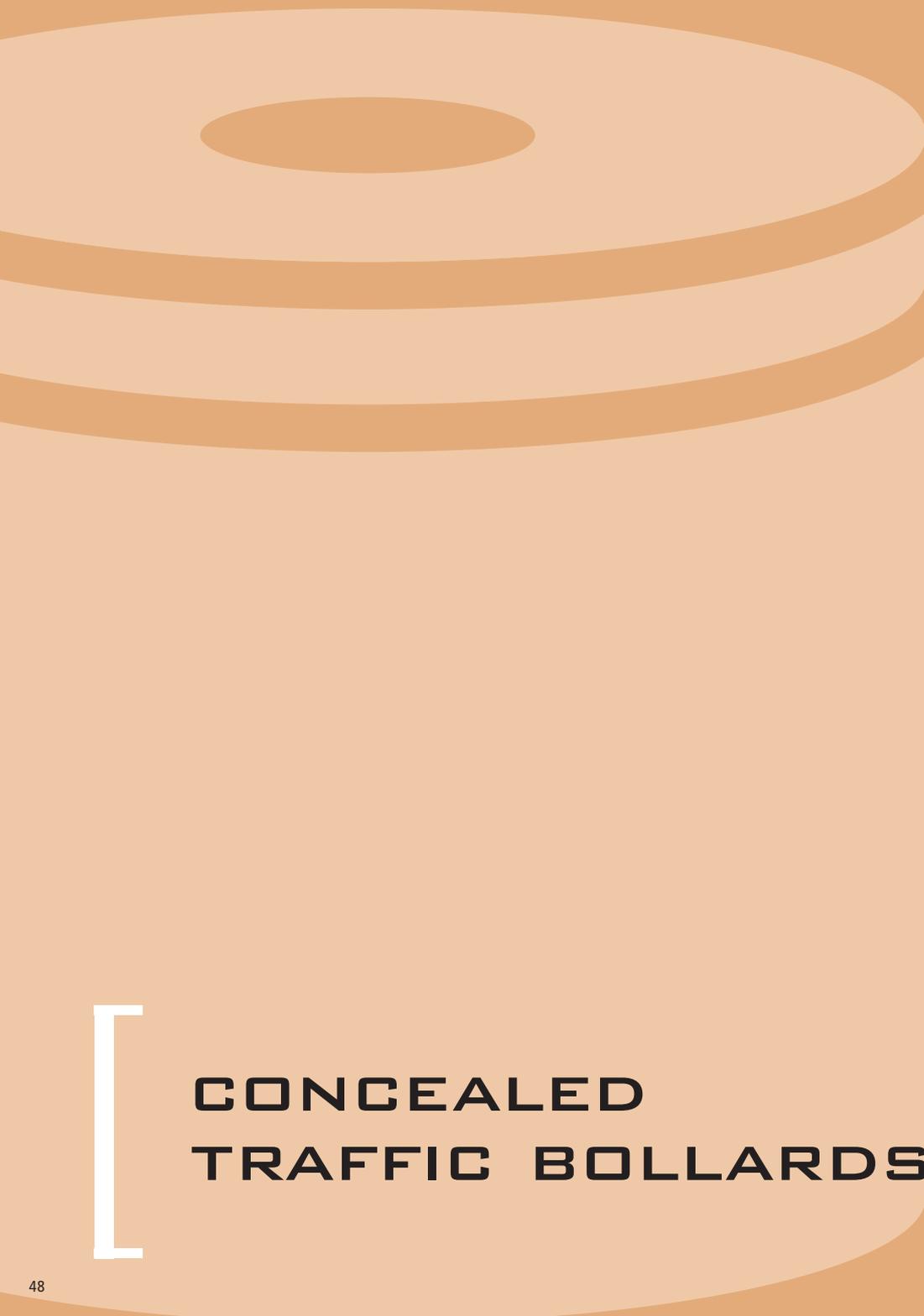
FAAC

concealed traffic bollard

■ We have solved the problem of accesses to old town centres or to restricted traffic zones

In cities, especially in old town centres, traffic is becoming more and more difficult to manage. FAAC launches a new range of devices specifically studied to offer solutions for this type of problem.

■ A valid city traffic controller

FAAC City is a metal cylinder with a piston mechanism enabling it to be raised and lowered by command. These cylindrical elements are highly resistant

to impact and atmospheric agents. They are housed inside compartments set into road surfaces and dissuade traffic and/or parking. FAAC City offers help and an intelligent solution as an alternative to fixed stations, railings, barriers, chains and the like, by regulating entry of cars in given zones and preventing abusive parking.

The bollard therefore has a multiplicity of uses: it delimits pedestrian islands during the most crowded hour bands or permanently, it allows entry to certain zones to authorized vehicles only (tradespeople, residents, hotel or garage guests, taxis and chauffeured driven cars, holders of reserved parking permits), it delimits car parks, squares or pavements and can also be used as a safety protective device.

■ City mobility and respect for urban decor

FAAC City's strong point is that it best exploits available space, thanks to its mobile, concealed structure.

The bollard not only guarantees smooth pedestrian flow, but also manages vehicle traffic and restricted parking, with the following advantages:

- Does not disfigure the characteristics of the environment because it is a mobile, concealed element with minimum environmental impact.
- Ensures greater protection of pedestrian areas in old town centres.
- Allows access to authorized vehicles only.
- Reduces and optimises the use of human resources engaged in access control activities.
- Customisable colour selection for blending in with the urban context.
- Operation can be highlighted by buzzer or indicator light, according to position.
- Available with a large range of accessories.
- It is a deterrent

FAAC CITY automatic

 CE

we advise installing FAAC City Automatic when many transits per day are necessary or expected.
It can be activated or disabled automatically by commands executed by authorized persons (holders of smart cards, remote controls, etc.) or by pre-set time-based automatic commands (hourly programmer).
The device has double-acting hydraulic activation and a hydraulic unit (built into the device) to motorise the bollard

■ In its low position, it allows vehicle traffic

■ At the lifting stage

■ In its high position, it prevents vehicle traffic

Technical specifications FAAC CITY 275 AUTOMATIC	H 600	H 800
Motion criterion	Hydraulic	
Driven cylinder	Fe37 steel - thickness 6 mm	
Treatment of drive cylinder	Polyester powder paint, dark grey metallised colour	
Driven cylinder diameter	275 mm	
Driven cylinder stroke	600 mm	800 mm
Cylinder top part (head)	Anticorodal case hardened aluminium	
Cylinder surface treatment	Polyester powder paint, light grey metallised colour	
Descent time	9 sec	12 sec
Rise time	9 sec	12 sec
Hydraulic pump	Power supply 230 vac +6% -10% 50 Hz	
Protection class	IP 67	
Absorption	220 W	
Work frequency	Intensive use	
Refracting adhesive band	Standard height 80 mm	
Manual lowering operation	YES(*)	
Impact resistance	6,000 joule (FE steel - thickness 6 mm)	
Crashing resistance	75,000 joule (FE steel - thickness 6 mm)	
Dimensions of pit to be walled in	560x560x1020 mm	560x560x1220 mm
Standard length of connected cable	10 mt	

(*) The "Up" bollard position is guaranteed. Even in case of power failure, by the hydraulic lock integrated into the system.
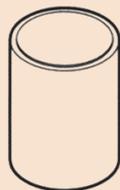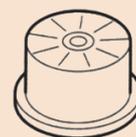As optional, available an "Automatic release device" in case of lack of power.

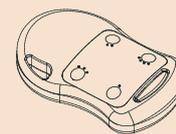# Accessories
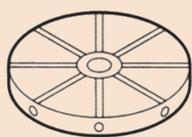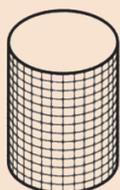
| Integrated light | Reflective tape or customised painting for cylinder | Stainless steel cylinder | Acoustic intermittent device | DL4 868 SLH four-channel transmitter |

FAAC CITY semiautomatic

FAAC

this type of bollard should be used when accesses are restricted, or be combined with the Automatic version of FAAC City.
It solves transit and/or parking problems without high costs and without the need for electrical energy. In fact, thanks to the single-acting gas actuator, automatic-manual lifting with the aid of a key is possible

■ Turn the key to acti-vate the release com-mand

■ Lower by lightly pres-sing downward

■ Turn the key to acti-vate the release com-mand

■ FAAC City lifts auto-matically

Technical specifications FAAC CITY 275 SEMIAUTOMATIC	H 600
Motion criterion	Single effect gas piston
Cylinder	Fe37 steel - thickness 6 mm
Treatment of cylinder	Polyester powder paint, dark grey metallised colour
Cylinder diameter	275 mm
Cylinder stroke	600 mm
Cylinder top part (head)	Anticorodal case hardened aluminium
Cylinder surface treatment	Polyester powder paint, light grey metallised colour
Refracting adhesive band	Standard height 80 mm
Manual lowering operation	YES
Impact resistance	6,000 joule (FE steel - thickness 6 mm)
Crashing resistance	75,000 joule (FE steel - thickness 6 mm)
Dimensions of pit to be walled in	560x560x1020 mm
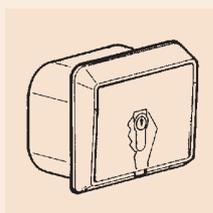
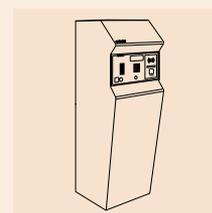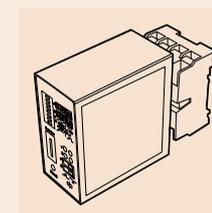Key operated
push-button
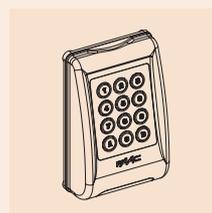
Radio keypad
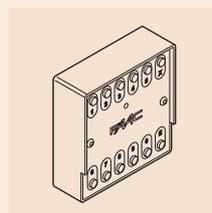
Resit TPS-SA
stand alone reader

CAR MP vehicle
access control unit

Inductive metal
detectors FG 2

Rev. 10

40° ANNIVERSARY 1965-2005

FAAC

SIN CERT

CERMET
SISTEMA
DI GESTIONE
CERTIFICATO
**REG. N. 085
UNI EN ISO 9001:2000**