

## Carwash Range







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SUZOHAPP is a technology company providing software and hardware for cash handling automation and self-service solutions to more than 25,000 customers throughout the world. SUZOHAPP's technology enables automation for customers operating in a variety of end markets, including retail, transportation, vending, banking, gaming and amusement. SUZOHAPP's solutions include cash deposit, recycling, processing and payment systems as well as a broad range of self-service component technologies. SUZOHAPP operates in 19 countries and its dealer network covers more than 100 countries.



1,100+  
employees



50,000+  
products



35  
facilities



25,000  
customers



115  
Engineers



Hundreds  
of patents



## VISION

To be the global market leader in technology-driven cash management, self-service, and gaming devices through our commitment to people, customers, and quality



## MISSION

To provide our customers with excellent service and high-quality components, solutions, and software that create significant value for their business



## CORE VALUES



AGILITY



CUSTOMER  
FOCUS



INNOVATION



INTEGRITY



RELIABILITY



TEAMWORK

## PRODUCT BRANDS

SUZOHAPP is a diverse company with multiple brands and product lines

**SCAN COIN**

Cash**Complete**™

 **Comestero**

Bill**toBill**™

**currenza** 

**coinCO**

 **VisionPro**™

 **CompetitionPro**

 **BilliardPro**

 **InteractivePro**

We take pride in our products, we take care of our customers and we value our people



## Global Reach

SUZOHAPP is a global company with a worldwide presence and a diverse workforce. SUZOHAPP has grown rapidly to meet the needs of the markets, expanding the breadth of its product offering and service capability. Its best-in-class product and service offerings create significant value and operational efficiencies for customers all over the world.

- International coverage through national subsidiaries
- Distribution partners all around the globe
- Worldwide presence with a global service network
- Variety of customers across multiple business segments

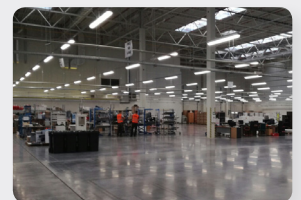


## Around The World & Around The Corner

In addition to the offices and manufacturing sites located on the map, SUZOHAPP has strategic partnership agreements with Value Added Distributors, Gaming Channel Partners, and Contract Service providers in those regions where market or license conditions dictate.

## Your Strategic Partner

SUZOHAPP's logistical support and supply chain configuration builds on its total value proposition by providing customers with cost saving delivery "From Our Door to Your Production Floor". Through continuous communication and feedback, the SUZOHAPP supply chain team works closely with customers and factories to maintain a steady product supply while eliminating costly additional inventory. We are firmly committed to providing the best customer service to all customers.



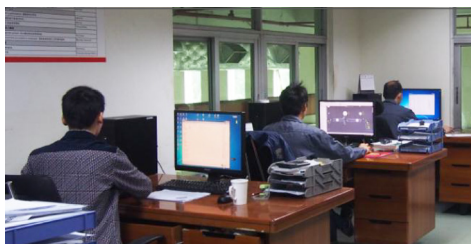
# Manufacturing Capabilities

## Adding Value Through Manufacturing

SUZOHAPP continually improves its engineering, manufacturing, service and distribution capabilities to meet the needs and exceed the expectations of its valued customers. With many years of industry experience and production excellence, SUZOHAPP has developed innovative customer-centric engineering and manufacturing processes.

SUZOHAPP designs and manufactures products that are used extensively in Gaming and Amusement devices as well as in demanding Industrial, Vending, and Transportation applications. In-house design, development and production resources located in multiple SUZOHAPP facilities, ensure that projects are efficiently taken from concept to completion.

## DESIGN & ENGINEERING



Design & Prototyping

### Equipment

- CAD workstations
  - Pro/Engineer
  - SolidWorks
  - AutoCAD
- FDM prototyping machine (3D printing technology)

### Capabilities

- Quick turn-around
- In-house prototyping

### Resources

- 30 Engineers
  - Electrical
  - Mechanical
  - Software

## LCD, TOPPERS & KIOSKS



LCD Production

### Equipment

- Integrated toppers
- OEM open frame
- LCD integration
- Signage & custom assemblies
- Bid specification & RFQ

### Capabilities

- 20,000 pieces per year

### Resources

- 3 Engineers

## PLASTIC INJECTION, TOOL & DIE



Direct Injection

### Equipment

- 5 - CNC mills
- 5 - Lathes and grinders
- 1 - Wire EDM
- 28 Injection machines

### Capabilities

- Sizes from 25-1,600 tons
- 20 million pieces per year
- 24-hour operation
- Insert & over-moulding
- Design to first shoot within 10 days
- 15 tools per month

### Resources

- 65 dedicated staff
- +35 flex staff

## PCB PRODUCTION



PCB Production

### Equipment

- SMT high speed mounter
- SMT inspection
- Wave solder

### Capabilities

- Surface mount
- Through-hole
- 150,000 boards per month

### Resources

- 25 dedicated staff
- +15 flex staff

## ASSEMBLY



Assembly

### Equipment

- 12 - Conveyor lines
- 30 - Workstation cells

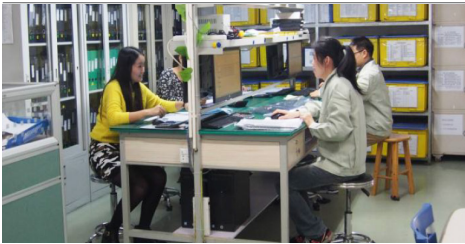
### Capabilities

- 50 assemblies per hour, per line/cell
- Service and Repair
- Assemblies with up to 1,000 components

### Resources

- 100 dedicated staff
- +100 flex staff

## QUALITY ASSURANCE



Quality

### Highlights

- ISO 9001
- Testing services and capabilities

### Resources

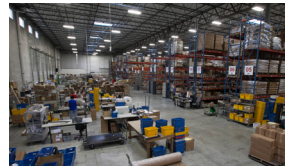
- 30 FTEs in area of quality control and assurance

## Manufacturing and Distribution Facilities



### Manufacturing Site China

- Zhuhai, China
- 12,000 sqm
- 250 employees
- Turnkey design / manufacture
- Interactive touch displays
- Transparent LCD technologies
- Cash handling technologies
- Printers, card/barcode readers, NFC/RFID, cameras
- Kiosks, loyalty and betting terminals
- Digital signage
- LED lighting and back lighting technologies



### Manufacturing and Distribution Site North America

- Mount Prospect, IL and Las Vegas, NV production locations
- Over 6,000 sqm
- Assembly, Distribution, Service and Support
- Cash Management Solutions: Note recyclers, coin recyclers, deposit safes
- Components & OEM: Joysticks, buttons, coin doors, LCDs, reel mechs, toppers, game controls



### Manufacturing Site Poland

- Poznan, Poland
- Over 5,000 sqm
- 60 employees
- Components: Coin validators, coin recyclers
- Solutions: Change machines, cash points for self-service laundrettes, car wash starter systems, cash handling solutions



### Assembly and Logistics Hub Netherlands

- Oud-Beijerland, Rotterdam
- 49,000 sqm
- Fully bar-coded warehousing
- Real time data processing systems
- Accurate reporting of inventory
- Excellent customer service

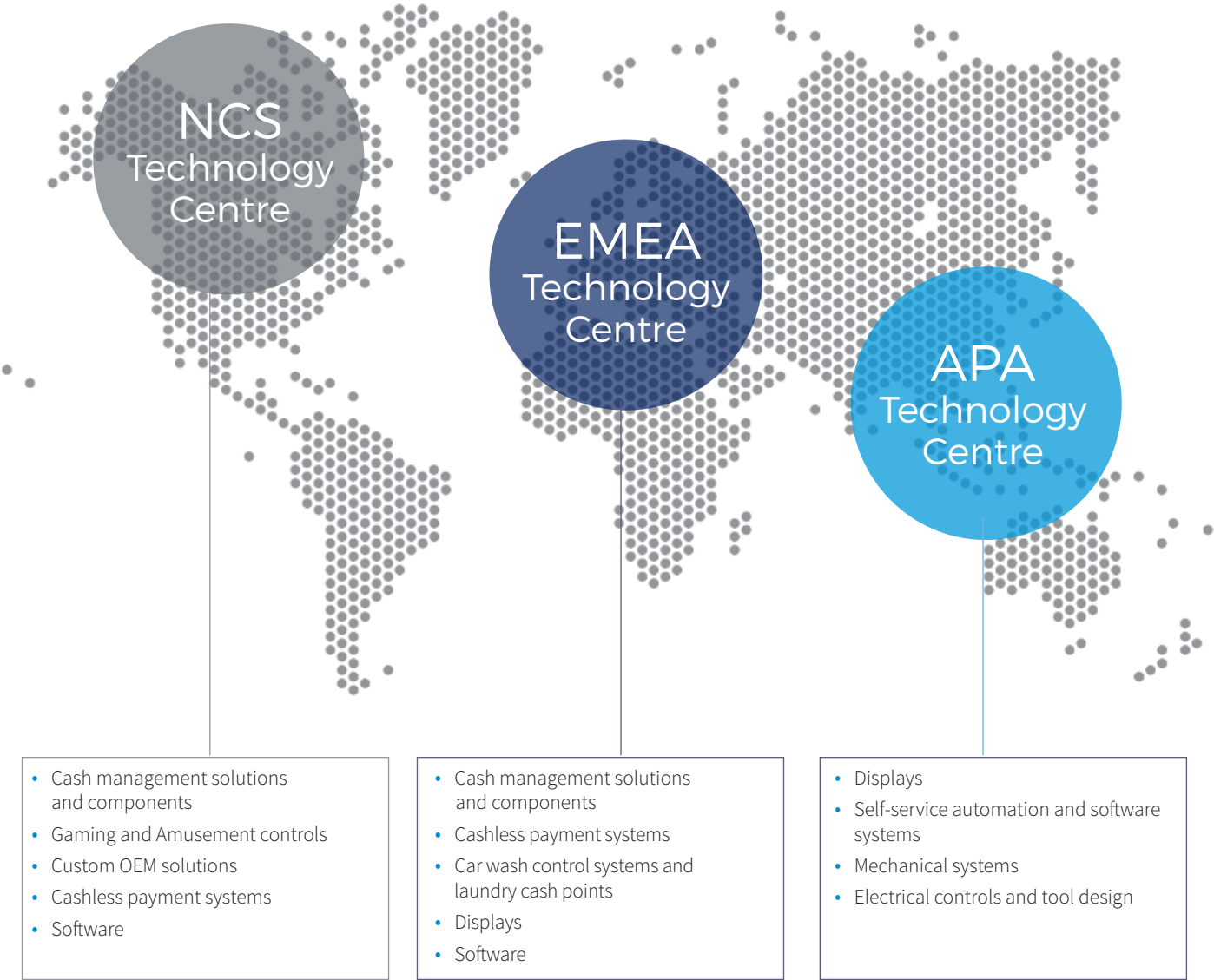


# R&D Capabilities

## Investment in research and development is a top priority

Global product management teams meet continuously to develop new products and custom solutions for customers' ever-changing needs. Dedicated industrial, mechanical, and electrical engineering teams provide complete design, as well as component selection. SUZOHAPP utilizes contemporary modelling technology to produce accurate designs with competitive costs and short lead times.

## Technology Centres



SUZOHAPP's Research & Development team is centralized into one global engineering centre of excellence, SUZOHAPP Technology Services (STS). This highly skilled department develops and supports the company's core technology, accelerates new product development and leads the introduction of innovative technologies.

## Design activities and expertise provided include:

- Turnkey design/manufacture of individual parts to complete machines - from concept development through final, highly engineered solutions
- 2D and 3D CAD Design – using SolidWorks for part/assembly modelling and drawings
- Metalwork/plastic design and electrical/wiring harnesses, virtual and physical prototyping, and product renderings
- Design of injection moulds and tooling
- Rapid prototyping through in-house 3D printing capabilities
- Proprietary electronics and PCB Design using the leading software package Altium
- Programming for microprocessors and Advanced Risk Machines (ARM, software development in most operating systems including Windows, Linux and Android OS
- Compliance testing and documentation, including UL

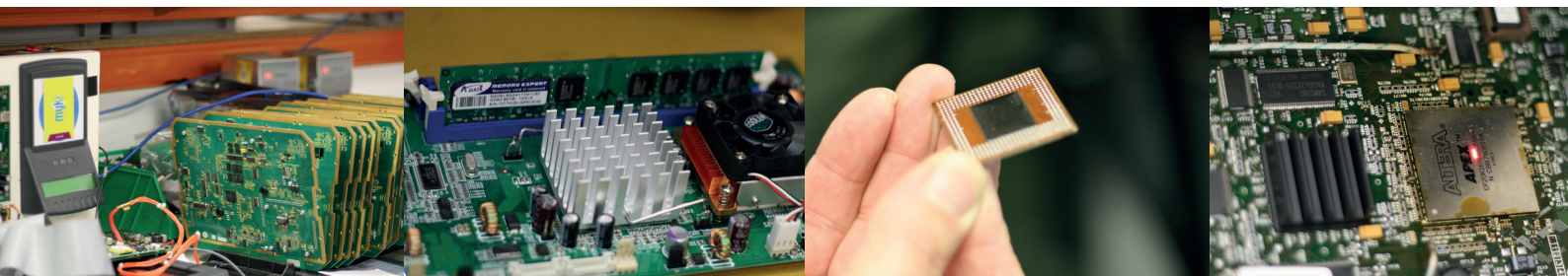
## Examples of some of the technologies SUZOHAPP works with:

- The latest LCD and touchscreen technologies, including projective capacitance
- LED lighting and back lighting technologies
- Embedded micro controllers and CPUs
- Electromechanical and mechanical systems

SUZOHAPP's dedicated team has been central to the success of many product deployments to the global amusement, gaming, industrial, transportation and vending markets.

## Projects have included:

- LCD retrofit integration
- Custom designed displays, including transparent LCD technology
- Interactive touch displays, large and small
- Cash handling technologies
- Printers, card/barcode readers, NFC/RFID, cameras
- Kiosks, loyalty and betting terminals
- Digital signage



## Workshop Service

Highly experienced lab technicians can repair parts to component level, utilizing the latest diagnostic equipment and techniques. SUZOHAPP can also redesign, re-engineer, restore or re-manufacture parts and components reducing your business maintenance costs.

### Repair Services

- Electronic gaming machines
- Jackpot systems and player tracking hardware
- POS systems, ATMs, self-service terminals
- Cash handling – bill acceptors, coin mechanisms, hoppers
- Data scanners, PDAs, PC mainboards, logic boards
- LCD displays, touchscreens
- LCD and CRT monitors, power supplies
- Electronic assembly and manufacturing services
- Electronic kiosks
- Wagering terminals
- Other electro-mechanical assembly work

### SUZOHAPP technicians are highly skilled

- IPC certified specialist technicians ensure the highest quality in surface mount, hole through and wave soldering
- Experienced in repairing multilayer boards
- Ability to perform circuit programming (FPGA, JTAG) and program microprocessors (TQFP, SSOP, EPROM)

### SUZOHAPP technical experts:

- Re-work and re-flow BGA ICs
- Give logic boards, main boards and A-D boards a new lease on life
- Refurbish circuit boards for most popular gaming machines and electronic equipment
- Repair bill validators, ticket printers, hoppers and coin mechanisms, giving considerable savings compared to the cost of replacement

# Pit PRO

## High-End Entry Level

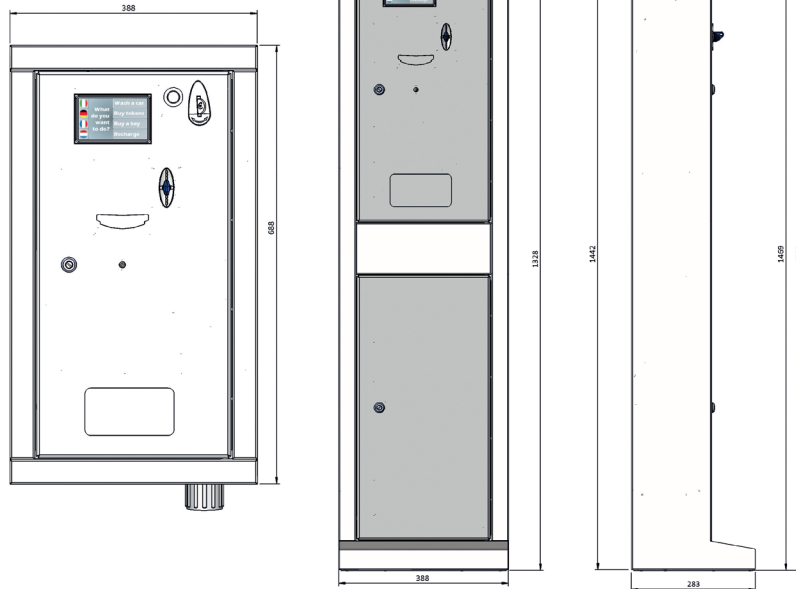
Designed for outdoor applications, Pit PRO manages up to 8 different washing programs, changes money and tokens, and recharges keys and cards. The new heavy-duty structure is specifically designed to resist dust, splashes of water and sprayed chemicals. The compact structure with a front door is suitable for all installations, free-standing or built-in.



### Features

- ▶ User-friendly 5" touch screen
- ▶ Vocal guide
- ▶ Payment in coins, banknotes, cards and keys, and bankcards (optional)
- ▶ Recharge of cards and keys
- ▶ Change banknotes into coins and/or coins into tokens
- ▶ Receipt once a transaction is completed or in case of malfunction
- ▶ Remote connection using the new CashComplete™ software platform
- ▶ Automatic alarms email
- ▶ Automatic accounting email
- ▶ Lockable door with 10 closing points
- ▶ Installation: free-standing or wall-mounted

## Technical Schematics



Note: Unit of measure: mm

## Installed Peripherals

- Proximity sensor
- Anti-vandal 5" touch screen
- Vocal guide

## Optional Peripherals

- RM5 HD coin validator
- Currenza C<sup>2</sup> coin changer (instead of RM5 HD coin validator)
- NV9 USB+ banknote reader
- Cube Hopper + extension
- EuroKey Next cashless system
- Credit and debit card reader
- Thermal receipt printer
- Maxi BIO board to manage car wash facilities



## Technical Specifications

	Free-standing	Wall-mounted
Dimensions (LxHxW)	394 x 1,508 x 283 mm	388 x 688 x 182.3 mm
Weight	52 kg	17 kg
Power supply voltage	24 Vac ±10%	24 Vac ÷ 10%
Current consumption	25 W	25 W
Operating temperature	-15 °C to 50 °C humidity 10% - 90% uncondensed	-15 °C to 50 °C humidity 10% - 90% uncondensed

## Coin Capacity

	0.50 €	1.00 €	2.00 €
Cube hopper with extension	700	700	500



# Multi PRO

## Latest Technology for Your Car Wash Business

Multi PRO is the innovative starter for portals and an outdoor change machine. It manages up to 8 washing programs via a 5" touch screen monitor and a vocal guide. Based on state-of-the-art PC architecture, it supports the user to quickly manage multiple tasks, such as starting the wash program, recharging cards and keys, changing money, buy tokens and distributing cards and keys.

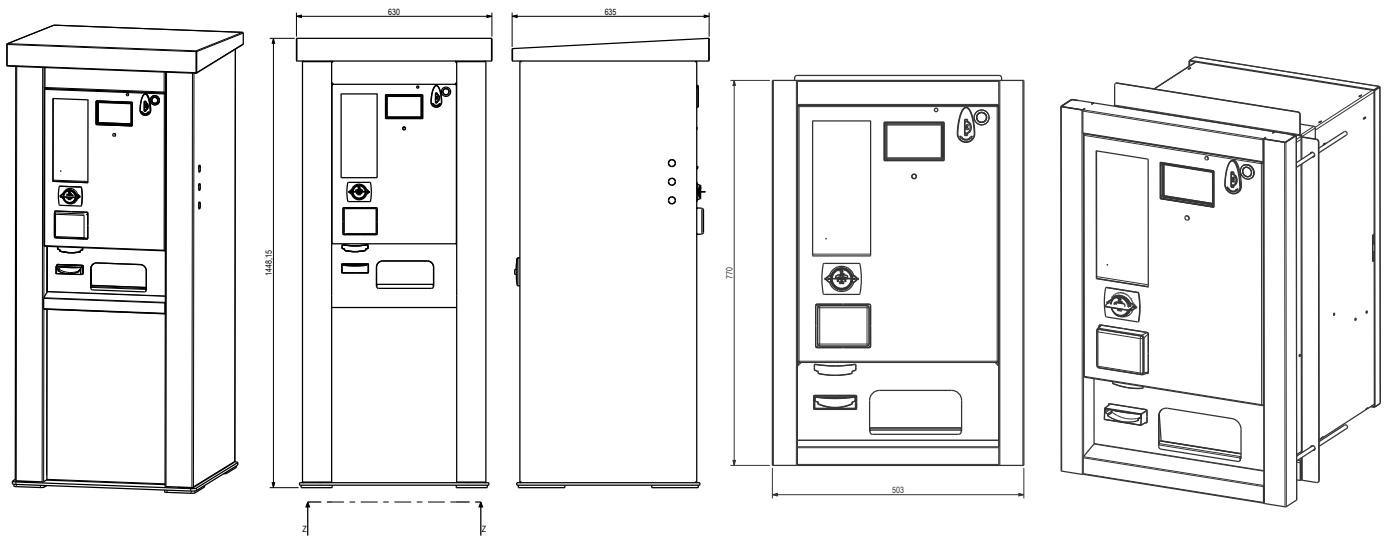


### Features

- ▶ Integrated and complete control of the carwash portal. A single device to activate washing programs, pay, recharge cards/keys, change money, distribute keys/cards and buy tokens, cards and keys
- ▶ Payment in coins, banknotes, cards and keys. If required, payment can be made with bankcards (chip or contactless)
- ▶ Dispense and recharge of cards and keys
- ▶ Change banknotes into coins and/or coins into tokens
- ▶ Give change in coins and banknotes
- ▶ Management of promotional activities to purchase tokens and recharge cards and keys
- ▶ Receipt once a transaction is completed or if it does not succeed
- ▶ Remote connection using the new CashComplete™ software platform
- ▶ Automatic alarms email
- ▶ Automatic accounting email
- ▶ Barcode reader
- ▶ Installation: free-standing or wall-mounted
- ▶ Resistant to atmospheric agents



## Technical Schematics



Note: Unit of measure: mm

## Installed Peripherals

- Anti-vandal 5" Touch screen
- Vocal guide
- Proximity sensor

## Optional Peripherals

- RM5 HD coin validator
- Currenza C<sup>2</sup> coin changer (instead of RM5 HD coin validator)
- EuroKey Next cashless system
- 2 dispensers of cards/keys
- 2 NV9 USB+ banknote readers
- 3 Evolution Hoppers
- Credit and debit bankcard reader
- Barcode scanner
- Thermal receipt printer
- Maxi BIO board to manage car wash facilities



## Technical Specifications

### Free-standing

### Wall-mounted

Dimensions (LxHxD)	630 x 1,448.15 x 590	503 x 770 x 518 mm
Weight	140 kg	70 kg
Power supply voltage	230 Vac	230 Vac
Current consumption	230 VA	230 VA
Operating temperature	-15°C to 50°C humidity 10% to 90% not condensed	-15°C to 50°C humidity 10% to 90% not condensed

## Coin Capacity

### 0.50 €

### 1.00 €

### 2.00 €

1 Evolution hopper	1,500	1,500	1,200
2 Evolution hoppers	3,000	3,000	2,400
3 Evolution hoppers	4,500	4,500	3,600

# Touch PRO

## Automated Support Service and Effective Marketing Tool

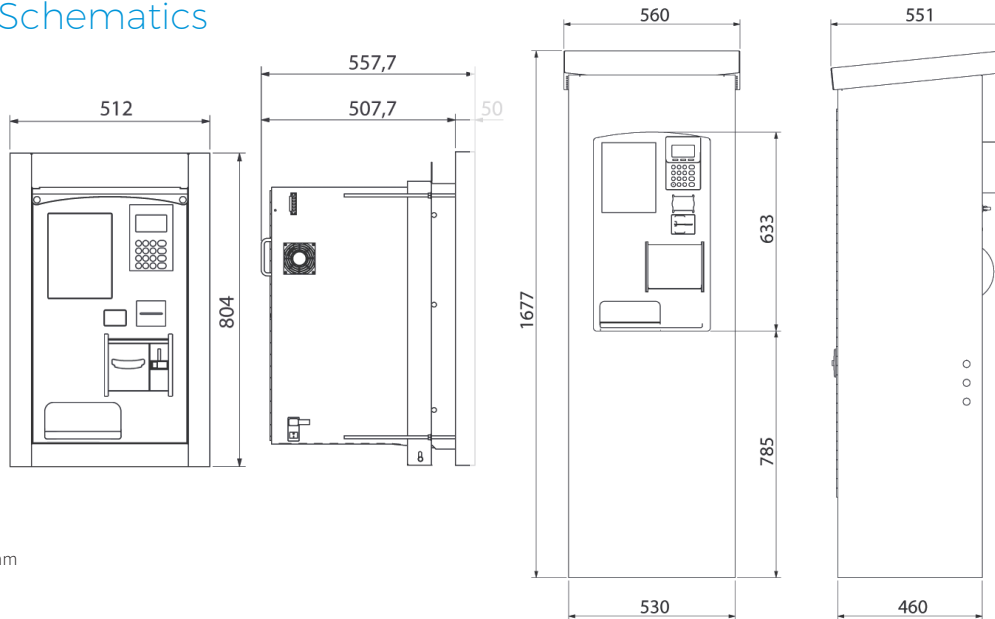
Touch PRO is a revolutionary multi-device for car wash facilities. Equipped with state-of-the-art technology, it offers numerous advantages to both users and operators. Touch PRO is not just a simple centralised cash point but also an automated support service and a powerful marketing tool which allows the operator to increase the business. It manages up to 8 different services and dispense complementary products, such as tokens and cards.



### Features

- ▶ User friendly touch screen interface for easy sales operations as well as accounting data configuration and collection
- ▶ Graphic and vocal support to guide customer through various operations
- ▶ Payment in coins, banknotes, tokens, cards/keys and bankcards (optional)
- ▶ Change is given
- ▶ Dispense keys, cards and tokens
- ▶ Management of promotional campaigns based on discounts and special offers
- ▶ Incentive to stimulate users to purchase higher price/quality programs
- ▶ Printing of limited-time promotional tickets to increase customer visit frequency
- ▶ Barcode scanning to manage promotions, bonuses and discounts
- ▶ Differentiated pricing per payment method (cash or cashless)
- ▶ Automatic alarms email
- ▶ Automatic accounting email
- ▶ Printing of daily accounting reports by means of a special barcode
- ▶ Exporting of accounting data in .csv format
- ▶ Receipt in case of malfunction and service delivery failure

## Technical Schematics



Note: Unit of measure: mm

## Tools

### TouchConfig

Integrated program for device configuration. It allows to import and export total and partial accounting data.

### TouchCompta

Program for consulting, analysing, exporting and printing the accounting data. It allows to set the search filters to get the statistics of marketing operations. Data access is protected by hierarchical passwords.

## Installed Peripherals

- Anti-vandal touch screen
- RM5 HD coin validator
- Barcode scanner
- Thermal receipt printer

## Optional Peripherals

- NV9 USB+ banknote reader
- Evolution Hopper
- 2<sup>nd</sup> Evolution Hopper
- EuroKey Next cashless system
- Card dispenser
- Key dispenser
- Credit and debit bankcard reader
- Easy Pay to activate washing program via QR code
- Direct phone calls through a dedicated line

## Optional Accessories

- 'Accessible' cabinet
- Standard cabinet

## Technical Specifications

Technical Specifications	Accessible cabinet-mounted	Wall-mounted
Dimensions (LxHxD)	560 x 1.677 x 551 mm	512 x 804 x 562,7 mm
Weight	81 Kg	53 Kg
Supply voltage	230 Vac	230 Vac
Current consumption	230 VA	230 VA
Operating temperature	-15 °C to 50 °C humidity 10% - 90% uncondensed	-15 °C to 50 °C humidity 10% - 90% uncondensed

Internet connection required to make the machine work properly

## Coin Capacity

	0.50 €	1.00 €	2.00 €
1 Evolution hopper	1,500	1,500	1,200
2 Evolution hopper	3,000	3,000	2,400

# MyScan

MyScan comes from the combination of the MyService system and a 2D scanner. By scanning a QR Code ticket, it automates the payment of various timed services, such as car wash facilities, self-service laundrettes, sport and tourist facilities and timed lighting.

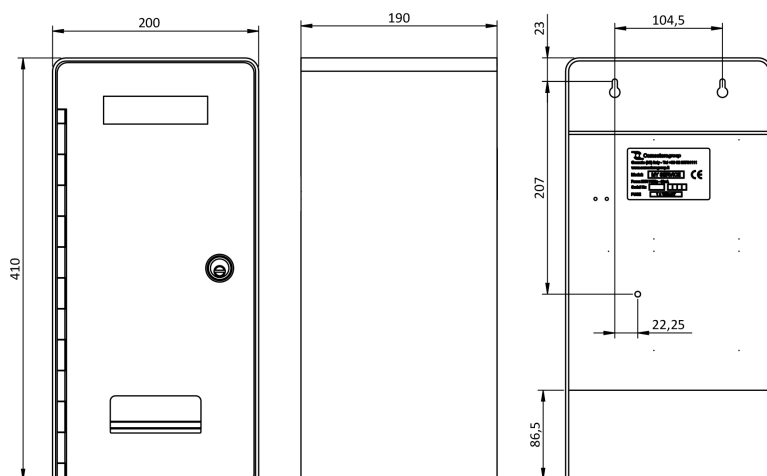
## Features

- ▶ Automatic activation by scanning a QR-code ticket which can be printed using the Easy Pay unit (desktop solution) or the Touch PRO (unattended solution)
- ▶ Management of up to 8 services
- ▶ Management of accounting data

## Optional Peripherals

Easy Pay to activate washing program via QR code

## Technical Schematics



Note: Unit of measure: mm

## Technical Specifications

Dimensions (LxHxD)	200 x 410 x 190 mm
Weight	8.5 Kg
Mounting	Wall-mounted
Input voltage	230 Vac $\pm$ 10%
Power consumption	40 W
Outputs	Relay, current-carrying capacity 4A at 230 Vdc
Humidity (non condensed)	90%
Storage temperature	- 20° C to 70° C



# MyPOS

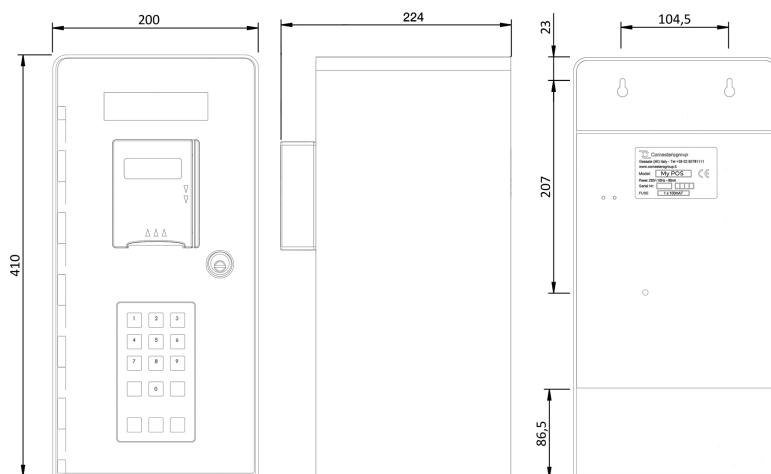
MyPOS comes from the combination of the MyService box and a POS system. By paying with bankcard, it automates the payment of various services, such as car wash facilities, self-service laundrettes, sport and tourist facilities and timed lighting.

## Features

- ▶ Activation by choosing the service number on the keypad
- ▶ Compatible with most of the contactless bankcard payment systems
- ▶ Management of up to 8 services
- ▶ Management of accounting data



## Technical Schematics



Note: Unit of measure mm



Ingenico contactless reader IUC180



P68 reader

## Technical Specifications

Dimensions (LxHxD)	200 x 410 x 190 mm
Weight	8.5 Kg
Mounting	Wall-mounted
Input voltage	230 VAC $\pm 10\%$
Power consumption	40 W
Outputs	Relé, max 4 A a 230 Volt
Humidity (non condensed)	90%
Storage temperature	-20 °C to 70 °C

# Pit Start Plus

## The Ideal Solution for Self-service Washing Bays

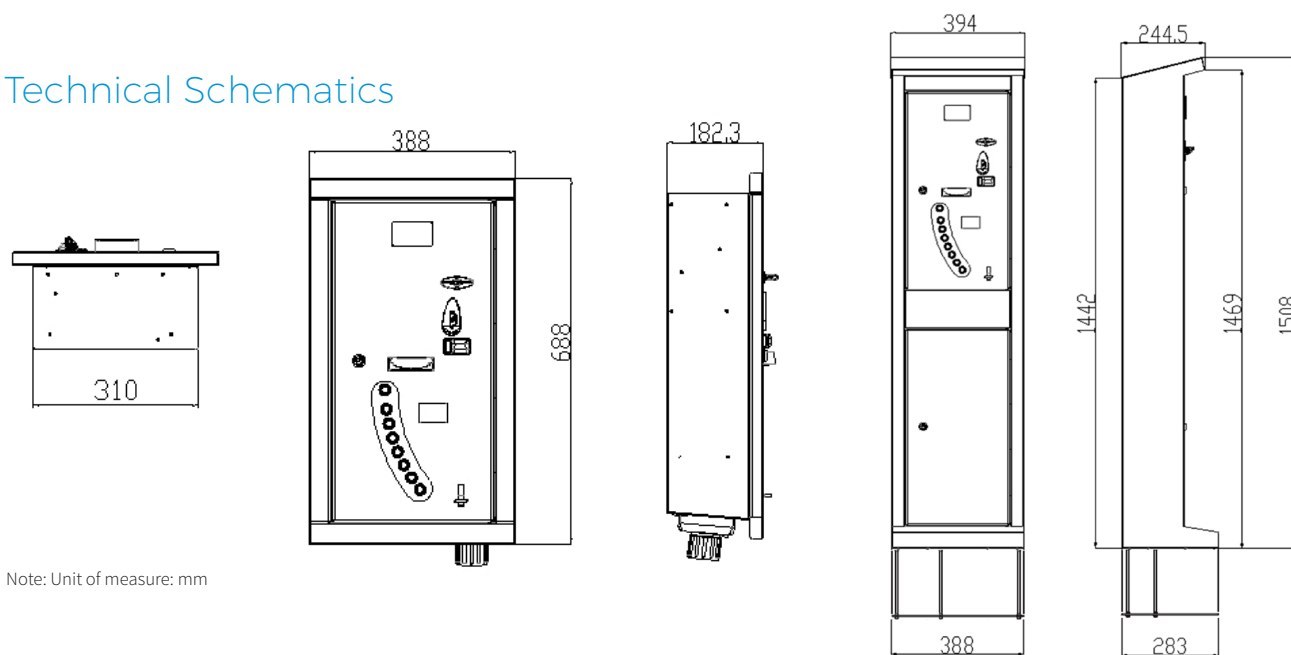
Specifically designed for self-service washing bays, it manages up to 7 wash programs through a single payment unit. Solid and resistant, it guarantees excellent protection against dust, water jets and nebulised chemical products. Pit Start Plus is available in 2 different versions for easy installation. Suitable for modernising existing high-pressure systems which employ electro-mechanical control systems.



### Features

- ▶ IP 54 protection degree
- ▶ Coin entry protected by a mobile plate
- ▶ Stainless steel external frame, door and pushbutton panel
- ▶ Opening protected by 9 point closings lock
- ▶ Back-lit display for maximum visibility even in conditions of full sunlight
- ▶ Pushbutton panel equipped with 7 program selection buttons and 1 stop button, which allows the user to interrupt the service in progress
- ▶ Front panel with wide space for user's instructions, shown on a customisable adhesive panel
- ▶ In the standard version, the interface is made with a DIN guide box equipped with 8 opto-isolated inputs for receiving signals from the system control unit and 7 relay outputs
- ▶ Prices of the services can be set on-board machine
- ▶ Installation: free standing or wall mounted

## Technical Schematics



Note: Unit of measure: mm

## Functions

### Stand-by status

When the cash unit is in stand-by, the display shows a message asking to insert cash and select a service, while the buttons light up in a rapid sequence in order to attract the customers' attention.

### Coin and token functionality

When the user inserts coins or tokens, the display will show the purchased credit. Once the first set price is reached, the Pit Start Plus will be ready to activate the corresponding service.

### Card or key operated

When the user inserts the key or the card, the display will show the amount of credit available. If the credit is equal to or higher than the lowest configured price, the Pit Start Plus is ready to activate the relative service.

### Selecting the services

Up to 7 different services can be selected, which correspond to an equal number of wash programs. The user can rapidly switch from one service to another by simply pressing the corresponding button.

## Installed Peripherals

- RM5 HD electronic coin validator
- EuroKey Next cashless system

## Optional Peripherals

- NV9 banknote reader
- WorldKey cashless system
- Credit and debit bankcard reader



## Technical Specifications

	Free-standing	Wall-mounted
Dimensions (LxHxW)	394 x 1,508 x 283 mm	388 x 688 x 182,3 mm
Weight	52 Kg	17 Kg
Power supply	24 Vac ±10%	24 Vac ±10%
Power consumption	25 W	25 W
Operating temperature	-15 °C to 50 °C humidity 10% ÷ 90% non-condensed	-15 °C to 50 °C humidity 10% ÷ 90% non-condensed

## Coin Capacity

	0.50 €	1.00 €	2.00 €
Cash box	800	850	650



# RM5 Evolution

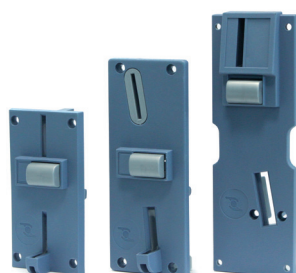
## The Record-Breaking Coin Validator

Over 2 million units sold, RM5 Evolution is well known for its quality and reliability. Its electronics combines extraordinary selectivity with extreme programming versatility. The Cloning system allows the transfer of the configuration parameters from one sample coin validator to another. Available in tropicalised version to be used in environments affected by adverse weather conditions.



### Features

- ▶ 3 pairs of inductive sensors for processing 6 different parameters regarding the material and the mass
- ▶ 3 pairs of optical sensors for determining the coin's diameter
- ▶ A mechanical and electronic anti-fishing device
- ▶ Wire cutting blade
- ▶ Automatic optical sensor compensation system for variations in temperature, voltage and lighting
- ▶ Up to 59 identification channels - each of them can be redirected to the outlets. The first 6 support Self-Prog mode
- ▶ Open collector outputs
- ▶ Serial interface for external connections (portable programmer or PC) for calibrating and testing, as well as for updating the value and operating parameters tables
- ▶ Credit recognition: parallel, binary, pulse



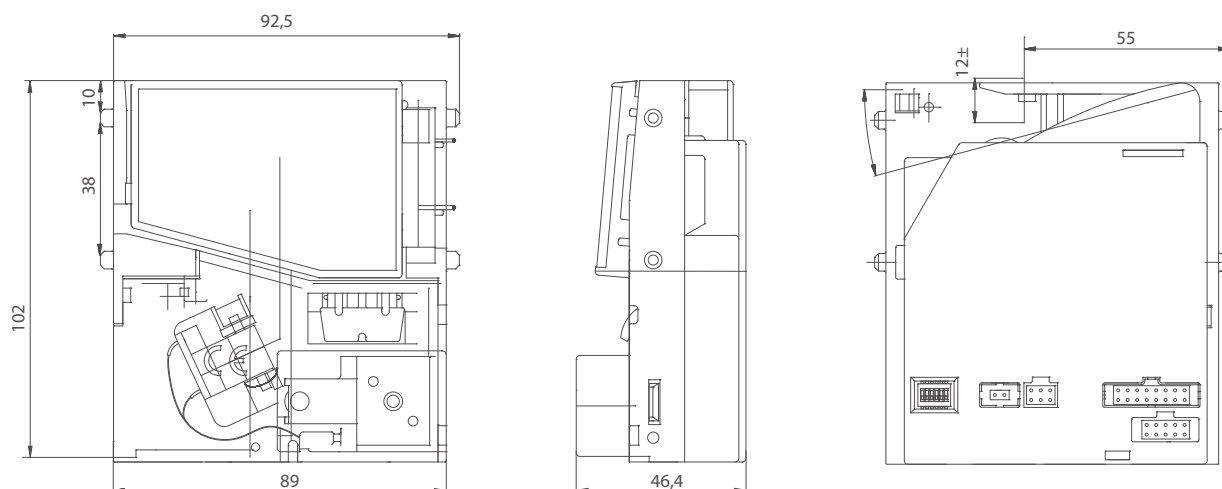
Front plates: mod. F1 (60x118 mm)  
F3 (60x152 mm) - F6 (60x180 mm)



RM1000-ADATTAS vertical adaptor  
for vending machines without coin recycler



## Technical Schematics



Note: Unit of measure: mm

## Tools

### Clone 5

Programming, configuration and diagnostics software (not for use with the ccTalk giochi Italia version).



### Programmer

Portable tool for on-site programming, configuration and diagnostic operations (not for use with the ccTalk version).



## Versions

- USB
- ccTalk
- Parallel Validator
- Parallel Validator with sorter
- Spain mode validator
- Binary Validator
- Confida Binary Validator
- Multipulse validator
- 2 price totaliser
- 1 price totaliser with timed internal reset
- Fountain totaliser
- Credit pulse emission totaliser
- Credit pulse emission totaliser with sorter control
- Progressive timer
- Progressive timer with timed credit pulse emission upon request
- Progressive timer with counter outlet
- Totaliser with credit pulse upon request
- Totaliser with timed credit pulse emission upon request

## Optional Accessories

- RM1000-ADATTA5 vertical adaptor for vending machines without coin changer
- Validator Adaptor from 3½" to 5"
- Front plates: mod. F1 (60x118 mm)  
-F3 (60x180 mm) - F6 (60x152 mm)
- Coin collection funnels of various heights: 9/16/25 mm
- AGCAVO10P: standard cable to connect the coin validator to the host machine. Available lengths: from 15 to 250 cm
- RMPINTERF5: cable to connect the RM5 Evolution to a PC in serial mode
- USB SERIAL: cable to convert a serial connection to USB connection
- USB Kit
- MDB adapter
- Customizable graphic label by quantity
- Wide range of sorters

## Technical Specifications

Dimensions (LxHxW)	89 x 102 x 46,4 mm
Weight	185 g
Power supply	12 to 24 Vdc $\pm$ 10%
Power consumption	4W a 12 Vdc
Current consumption	In stand-by: 35 mA max, 12 Vdc During identification: 50 mA max, 12 Vdc During acceptance: 340 mA max, 12 Vdc
Maximum current capacity	200 mA a 24 Vdc $\pm$ 10% (from channel 1 to channel 4) 800 mA a 24 Vdc $\pm$ 10% (from channel 5 to channel 6)
Operating temperature	-20°C to +70 °C - 10 to 75% humidity non-condensed (standard version)
Coins accepted	Ø 16 to 31.5 – Thickness up to 3.3 mm
Acceptance speed	up to 3 coins per second

## Mechanical Configurations

Model	Coin entry	Coin reject
G	Top	Bottom
F	Top or front	Front
B	Top or front	Bottom
V	Top	Front

# RM5 HD

Extreme reliability, remarkable acceptance speed and high versatility

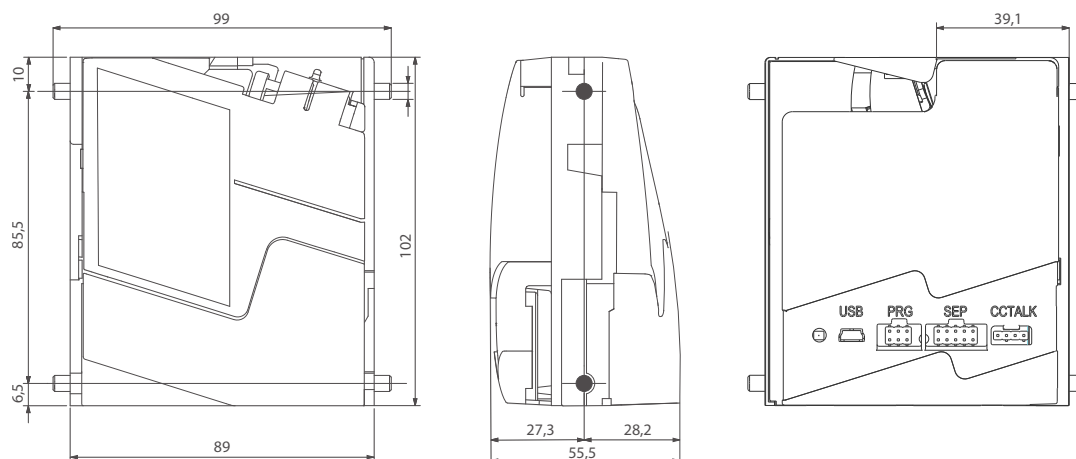
The RM5 HD coin validator has set new reference standards in coin validation. Through 5 different sensors and 10 recognition parameters, it ensures a high level of recognition and discrimination of valid and counterfeit coins with an unprecedented speed of up to 6 coins per second. Its advanced electronic and mechanical anti-fraud systems guarantee excellent security in all its various installations. Available in tropicalised version to be used in environments affected by adverse weather conditions.



## Features

- ▶ HD high-discrimination system based on 10 different parameters regarding frequency, dimensions and phase
- ▶ 5-sensor identification technology: 3 inductive sensors, 1 optical sensor and 1 magnetic sensor
- ▶ Advanced electronic and mechanical anti-fraud system: electronic anti-fishing device, coin movement direction detection, 3 mechanical traps, and wire cutting blade
- ▶ Compatible with all coin sorters available on the market
- ▶ LED indicator
- ▶ USB version also available





Note: Unit of measure: mm

## Tools

### MultiConfig

Program for configuration via PC. You can download it free of charge at [suzohapp.com](http://suzohapp.com) (Download area)



### Virtual Dip Switch

A new device for on-site configuration operations



### PC Programming Kit

Includes coin validator support, test box, power supply, interface cable and the MultiConfig software



## Versions

- USB
- Parallel Validator
- Parallel Validator with sorter
- Spain mode validator
- Binary Validator
- Confida Binary Validator
- Credit pulse emission totaliser
- Credit pulse emission totaliser with sorter control
- ccTalk Giochi Italia
- ccTalk Full

## Optional Accessories

- RM1000-ADATTA5 vertical adaptor for vending machines without coin changer
- Validator Adaptor from 3½" to 5"
- Front plates: available in the versions mod. F1 (60x118 mm), F6 (60x152 mm)
- Coin collection funnels of various heights: 9/16/25 mm
- Customizable graphic label by quantity
- Wide range of sorters

## Mechanical Configurations

RM5 HD is available in two versions, with different acceptance channel:

- Optimized for the euro, which accepts coins with a maximum diameter of 27 mm and maximum thickness of 2.4 mm
- Extended version to accept coins with a diameter of up to 31.5 mm and thickness of up to 3.2 mm.

These versions are available in four models to meet different installation requirements.

Model	Coin entry	Coin reject
G	Top or front	Front
F	Top	Front
B	Top or front	Bottom/left
V	Top	Bottom/right

## Technical Specifications

Dimensions (LxHxW)	99 x 102 x 55.5 mm
Weight	200 g
Power supply	12 to 24 ( ±10%) Vdc
Current consumption	Stand by: max 70mA During acceptance: max 400mA
Operating temperature	0 °C to 55 °C - 10% to 75% umidity non-condensed (standard version) -25 °C to 70 °C (tropicalised version)
Coins accepted	Ø 16 to 27 mm; max thickness 2.4 mm (Standard)) Ø 16 to 31.5 mm; max thickness 3.4 mm (with acceptance channel: 4.5 mm)
Acceptance speed (without sorter)	Up to 6 coins per second
Acceptance rate	95% + first insertion 98% + secon insertion
MTBF (Mean Time Between Failure)	At 25° C is around 170,000 hours
MCBF	1,000,000

# EuroKey NEXT

## Increase Flexibility and Profitability

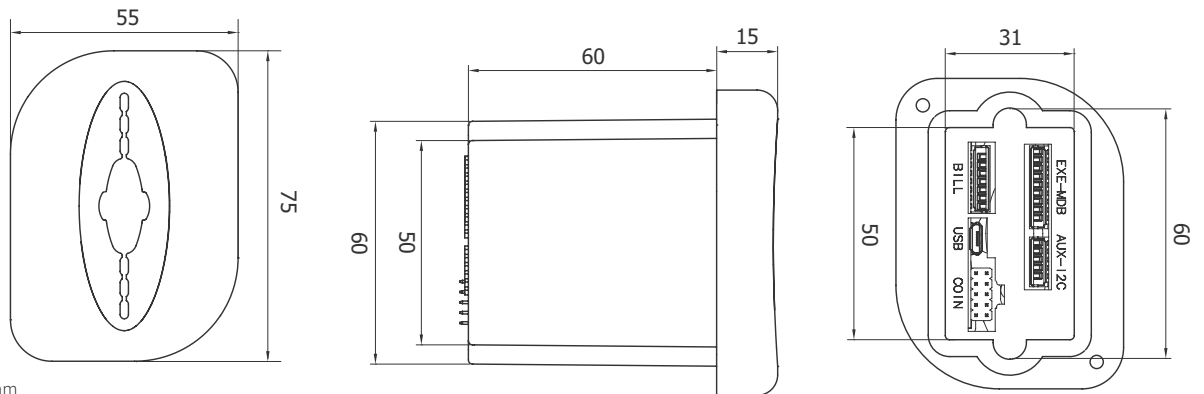
The EuroKey Next cashless device comes from the combination of the reliability of the EuroKey range and the high WorldKey's safety standards. EuroKey Next can manage both EuroKey system keys and media based on the MIFARE® platform. It is extremely flexible and can manage both the MDB and EXE communication protocols. It is also available in the Parallel version for applications in car wash stations, self-service laundrettes, tourist and sports facilities. EuroKey Next allows operator to set promotional campaigns and discounts, even based on time slots, to build customer loyalty and increase sales.



### Features

- ▶ Reader of keys/cards/tags upon insertion
- ▶ Equipped with red light signal with 3 status LEDs and infrared interface to collect audit data
- ▶ Maximum compatibility with EuroKey and WorldKey systems
- ▶ Management of EuroKey keys and MIFARE® media (keys, cards and tags)
- ▶ Management of RM925, KPD, KPM input/output electronic boards and the 4-digit RM924 display
- ▶ Automatic activation of keys/cards/tags upon first insertion
- ▶ Micro USB port for PC connection, firmware update and audit data collection
- ▶ Management of configuration and accounting data through the Unico software and IrDA interface
- ▶ Dual installation: front-panel and back-panel mount (by means of a special adjustment plate)

## Technical Schematics



Note: Unit of measure: mm

## Functions

- Management of 3 security codes (Manager, Renter, Machine)
- Management of maximum value that can be charged to the medium
- Management of a second MDB address (MDB mode)
- 3-price management modes
- Management of coin validator and banknote reader
- Machine no. editable by the user
- Management of differentiated keys
- Management of black lists
- Management of bonuses
- Management of time slots
- Management of accounting data

## Versions

Compatible with the old EuroKey Plus Parallel versions: standard single-price e standard multiprice

## Tools

### UNICO configuration software

Software suite for audit data collection and management (according to EVA-DTS standard or Windows Excel), operating parameter programming and key/card/tag management

### Portable universal programmer (UHHT)

For direct field-programming through micro USB cable connection



### Programming key & Clone programming key



## Optional Accessories

- RFID keys
- RFID cards customisable in the graphics (by quantity)
- RFID tags customisable in the graphics (by quantity)
- Installation starter kit
- Back panel mounting kit
- LCD Display
- Countertop recharge box



## Technical Specifications - CPU

Dimensions (LxHxD)	55 x 75 x 77 mm
Weight	90 g
Power supply	18-40 Vdc 105mA 18-27 Vac 50/60 Hz 170 mA
Power consumption	3.2 W
Operating temperature	-10 °C to +50 °C
Humidity (non condensed)	85%
Storage temperature	-10 °C to +60 °C

## Technical Specifications – keys/cards/tags EuroKey keys

Technology	125 KHz Transponder
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## MIFARE® keys/cards/tags

13.56 MHz inductive transmission system, ISO 14443 data and energy – MIFARE® encrypted



# WorldKey

## A World of Opportunities

The WorldKey range is composed of a wide array of cashless systems that can fulfil any payment, activation, identification and recharging requirements. The WorldKey systems are based on the MIFARE® (standard, Plus, DesFire, NFC) technology platform to ensure high safety standards. Security in transferring data is ensured by the combination of the proprietary encryption MIFARE® and RFtech TDES (Triple Data Encryption Standard). Designed to manage multiple applications, WorldKey is a flexible, durable and reliable cashless solution and a powerful customer management tool. Operators can manage multiple sales or identification applications by storing them on a single RFID card/key/tag/sticker. WorldKey supports the most used protocols (Executive, MDB, BDV) and is ready to integrate the Ethernet, RS485, CAN BUS, ccTalk and USB interfaces.



## Features

- ▶ System composed of a CPU unit and a reading head connected by only one coaxial cable for a easy installation
- ▶ The reading device is available in 3 versions:
  - Moon:** key/tag only. Supplied with two different front panels: round and oval, ideal for retrofitting
  - Sky:** key, card and tag
  - Galaxy:** key, card and card (in tap & go mode)
- ▶ CPU equipped with USB and RS232 ports for:
  - firmware upgrading
  - system configuration
  - audit/log data collection
  - connection to the PC
  - piloting an external device (USB in OTG “on the go” mode)
- ▶ Compatible with KPM and RIO boards
- ▶ Reading heads equipped with semaphore signals according to the EVA-CVS standard with 3 status LEDs, buzzer and infrared interface (to collect audit/log data and program the readers)
- ▶ Supported protocols: Executive master/slave, MDB master/slave and BDV master/slave
- ▶ Automatic baptism of cards/keys/tags upon first insertion into the CPU
- ▶ A display with 16 characters on 2 rows can be connected

## Functions

- Different price management modes
- Sales prices (80x3 cashless prices + 80 cash prices)
- Single or multiple cash sales modes
- Management of 3 security codes (Manager, Renter, Machine)
- Machine no. editable by the user
- Management of differentiated keys
- Management of black lists, white list and log file
- Management of bonuses
- Management of time slots
- Management of accounting data
- Management of the maximum value to be charged on the key
- Differentiated key management
- On-site firmware updating
- Remote management via Ethernet
- USB on the go
- CAN BUS connector
- RS485 connector
- Parallel banknote reader management
- Parallel coin validator management

## Versions

- EXE/EXE also in BDV
- EXE/MDB also in BDV
- MDB/MDB
- MDB/SLAVE

## Tools

### UNICO configuration program

Software suite for audit data collection and management (according to EVA-DTS standard or Windows Excel), operating parameter programming and key/card/tag management (user data, prices, black/white list, bonus, points, discounts, free sales, subsidies, usage time slots, access time, etc.).

### Software for card management

### Software for audit and log management

### Portable universal programmer (UHHT)

For direct field-programming and download the audit data via infrared connection.

### Programming key & Clone programming key

### Audit key



## Optional Accessories

- RFID keys
- RFID cards customisable in graphics (by quantity)
- RFID tags customisable in graphics (by quantity)
- Stickers customisable in graphics (by quantity)
- Credit Box to transfer credits from one transponder to another
- LCD display
- Countertop recharge box
- Printer

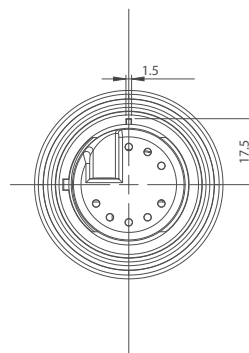
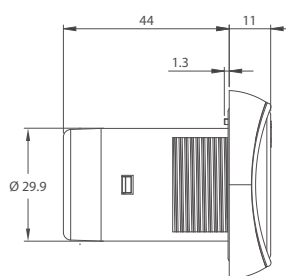
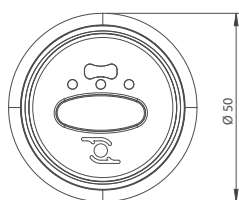


## WorldKey



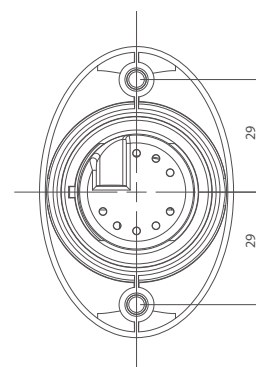
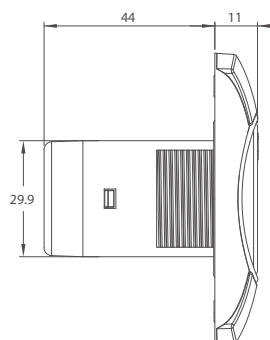
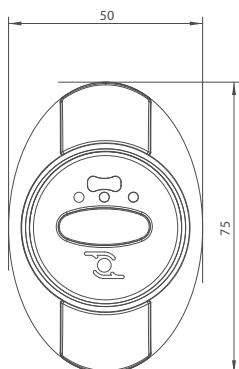
**Moon**

Reading device for keys and tags  
(Round front plate)



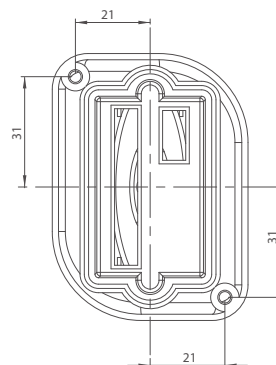
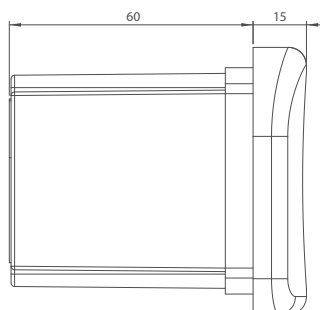
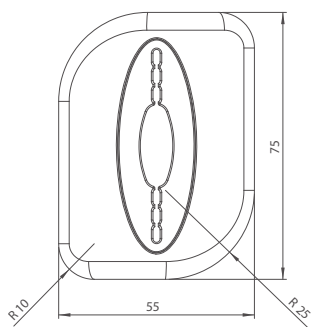
**Moon**

Reading device for keys and tags  
(Oval front plate)



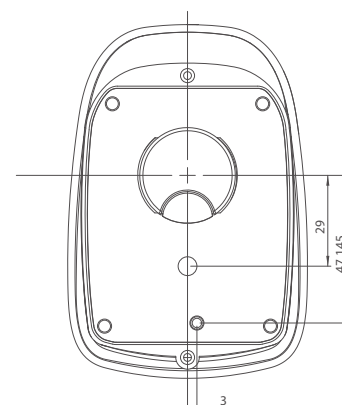
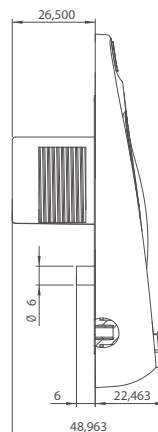
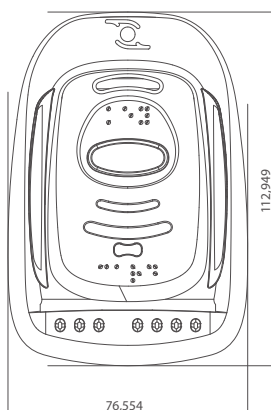
**Sky**

Reading device for keys, tags  
and insertion cards



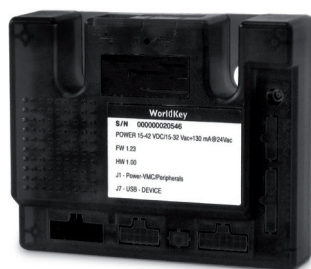
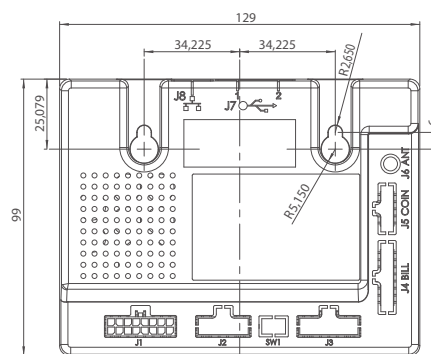
**Galaxy**

Universal reading device  
for keys, tags and tap & go cards



Note: Unit of measure: mm



WorldKey  
CPU

Note: Unit of measure: mm

## Payment Supports



Keys

Cards customisable in the graphics  
by quantity

Stickers customisable in the graphics by quantity



Happy: customisable Tag by quantity

## Technical Specifications - CPU

Dimensions (LxHxW)	129 x 99 x 28 mm
Weight	170 g
Power supply	15-40 Vdc - 12-27 Vac (50-60 Hz)
Power consumption	3.75W without peripherals
Operating temperature	-20 °C ÷ 50 °C
Humidity (non-condensed)	90%
Storage temperature	-20 °C ÷ 70 °C

## Technical Specifications - Reading Heads

	Moon (Round front plate)	Moon (Oval front plate)	Sky	Galaxy
Dimensions (LxHxW)	50 x 50 x 55 mm	50 x 75 x 55 mm	55 x 75 x 75 mm	77 x 113 x 50 mm
Weight	45 g	45 g	60 g	90 g
Operating temperature	-20 °C ÷ 50 °C	-20 °C ÷ 50 °C	-20 °C ÷ 50 °C	-20 °C ÷ 50 °C
Humidity (non-condensed)	90%	90%	90%	90%
Storage temperature	-20 °C ÷ 70 °C	-20 °C ÷ 70 °C	-20 °C ÷ 70 °C	-20 °C ÷ 70 °C

## Technical Specifications - keys/cards/tags

Technology used	ISO 14443 – MIFARE® encrypted data and energy induction transmission
Transmission frequency	13,56 MHz

# Easy Pay Recharging Unit



## Features

- ▶ Portable device which allows operators to simplify cashpoint operations and charge MIFARE® cards, keys and tags
- ▶ Recharge of user cards
- ▶ Recharge bonus management
- ▶ Use of Programming/Audit keys
- ▶ Management of Black and White lists
- ▶ Printing of barcodes for activation and payment of different services on the Touch PRO and MyScan

## Optional Accessories

Cards, keys, tags and stickers customisable

## Versions

- **Mobile:** portable version with rechargeable battery
- **Combi:** desktop version

## Technical Specifications

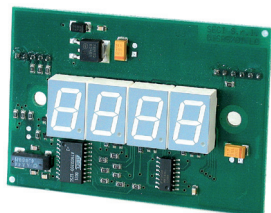
Dimensions (LxHxW)	216 x 86 x 95 mm
Weight	525 g
Power consumption	40 VA
Power supply	8,2V DC
Operating temperature	-5°C to 50°C
Humidity (non-condensed)	90%
Storage temperature	-20°C to 80°C

# Electronic Boards

## RM 924

### Features

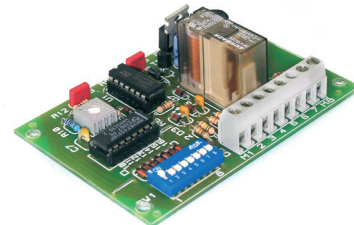
- ▶ A 4-digit display managed by RM5 coin validator or by RM 925 boards (dedicated versions)
- ▶ It can also be managed by the parallel version of the cashless system or by the KPM and KPD multi-price boards



## B 904

### Features

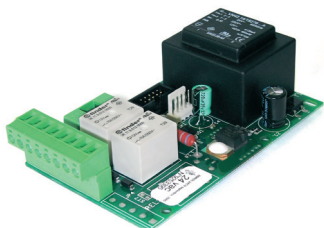
- ▶ Timer for mechanical coin validators
- ▶ Provides a time proportional to the number of inserted coins. Time can be set via the dip-switches on the board
- ▶ Available in 2 different configurations according to the type of power supply: B 904/E1142/A at 220 or 24 V and B 904/E1131/E at 24 V



## RM 925

### Features

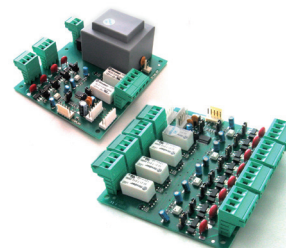
- ▶ Interfaces the RM5 electronic coin validator or the cashless system, parallel single-price version, with electro-mechanical equipment
- ▶ Ideal for automating service payments
- ▶ Provides the power supply for the coin validator or the cashless system, as well as for the display (if any)
- ▶ Equipped with two relay outputs: a third relay is available as an option to control an external service
- ▶ Available in different configurations according to the power supply and the coin validator model



## KPD/ KPM

### Features

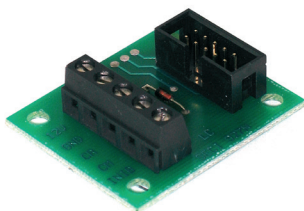
- ▶ Management of 2 and 4 prices with cashless systems in multi-price parallel version
- ▶ Control of machines activation in self-service laundrettes and car wash stations
- ▶ Management of 6 time-set services simultaneously (lighting, showers, etc.) with cashless system
- ▶ It allows to connect the RM 924 display and the RM5 coin validator for payments or recharging user keys



## RM 927

### Features

- ▶ Facilitates the connection of a coin validator with credit pulse emission totaliser to any equipment
- ▶ Equipped with a 5-pole terminal board for easy wiring operations or connection to a board



## WorldKey Move

### Features

- ▶ CPU equipped with 2 relay outputs and 4 inputs
- ▶ The ideal solution for managing electromechanical equipment
- ▶ Compatible with QR code reader



# Tokens

## Over 70 Different Models

The monometallic and bimetallic tokens, made from special long lasting alloys, are designed for intensive use on machines with electronic coin validators. The grooved tokens, made from copper and nickel plated steel, are ideal for machines with mechanical coin validators. Coin entry plates suited to each token are available for these applications. Each model is customizable by diameter, thickness and coining.

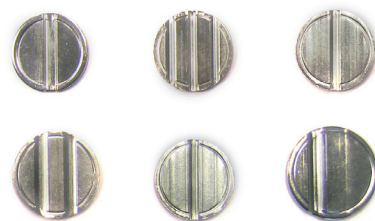


### Monometallic

- Particularly sturdy and wear-resistant thanks to the long-lasting materials (brass alloy, nickel-silver, iron or zama)
- Diameter from 18 to 31 mm

### Bimetallic

- Diameter from 26 to 27 mm (other sizes upon request)



### Grooved

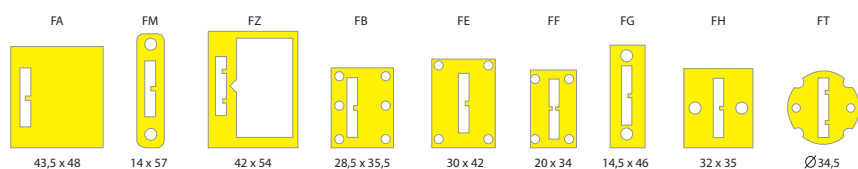
- Made of iron or zama, they have one or more grooves on either the front or back
- Diameter from 22 to 27.8 mm

### Themes

Four different graphic themes: zodiac, cars, historical monuments and African animals



## Coin entry plates





SUZOHAPP

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# Notes

Handwriting practice lines consisting of 30 horizontal dotted lines.

# Notes

A series of horizontal dotted lines for writing notes.



# Notes

A series of horizontal dotted lines for writing notes.

# Notes

Handwriting practice lines consisting of 20 sets of three horizontal dotted lines.

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Comestero

**SCAN COIN**

Cash**Complete**<sup>TM</sup>

*coin***CO**

currenza **G<sup>2</sup>**

Bill**to**Bill<sup>TM</sup>

 **VisionPro**<sup>TM</sup>

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