Kiosk, Vending and Ticketing Components

- Monitors
- Barcode Scanner
- Printers
- Speakers and Amplifiers
- LED Light Strips
- Cooling Fans
- UPT Reader
- Boards
- Door Switches
- Locks
- Power Supplies, USP, Line Filters
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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.

**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
- coinco
- CashComplete™
- VisionPro™
- Comestero
- CompetitionPro
- Bill@Bill
- BilliardPro
- currenza
- 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
- Worldwide presence with a global service network
- Distribution partners all around the globe
- 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**

**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**

**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**

**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**

**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

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

Highlights
- ISO 9001
- Testing services and capabilities

Resources
- 30 FTEs in area of quality control and assurance

Manufacturing and Distribution Facilities

Manufacturing Site
and Logistics Hub
Poland
- Poznan, Poland
- 20,000 sqm
- 190 employees
- 400 product lines produced daily
- Coin validators, coin and bill recyclers, change machines, cash points for self-service laundrettes, car wash starter systems, cash management solutions

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
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
Your Complete Source for Kiosk, Vending and Ticketing Components

Simplify Your Sourcing with Our Broad Product Range, Local Resources, and Global Capabilities

Kiosk

Monitors
Barcode Scanner
Printers
Speakers and Amplifiers
LED Light Strips
Cooling Fans
UPT Reader
Boards
Door Switches
Locks
Power Supplies, USP, Line Filters

suzohapp.com/kiosk
Vending and Ticketing Components

Vending

Range, Local Resources, and Global Capabilities

suzohapp.com/vending
Ticketing

- Touchmonitors and Secondary Displays
- Coin Validators and Recyclers
- Boards
- UPT Reader
- Bill Validators and Recyclers
- Hoppers
- Doors
- Switches
- Cooling Fans
- Pushbuttons
- Barcode Scanners
- Printers
- Speakers and Amplifiers
- Locks
- Power Supplies

suzohapp.com/oem
Bill-to-Bill™ Range
The Most Efficient Currency Management System Designed to Validate and Recycle Banknotes
The Bill-to-Bill™ is a fully integrated, high-security, frontloading system that utilizes advanced bill recycling technology for cash and cashless transactions. Bill-to-Bill™ banknote recyclers provide all-in-one automated cash management solutions that optimise the cash-in-transit and revenue collection operations. By adopting banknote recyclers, operators can achieve higher customer throughput, higher cash replenishment rates and lower cash-in-transit costs.

Bill-to-Bill 300™
Intelligent Bill Recycling
The Bill-to-Bill 300™ is the multi-width front load bill recycler characterized by an advanced sensors technology that improves authentic bill recognition and protects against counterfeits. The validated bills are distributed between three recycling cassettes and one lockable-removable drop cassette. A maximum of 3 denominations may be directed to the recycling cassettes, and other denominations to the drop cassette.

Best in class
3-denomination recycling

True modular design
and field upgradability

Field proven reliability
with 15,000+ unit installed base

98% + first time insertion acceptance rate.
Acceptance speed:
2.3 seconds per banknote

Bill width validated: 67 to 71 mm wide (fixed width)
and 62 to 82 mm wide (multi width), length of bill:
maximum 172 mm, minimum 124 mm

Up to 3 recycling cassettes (each cassette holds
up to 100 notes): “smart” cassettes save content
information for easy swapping, individually
configurable to any denomination

Multi-note dispenser for dispensing
up to 20 notes in bulk

Industry’s first self-centering
mechanism

Bill acceptance:
lengthwise in 4 directions

Barcoded coupons: 2 ways face up (encoding
standard: ANSI/AIM BC2-1995, Uniform
Symbology, Interleaved 2 of 5)

Anti-stringing protection

Up to 2 high-security locks protecting 1000-note
metal cashbox contents (one additional lock
to lock cashbox to device)
Bill-to-Bill XE™
Advanced Technology for Fare Collection

Bill-to-Bill XE™ is an innovative bill validator with patented technology allowing for high acceptance rates and a superior counterfeit detection. It validates, recycles and dispenses banknotes reducing the overall cash on hand and the operating costs. A system of custom high-security locks, RFID tracking, and external bezels protect cash when in TVM, during maintenance, and during transportation.

Features

- **Validation technology**
  Optical, capacitive and inductive sensor technology
- **Sensors**
  Patented optical, inductive, dielectric and cross channel
- **Bezel**
  Choice of single metal bezel or dual bezel design
- **Sense-a-Click™ sensor pack**
  Four versions are available depending on currency set
- **Dispensing Cassette**
  Dispenses up to 20 bills in bulk
- **Multi-escrow application**
  All validated bills will be directed from the validating head into the recycling cassette
- **High impact resistant cash vault**
  Durable, metal chassis
- **MCBJ 1:20,000**
  For any situation that requires a service call

Up to 3 Recycling Cassettes (each cassette holds up to 100 notes)
✓ “Smart” cassettes save content information for easy swapping
✓ Individually configurable to any denomination
Bill-to-Bill TD™ Top Dispenser

Ideal for fare collection, Bill-to-Bill TD™ Top Dispenser recycles up to three denominations and dispenses multiple banknotes in one operation, with a great choice of bezels and easy firmware updating using the memory card or through the host. The banknote dispenser has been moved up closer to the validating module to satisfy the law requirements and to give a user-friendly experience during the transaction, by requiring the customer to reach a shorter distance between the two openings.

- 98% + first time insertion acceptance rate
- Dispensing capacity: up to 20 banknotes
- Multi-escrow up to 20 bills
- Cash capacity: 600/1,000 banknotes
- Multi-width validating head
- RFID on cashbox optional
- Up to 3 recycling cassettes (each cassette holds up to 100 notes)
- CCNET protocol allows for easy, remote online download
- Interface: Serial RS232

Bill-to-Bill ST™ Stackerless

Bill-to-Bill ST™ Stackerless is the smallest banknote recycler that maintains one of the highest recycling capacity. It is the first 3 denomination banknote recycler with free-fall capabilities. Bill-to-Bill ST™ Stackerless offers an easy upgrade path from a single note recycler to a full 3 note recycler with escrow functionality to provide flexibility.

- State-of-the-art validation technology and top of the line performance
- Included additional sensors for note tracking to improve reliability
- Banknote dispenser closer to the banknote accepting module. The locking mechanism has been relocated to the top
- Faster troubleshooting and jam clearing increase uptime
- Up to 3 recycling cassettes (each cassette holds up to 100 notes)
- Easier integration, requiring no rails to access the rear of the unit
MFL®

Industry’s Most Reliable, Secure, Modular Design

MFL® is the front load banknote validator designed for automated cash transaction applications. MFL® provides modularity and high security due to unique multi-sensor technology. MFL® utilizes a patented alignment mechanism enabling a high acceptance rate for banknotes and barcode vouchers. Due to its robust design and higher reliability, MFL® lowers total cost of ownership, enhances protection against counterfeits and improves machine uptime.

- **98% or higher acceptance rate**
- **Barcoded coupons: 2 ways face up** (encoding standard: ANSI/AIM BC2-1995, Uniform Symbology, Interleaved 2 of 5)
- **Supports multiple protocols and has a standard footprint**
- **Patented multi-sensor technology with self-calibration and removable sensor module**
- **Updates by smart-stick memory card or host machine**
- **Robust mechanism and beltless bill path**
- **Aligning mechanism straightens the misaligned banknotes**
- **Lockable and secured cash box**
- **Cash box: 600 or 1,000 banknote capacity that can be secured on housing and supports 2 locks on door**
- **Vandal-proof metal bezel: up-stack or down-stack, IP24 compliant, ideal for outdoor applications**
- **Plastic bezels: running light, digital display, standard, Bat and Konami**
Vantage

Increase Your Profits with the Vantage Advantages

Vantage bill validator is an industry-leading solution with a host of advanced features for highest in-service time. Extremely robust and flexible, Vantage is designed to enhance operator business by maximizing profitability.

Highlights:

- Advanced bill image processing and dynamic sensor calibration offers industry leading bill acceptance and fraud protection
- Proprietary Smart Bezel increases sales by actively communicating 5€, 10€, and 20€ bill acceptance in real time
- Quick-release bezel speeds installation and removal, improving access while reducing service costs
- Three levels of anti-stringing technology provide superior cheat resistance
- Capture new customers with eye-catching impulse lights
- Sculpted 360° illuminated bezel offers ease of bill insertion
- Automated self-diagnostics ensure optimal performance resulting in fewer service calls

Patented note path lockout provides high security Level Three stringing and fishing protection

FlexStack™ bill box expands up to 500 bills

Tool-free disassembly eases service

Status indicators simplify setup and troubleshooting

Smart Bezel™ actively communicates bill acceptance

Quick-Release Bezel speeds installation and removal

More Profitable

New features to increase your in-service time and sales.

- Centric driver roller provides highest acceptance rates for skewed bills
- Automated self-diagnostics and visual bezel notification guarantee your validator is always ready to accept cash
- Smart Bezel™ increases sales by communicating 5€, 10€ and 20€ bill. Multiple acceptance in real time

More Robust

Innovative technologies enhance reliability and security.

- Fourteen sensor pairs scan more of the bill. Multiple analysis technologies increase acceptance while eliminating frauds
- Streamlined bill path and intelligent bill transport software reduces jam conditions providing highest in-service time
- Level Three Cashbox Lockout Technology provides industry leading security by completely blocking bill path access to the cashbox

More Flexible

Easier to install, service and update.

- Quick-release bezel expedites installation and removal, even for tight installations
- Tool-free disassembly eases service. Illuminated bezel and status indicators simplify setup and troubleshooting
- FlexStack® cashbox holds over 500 bills. It maximizes bill capacity and reduces machine visits
- Broad range of support tools and accessories to meet your specific application
Currenza C²
Reduce your Machine Downtime and Increase Revenues
Currenza C² represents the latest innovation in coin acceptance and recycling technology. Thanks to the PRP (Payout Redundancy Protection) system, six tubes and three independent motors, it delivers superior results to vending operators in terms of high coin capacity, excellent payout reliability and maximum configuration flexibility. Currenza C² takes cash management to the next level by maximizing operators’ profits and reducing machine downtime.

Highlights
- Acceptance and payout of all circulation coins (also 0.01 €)
- 6 self-filling tubes reducing refilling needs and providing optimum set-up of payout configuration and float level and easy access in case of maintenance
- Modular cassette structure for great freedom in tube configuration
- Payout combination optimization to meet each machine’s planogram and site users payment behavior
- High payout speed of up to 6 coins per second and acceptance speed of up to 3 coins/second
- MFT technology providing a more secure coin validation, sensor system to measure up to 40 different parameters
- Easy and fast programming with user-friendly intuitive menu
- Easy access to validation and sorting area for maintenance

Optional Accessories
- External box to connect Currenza C² to small automatic and semi-automatic vending machines

Versions
- Blue (EXE, MDB) with display and keys
- White (MDB) without display and keys

PRP System
(Payout Redundancy Protection)
6 tubes cassette and 3 independent motors for high payout safety and the minimization of down time
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.

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
USB version also available
Advanced electronic and mechanical anti-fraud system: electronic anti-fishing device, coin movement direction detection, 3 mechanical traps, and wire cutting blade
Tropicalised version also available for environments affected by adverse weather conditions

RM5 Evolution
The Record-Breaking Coin Validator
The RM5 Evolution coin validator 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.

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
Identification channels: up to 59, each of which can be redirected to the outlets. The first 6 support Self-Prog mode
A mechanical and electronic anti-fishing device
Serial interface for external connections (portable programmer or PC)
Credit recognition: parallel, binary, pulse

Over 2 million Comestero Coin Mechanisms Installed!
Coin Sorters

CINCO
Coin sorter with 5 sorting paths plus reject mechanism specifically designed to satisfy the requirements of any type of gaming machine. It can be installed both on machines operating in ccTalk and in parallel, allowing switching modes with ease.

SPS41LCC4
Coin sorter with 4 in-line sorting paths and reject placed over the third sorting outlet.

SPS31LCC3
Coin sorter with 3 in-line sorting paths and reject placed over the third sorting outlet.

SPS31SCC3
Coin sorter with 3 in-line sorting paths and a bottom reject mechanism.

SPS300CC3/VER-B
Coin sorter with 3 in-line sorting paths and front reject.

SPS300CC3
ICS (Intelligent Coin System)
The Innovative Coin Handling Device
The ICS is a revolutionary coin handling device able to process up to 8 different size coins without the need of pre-sorting the coins by the user. Due to its compact design and spacious size (up to 1,300 various sized coins), it is ideal for many applications, and supports a minimum coin-in to coin-out height solution. Thanks to its patented design and SUZOHAPP’s long-standing experience in coin handling, this device is the world’s first currency solution able to be integrated into machines from diverse markets including parking ticket machines, self-checkout stations, money changers, kiosks and vending. ICS’s intelligent interface gives you the possibility to directly manage the payout composition or make the calculation itself as to the amount of coins per type to be supplied based on the denomination it holds. It is also able to dispense 4 coins simultaneously.

* value can change according to currency
Cube Hopper
High Speed Single Denomination Hopper
The Cube Hopper has an expandable hopper capacity and is made from extremely strong, wear-resistant plastics. With one configuration it covers different coin sizes, and in case of conversion the disc can be replaced in seconds to convert the denomination of the hopper. The hopper is square and easy to mount by means of standard mounting bracket. By using an unique “Sun & Planet” gearbox system, this hopper offers the possibility to contain and count (with two extensions) over 1,200 coins of ø 24 mm. The hopper is protected by an auto-reverse anti-jam system and has an indirect optical readout with a continuous monitored optic sensor control. A low-level detection is integrated in the coin cup. A Dual Hopper version is also available which can payout two different types of coins.

- Standard 350 coins capacity (ø24 mm)
- High payout speed dispensing: up to 400 coins per minute
- Coin cup extensions available (optional) which increase capacity up to average 400 coins per extension (ø24 mm) (maximum 2 extensions up to 25.6 mm)
- A low-level detection integrated into connector as standard

Flow Hopper
Innovative Through-Hole Hopper
The innovative electronics and high-resistance plastic materials ensure durability over time. Available in two interfaces – standard parallel and ccTalk serial. Supplied with quick-release plate.

- Integrated fall tube for simple dual-hopper cabinet construction
- Clean design – no external wires run for level sensors
- ccTalk version is available in encrypted and non-encrypted modes
- Reliable through-hole coin disk design
- Low level sensor and anti-jam feature

3 DIFFERENT COIN BOWL SIZES
- Medium cup
- Intermediate cup
- Large cup
Evolution Hopper
High Dispensing Speed and Reliability Come Together

Based on a belt drive, Evolution Hopper is excellent in terms of both performance and ease of maintenance. The unique concept provides a single build type hopper that is suitable for 95% of the world’s coins and tokens without needing adjustments. A large DC motor in combination with an electronic motor control board yields reduced friction and motor noise. The optic board is easily accessible by removing the electronic control board from outside the hopper.

High capacity:
>1,100 coins (Ø 23mm)

Built-in agitator to prevent coin jams

Pay out speed:
4 coins per second

3 different coin sizes available:
16.25-20.9 mm, 19-26.4 mm (Euro Hopper) 21-30 mm

Low and high level sensing

Modular space & efficient system

Excel Hopper
Extremely Durable and Service-Friendly

Its gearbox system design provides advantages such as maximum torque with minimum power consumption, unique bayonet motor connection for easy motor replacement, and an easily-accessible coin exit. Available with 3 different bowls: standard bowl, wide or narrow bowl and extended bowl.

Payout speed:
450 coins/minute (<31 mm coins),
275 coins/minute (> 31,1 mm)

Indirect optic switch read out protected by dust and light cover

Silent operation

Customised frame and cups specifications

Steel bearings offer stable disc rotation
Coin Carousel WGR

The WGR coin carousel not only stores coins but acts as an escrow to return rejected coins and serves as a payout mechanism. The escrow returns coins already entered, acting as Last-In/First-out (LiFo) mechanism. The WGR is powered by a bidirectional drive motor and the coins are taken by an electromechanical shutter. The current motor position and the shutter position are both monitored by a slotted optical switch. To recognized coins, the entrance is monitored by 3 light barriers. The major design innovation of the WGR is the carousel with 53 compartments in which 50 entered coins can be stored. The carousel’s mechanical design allows all coin handling to take place within this unit. The modular design of the WGR allows several carousels to be placed on top of each other by using a simple rack construction in a complete coin storage and payout system.

Features

- LiFo (Last-In/First-Out) function
- Coin overflow to the cash box
- 3 optical sensors for coin entry, motor and shutter positions
- 3 coin channels for acceptance, overflow and reject
- Easy way to insert several WGR carousels on top of each other to form a coin handling system. Each separate coin value is thus assigned to a separate magazine. A CPU controls the whole process and drives the magazines (available as option)
- If all compartments are full, then the coin that was first accepted reaches the overflow opening in the base of the WGR, and consequently falls through the opening when the next coin enters the magazine
- As each magazine is placed directly on top of each other, the coin will fall through the magazine under it and thus into the cashbox. A coin exit sensor is inserted underneath the magazines to ensure that the CPU is informed of any misrouted coin (available as option)
UPT Card Readers
All-In-One Solutions For Digital, EMV Contact and Contactless Payments
The UPT Card Readers are certified, 4G Ready, and feature beautiful large full-color touch screens, providing an attractive interface with ultimate payment flexibility for your customers. The UPT Card Readers can even accept and integrate with campus card systems in addition to digital, EMV contact and contactless payment cards. Built-in 4G telemeters report machine health data to management systems.
Stationary Scanners

Newland scanners are supported by EasySet – a software tool for configuration, cloning setup for fast deployments, firmware upgrades, imaging functions, and includes a barcode generator.

FM3051 Grouper II
Plug-and-play simplicity enhancing your experience right from the start
With its snappy barcode reading of virtually any 1D or 2D barcode, the FM3051 Grouper II is the perfect response to the trend of barcodes moving from paper to the screen. Built to read from contemporary LCD widescreen devices, the fixed scanner is ideal for mobile phone applications like loyalty programs and ticket validation. Whether it’s an employee scanning a product label or a customer scanning a voucher on their mobile phone, barcode scanning is always easy and quick. The form factor and small footprint of the FM3051 Grouper II makes it easy to integrate into a kiosk. Also available in flush mount: the FM3056 Grouper II.

FM3056 Grouper II
Plug-and-play simplicity enhancing your experience right from the start
The new FM3056 Grouper II is Newland’s most aggressive and efficient fixed mount scanner to date, making it a strong all-around solution. It’s equipped with a megapixel camera that scans virtually any 1D and 2D barcode with impressive speed and ease. On top of that, its programming, IR sensor and light sensor help keep users moving, even in low light conditions. The combination of these features makes the device a leader in its class.

FM430 Barracuda
Read barcodes from short or long range with this compact scanner for when less space is available
The new FM430 Barracuda is Newland’s most aggressive and efficient fixed mount scanner to date, making it a strong all-around solution. It’s equipped with a megapixel camera that scans virtually any 1D and 2D barcode with impressive speed and ease. On top of that, its programming, IR sensor and light sensor help keep users moving, even in low light conditions. The combination of these features makes the device a leader in its class.

FM430 Barracuda
Read barcodes from short or long range with this compact scanner for when less space is available
The new FM430 Barracuda is Newland’s most aggressive and efficient fixed mount scanner to date, making it a strong all-around solution. It’s equipped with a megapixel camera that scans virtually any 1D and 2D barcode with impressive speed and ease. On top of that, its programming, IR sensor and light sensor help keep users moving, even in low light conditions. The combination of these features makes the device a leader in its class.

FM3080
Impressive short-range scanning capabilities combined with customization
Prepared for integration in your kiosk or counter, the FM3080 Hind combines performance and customization. The large scan window is optimized for short range reading of barcodes from a mobile phone or paper, even placed directly on the glass. With 4 color options available, the FM3080 Hind can be easily programmed to indicate a successful read or to match your brand.

FM100
Reading performance reaches and exceeds global standards, advanced CCD scan engine
Designed for OEM applications, this high-performance fixed scan engine can easily be integrated into various solutions such as kiosks, ticketing machines, (reverse) vending machines and many more. CCD technology means no laser, mirror or moving parts for increased durability.

FM100
Reading performance reaches and exceeds global standards, advanced CCD scan engine
Designed for OEM applications, this high-performance fixed scan engine can easily be integrated into various solutions such as kiosks, ticketing machines, (reverse) vending machines and many more. CCD technology means no laser, mirror or moving parts for increased durability.

FM3051 Grouper II
Plug-and-play simplicity enhancing your experience right from the start
With its snappy barcode reading of virtually any 1D or 2D barcode, the FM3051 Grouper II is the perfect response to the trend of barcodes moving from paper to the screen. Built to read from contemporary LCD widescreen devices, the fixed scanner is ideal for mobile phone applications like loyalty programs and ticket validation. Whether it’s an employee scanning a product label or a customer scanning a voucher on their mobile phone, barcode scanning is always easy and quick. The form factor and small footprint of the FM3051 Grouper II makes it easy to integrate into a kiosk. Also available in flush mount: the FM3056 Grouper II.

FM3056 Grouper II
Plug-and-play simplicity enhancing your experience right from the start
The FM3056 Grouper II is a flush mount scanner with a minimal footprint. With a height of only 53mm, the device is small enough to fit into most kiosks, while the flush mount ensures that the device suits any business environment. Built to read from contemporary LCD widescreen devices, the fixed scanner is ideal for mobile phone applications like loyalty programs and ticket validation. Whether it’s an employee scanning a product label or a customer scanning a voucher on their mobile phone, barcode scanning is always quick and easy. The FM3056 Grouper II is the flush mount equivalent of the FM3051 Grouper II.

FR27
Latest technology, compact design, CPU-based scanner
Armored with Newland’s latest-generation UIMG® technology, the FR27 can decode poor quality soiled or wrinkled barcodes with ease, even on a screen covered with protective film. Its exceptional motion tolerance and large FOV enhance the user experience. Fits on a narrow desk or shelf when space is at a premium.
FR21 Neon
Ideal desktop scanner for mobile payment, customer loyalty and ticket verification
The FR21 Neon was built to create an optimal customer experience at the POS. It scans quickly and easily, even for the most inexperienced user, making it an ideal solution for applications like mobile payment, customer loyalty, cashback, and ticket verification. “Scan here” circle customizable with any sticker.

OEM Scan Engines

EM2037-V4
Delivers speedy and accurate scanning performance
No matter what type of barcode is presented, the megapixel camera allows users to scan 1D and 2D barcodes, including very small ones, with impressive speed and ease. In addition to excellent scanning of high-density barcodes, the EM2037-V4 also provides the added value of decoding postal barcodes.

EM3080-W
Small, lightweight and easy for integration
The EM3080-W is Newland’s smallest OEM scan engine. Including easy integration with a minimal footprint, the EM3080-W is the perfect solution for all-around scanning capabilities.

EM2080
Snappy on-screen barcode capture
The CPU-powered EM20-80 is incredibly reader-friendly on smartphone and tablet displays, and features excellent near-field reading, a wide viewing angle and snappy reading.

EM3396
Integratable into various OEM devices including kiosks, ticket validators, and PDA’s
The EM3396 OEM scan engine with a bright laser aimer, offers stunning performance on 1D and 2D barcodes. It can be integrated into various OEM devices including kiosks, ticket validators and PDA’s. Due to its light weight of only 4g, solid-state build and low power consumption, the engine is ideal for portable scanning devices.

EM50S-10
Superior scanning performance
The EM50S-10 / EM50S-20 is a CPU-based scan engine that delivers stunning performance. Armed with Newland’s sixth-generation of UIMG technology, decoding damaged or poor-quality barcodes is no match for this scan engine.

EM1300
Compact and highly integrated design
Designed for OEM applications, this high-performance CCD scan engine can easily be integrated into various solutions such as kiosks, ticketing machines, PDA’s and many more.
WorldKey Systems
Innovation in Cashless Management
The WorldKey range is composed of a wide array of Mifare® cashless systems that can fulfil any payment, activation, identification and recharging requirements. Designed to manage multiple applications, WorldKey systems are flexible, durable and reliable cashless payment solutions.

Benefits:

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash in advance</td>
<td>The customer is paying today for the consumptions of tomorrow</td>
</tr>
<tr>
<td>Pricing flexibility</td>
<td>Set up prices at any value. No restrictions related to cash denominations or bank card transactions</td>
</tr>
<tr>
<td>Fast payment at purchase</td>
<td>3 times faster than cash</td>
</tr>
<tr>
<td>Users differentiation</td>
<td>Users ID inserted in the payment media can be linked to users data and customized product and rewards</td>
</tr>
<tr>
<td>Product promotions</td>
<td>Set up differentiated pricing by product through discounts or subventions</td>
</tr>
<tr>
<td>No transactions fee</td>
<td>Credit uploaded through cash insertion at the machine or at independent loading stations</td>
</tr>
</tbody>
</table>

WorldKey is the Most Complete Cashless Range in the Market:

5 Models
- WorldKey
- WorldKey Lite
- WorldKey Move
- WorldKey UltraLite
- EuroKey Next

3 Reading Heads
- Moon
- Sky
- Galaxy

4 Customizable Payment Supports
- Keys
- Cards
- Tags

A private Cashless Payment System and Powerful Customer Management Tool
The WorldKey system is based on the MIFARE® (standard, Plus, DesFire, NFC) technology platform which ensures high safety standards. Security in transferring data is ensured by the combination of the proprietary encryption MIFARE® and RFtech TDES (Triple Data Encryption Standard). Operators can manage several sales or identification applications by storing them on a single RFID support (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.
High Quality Open Frame LCDs
For Kiosks, Vending, and Ticketing Machines

Touch and Non-Touch

Fast customization is available for both OEMs and upgrades: 6.2" to 90", specialized panels and integration, customized metal and oversized glass, touchscreens and inputs.

Features:
- Standard sizes from 15” to 43”, smaller and larger sizes available with fast customization
- Up to 4K resolution
- Standard and wide viewing angle units available
- Choice of:
  - 10+ touch Projected Capacitive (PCAP), true-flat, seamless edge-to-edge glass with thru-glass capability
  - 3M Surface Capacitive (SCAP) touch technology
  - Protective Glass
- Common footprint for touch and non-touch variations
- DVI, VGA, HDMI and DisplayPort input options
- Economically priced
- Models also available with LEDs surrounding the display with color

Below is just a small selection of VisionPro™ monitors available. See suzohapp.com/monitors for a comprehensive list.

<table>
<thead>
<tr>
<th>Model</th>
<th>Size/Aspect ratio</th>
<th>Resolution</th>
<th>Viewing angle</th>
<th>Panel Brightness</th>
<th>Contrast</th>
<th>Touch/Glass</th>
</tr>
</thead>
<tbody>
<tr>
<td>49-1902-DA</td>
<td>19” 5:4</td>
<td>1280x1024</td>
<td>178° x178°</td>
<td>250 cd/m²</td>
<td>1000:1</td>
<td>Optional I/R USB or serial</td>
</tr>
<tr>
<td>150TFTx2157</td>
<td>21.5&quot; 16:9</td>
<td>FHD</td>
<td>170° x160°</td>
<td>250 cd/m²</td>
<td>1000:1</td>
<td>3M touch or tempered glass</td>
</tr>
<tr>
<td>150TFTG2153</td>
<td>21.5&quot; 16:9</td>
<td>FHD</td>
<td>178° x178°</td>
<td>250 cd/m²</td>
<td>1000:1</td>
<td>Black edge-to-edge tempered glass</td>
</tr>
<tr>
<td>49-3366-02</td>
<td>21.5&quot; 16:9</td>
<td>FHD</td>
<td>178° x178°</td>
<td>250 cd/m²</td>
<td>1000:1</td>
<td>3M USB or serial</td>
</tr>
<tr>
<td>150TFTx2206Mxxx</td>
<td>22.0&quot; 16:10</td>
<td>1680x1050</td>
<td>178° x178°</td>
<td>250 cd/m²</td>
<td>2000:1</td>
<td>3M touch or tempered glass</td>
</tr>
<tr>
<td>150TFTx2382</td>
<td>23.8&quot; 16:9</td>
<td>FHD</td>
<td>178° x178°</td>
<td>250 cd/m²</td>
<td>1000:1</td>
<td>PCAP and matching glass version</td>
</tr>
<tr>
<td>150TFTx2306xxx</td>
<td>23.0&quot; 16:9</td>
<td>FHD</td>
<td>178° x178°</td>
<td>250 cd/m²</td>
<td>1000:1</td>
<td>3M touch or tempered glass</td>
</tr>
<tr>
<td>150TFTS2414Mxxx</td>
<td>24.0” 16:10</td>
<td>1920x1200</td>
<td>178° x178°</td>
<td>300 cd/m²</td>
<td>1000:1</td>
<td>3M USB or serial</td>
</tr>
<tr>
<td>150TFTx2411xxx</td>
<td>24.0” 16:10</td>
<td>1920x1200</td>
<td>178° x178°</td>
<td>300 cd/m²</td>
<td>1000:1</td>
<td>3M touch or tempered glass</td>
</tr>
<tr>
<td>150TFTx2705X</td>
<td>27.0” 16:9</td>
<td>FHD</td>
<td>178° x178°</td>
<td>300 cd/m²</td>
<td>3000:1</td>
<td>PCAP and matching glass version</td>
</tr>
</tbody>
</table>

Engineered and designed specifically to perform in some of the most demanding, high-touch environments, the 90-Series open-frame displays feature touch technology that is built-in rather than glued-on. Elo is the world leader in commercial touch with over 20 million installations, half a million units per years, nearly 2,000 units per day.

Take advantage of these great features:

- Next generation Projected Capacitive (PCAP) 2GS technology (2 glass solution)
- Highest optical quality and longevity as no plastic films, no metal mesh
- 10-touch true-flat solution
- Thru-glass mode which operates through up to 6 mm customer-supplied glass
- Common mechanical and electrical components across the line for easy design-in, compliance testing, service, and transition between sizes
- HDMI, DisplayPort, VGA inputs, with common port design across all units
- Built-in watertight edge seal
- Magnetic tethered OSD control box
- Unique field-replaceable touchscreen glass design
- Global agency approvals: United States UL, FCC; Europe CE TUV; Australia RCM; Canada cUL, IC; China CCC; Japan VCCI; Korea KCC; Mexico CoC; Taiwan BSMI; International CB; RoHS
- Passes UL and IK07 Ball Drop tests
- 50,000 hour demonstrated MTBF
- 3-year standard global warranty

Select from a wide range of sizes from 10” to 27” to fit in your environment. Other Elo products extend the range to 70”.

Only Elo produces the touchscreens, controllers, drivers, and monitors for a complete solution proven in over 20 million installations worldwide.
### TOUCH DISPLAYS

**10" to 27" desktop touchmonitors, All-in-Ones and interactive digital signage from 10" to 70"**

SUZOHAPP also distributes the complete line of Elo Touch Solution products — seen in interactive kiosks, point-of-sale terminals, interactive retail displays and transportation applications around the world.

<table>
<thead>
<tr>
<th>Model</th>
<th>Diagonal size</th>
<th>Aspect ratio</th>
<th>Contrast ratio</th>
<th>Brightness (panel)</th>
<th>Viewing angle</th>
<th>Native resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1093L</td>
<td>10.1&quot;</td>
<td>16:10</td>
<td>800:1</td>
<td>350 nits</td>
<td>85°/85° or 170°/170°</td>
<td>1280 x 800 at 60Hz</td>
</tr>
<tr>
<td>1291L</td>
<td>12.1&quot;</td>
<td>4:3</td>
<td>1500:1</td>
<td>450 nits</td>
<td>89°/89° or 178°/178°</td>
<td>800 x 600 at 60Hz</td>
</tr>
<tr>
<td>1590L</td>
<td>15&quot;</td>
<td>4:3</td>
<td>800:1</td>
<td>300 nits</td>
<td>80°/70°-80° or 160°/150°</td>
<td>1024 x 768 at 60Hz</td>
</tr>
<tr>
<td>1593L</td>
<td>15.6&quot;</td>
<td>16:9</td>
<td>500:1</td>
<td>300 nits</td>
<td>80°/80° or 160°/160°</td>
<td>1366 x 768 at 60Hz</td>
</tr>
<tr>
<td>1790L</td>
<td>17&quot;</td>
<td>5:4</td>
<td>1000:1</td>
<td>250 nits</td>
<td>85°/80° or 170°/160°</td>
<td>1280 x 1024 at 60Hz</td>
</tr>
<tr>
<td>1990L</td>
<td>19&quot;</td>
<td>5:4</td>
<td>1000:1</td>
<td>250 nits</td>
<td>89°/89° or 178°/178°</td>
<td>1280 x 1024 at 60Hz</td>
</tr>
<tr>
<td>1991L</td>
<td>19&quot;</td>
<td>5:4</td>
<td>1000:1</td>
<td>250 nits</td>
<td>89°/89° or 178°/178°</td>
<td>1280 x 1024 at 60Hz</td>
</tr>
<tr>
<td>2094L</td>
<td>19.5&quot;</td>
<td>16:9</td>
<td>3000:1</td>
<td>250 nits</td>
<td>89°/89° or 178°/178°</td>
<td>1920 x 1080 at 50, 60Hz</td>
</tr>
<tr>
<td>2293L</td>
<td>21.5&quot;</td>
<td>16:9</td>
<td>1000:1</td>
<td>250 nits</td>
<td>85°/80° or 170°/160°</td>
<td>1920 x 1080 at 50, 60Hz</td>
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<td>2294L</td>
<td>21.5&quot;</td>
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<td>1920 x 1080 at 50, 60Hz</td>
</tr>
<tr>
<td>2494L</td>
<td>23.8&quot;</td>
<td>16:9</td>
<td>3000:1</td>
<td>250 nits</td>
<td>89°/89° or 178°/178°</td>
<td>1920 x 1080 at 50, 60Hz</td>
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<td>2794L</td>
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</tr>
</tbody>
</table>
**Orizon™ NextGen™**
The ultimate kiosk printer, combining technology (PC-based infrastructure), flexibility (adjustable spindle arm) and outstanding reliability (200km print head life).

**PayCheck® Terminal™**
Low-cost hardware for interactive kiosks.
PayCheck Terminal XL is the world’s first kiosk terminal powered by a TITO printer. Taking advantage of the power and uniqueness of the PayCheck NextGen printer, we created a Linux-based terminal for your gaming, lottery and retail applications.

**PayCheck® NextGen™**
The ‘ONE’ printer you need!
Greater value, more reliable and more capable than any of its competitors on the market today, PayCheck NextGen is the ‘One’ printer venues need to ensure reliability, functionality and connectivity.

**PayCheck® 4™**
Fastest. Smartest. Toughest.
Finally, there’s a printer that’s as fast as the gaming action on your casino floor. The PayCheck 4 Thermal Printer from Nanoptix® can print a ticket in just 0.6 seconds!
PayCheck® Desktop 2™
The newest member of the PayCheck® series family
Powered with PayCheck NextGen technology, this desktop model can enhance your cage environment by providing your customers quick TITO tickets, promotional coupons and/or streamlined tax forms, to name a few, while keeping your host engaged one-on-one with your patrons.

HSVL Advanced™
The HSVL Advanced printer, provides manufacturers ultimate flexibility and outstanding reliability. By using innovatively designed movable spindle arms the HSVL Advanced can adapt to any kiosk design.

EZ-Tear™
Compact. Flexible. Modular.
The EZ-Tear printer provides manufacturers flexibility while remaining compact and reliable. Built with modularity in mind, the EZ-Tear printer will fit many types of kiosks and with its clamshell design, provide easy access for paper loading.

“Spill-Proof” Thermal Printer
Affordable and easy to use. Best of all, its patent-pending spill-proof design means never having to worry about OOOPS again. IEC60529, IPX3 spillage approved.
Kiosk / Self-Service Printers

MODUS 3  
Small footprint kiosk printer
Ultra compact thermal printer to meet the needs of slim-line kiosks without sacrificing features and functionality. MODUS 3 combines all the features of a self-service printer in a compact package (116Lx50Dx62H).

TG02H  
Extremely compact and versatile ticket printer
Designed for easy installation and panel mounting, the TG02H is an extremely compact and versatile ticket printer and includes a patented anti-jamming system.

TG1260HIII  
60mm ticket / receipt printer
60mm receipt and ticket printer with a metal frame and paper mouth with blocking system to prevent insertion of items. Available in cutter and tear-off versions, 24V version (TG2460), and with illuminated plastic bezel.

TG2480HIII  
80mm ticket / receipt printer
80mm receipt and ticket printer with a metal frame, static presenter, and an exclusive patented anti-jamming system.

VKP80III  
80mm ticket / receipt printer
The worldwide best seller in the kiosk industry! The most compact 80mm ticket and receipt printer with fast printing and low TCO (Total Cost of Ownership). Available with shutter for outdoor use to prevent introduction of objects.
Dynamic Panel Systems
SUZOHAPP’s Dynamic Panel Systems (DPS) feature the latest innovation in pushbuttons - all the adaptability of touch screens with the tactile satisfaction of mechanical pushbuttons. We remove the limits of standard LCD pushbuttons in both shape and content, utilizing a single LCD with a unique fibre optic conduit to elevate the image to the surface of the injection moulded plastic lens cap. Easily program the entire deck at once with dynamic and configurable content allowing for unprecedented interaction with customers.

Future-proof your user experience with SUZOHAPP Dynamic Panel Systems!

Benefits
- Dynamic content within a tactile format
- Ability to combine touch surface and multiple tactile video buttons all while utilizing the same LCD/TFT panel with single video input
- Decrease in maintenance and reliability concerns compared to single screen TFT/OLED buttons
- Display graphics, text, animations, video, and even highlight error states with moving colour
- Innovative use of precision image transfer fibre optics

Innovation
SUZOHAPP’s DPS feature Picture Key Technology at its core. This allows the dynamic picture to be elevated to the top face of your buttons. The revolutionary space-age fibre optic conduit provides the user with excellent visual clarity and enhanced interaction. Content is delivered using a single LCD, so you can reduce your development time and programming resources.

Serviceability
The DPS’ modular design enhances serviceability. Individual components can be replaced, allowing for efficient repairs and reduced downtime.

Fluid Ingress Protection
The robust design has been rigorously tested to prevent fluid ingress, preserving your game and maintaining uptime.

Customization
Uniquely designed for a large variety of tactile and touch combinations. We will work with you to create the deck perfect for your next project.

Prefer a single bash button with a touchscreen? All tactile with no touch? Your design possibilities are nearly limitless.
Chrome-Luminescent Pushbuttons

Polished chrome-plated button bezel with translucent color washer molded in bezel to provide edge luminescent effect. Available in several color combinations of button & luminescent effect. Additional customization also available.

- Locking nut has special design to allow it to fit over “Snap-Tab” feature with microswitch installed
- Ease & flexibility of mounting to metal control panels using either the “Snap-Tab” or traditional locking nut
- Switch pre-assembled on button for reduced assembly time into control panel
- Subminiature microswitch provides additional clearance room under control panel
- Polycarbonate lens for optical clarity and durability
- Switch snaps on bezel of button eliminating the need to have separate lamp holder
- Grounded for ESD protection

STC Pushbuttons

STC Pushbuttons with Subminiature Microswitch. Available in 6 different colors: red, orange, yellow, green, blue or white.

- Designed to resist spills and sticking, for high reliability and long life, tested for 10 million+ cycles
- Standard supplied with spacer bezel for mounting on top or in the panel (low-profile)
- Full 0.5 mm thickness on lamp terminals holds lamp or led connectors securely
- For use with 5 mm wedge base lamps or leds (not included)
- Standard fitted with Cherry DB5 style microswitch with 2.8 mm terminals or easy connection

LCD Pushbuttons

New and innovative addition to the SUZOHAPP product range. These interactive buttons give the designer additional tools for attracting new users.

- LCD is integrated into the button and moves with lens cap
- Light ring comes in a range of colors
- Option to customize LCD decal surround (black standard)
- 24 frames per second animation
- Full color 128 x 128 pixels
- USB interface, controller board controls up to 16 buttons
**Xlocks & STC Locks**

**Security Camlocks Key Alike**
- 10 pin operation
- Die cast housing with chrome finish
- Camlocks available in 3 lengths: 16 mm (5/8"), 22.3 mm (7/8”) and 28.6 mm (1-1/8”)
- Large key provides good grip during operation
- Key made of nickel silver material for trouble-free performance
- Standard supplied with 32 mm cam with dual hole so the lock can be mounted in any position

**Security Switchlocks**
- 10 pin operation
- Die cast housing with chrome finish
- Length 36.4 mm (1-7/16”)
- Large key provides good grip during operation
- Key made of nickel silver material for trouble-free performance
- Switchlocks have 6.3 x 0.8 mm terminals fitted for easy connection
- Switchlocks are available with or without automatic key return

**STC Round Key Camlocks**
High reliable range of camlocks of different sizes to satisfy customer needs. The locks are available both as key different and key alike.

- 7-pin tumbler lock
- Housing with chrome finish
- Round chrome plated key
- Available as key different and key alike
- Available in: 16 mm (5/8"), 22.3 mm (7/8”) and 28.6 mm (1-1/8”)
- Cam included

All new key alike series are supplied in lots of 25, 50 or 100 pcs with a total of 5 keys per key code. Re-orders on the same key code are possible with a minimum of 25 locks per key code.
The Ultimate Electronic Reprogrammable Lock
Secure, Remote Access Control with Operational Visibility
Identifies each user, checks permissions, records each operation

Features
- Never again change locks when a key is lost, or employee dismissed
- Carry far fewer keys for your fleet or location
- Drop-in replacement for existing locks – self-powered, no wiring
- Remote authorization and traceability with Bluetooth option
- Automatically logs access times and user – no more manual logging
- Authorization reissued daily, or on demand
- Grant temporary access to technicians or others

Design
- Standard cam or cylindrical formats, custom sizes available
- 90°, 132°, 180° rotation limiters, right and left
- IP65 for outdoor usage
- AES 128-bit encrypted communication
- Over 10 billion combinations

Bluetooth Connectivity
Fully control your locks from any remote location even from a smartphone or a tablet

Patented high-tech stainless-steel locking system with self-powered key sets

Program a Unique-Code for each lock with multiple User Key access, or Multi-Code to pair each lock with multiple key codes for a hierarchical or simple master key system.
E-PRL™

**Keys**

- **Master Key**
  Programs lock pairing with User and Download Keys

- **User Key**
  Unique-Code or Multi-Code

- **Download/Audit Key**
  Retrieve access history stored in locks

- **Bluetooth Key**
  Communicates with smartphone or tablet to headquarters

**Accessories**

- **Cylinder Adapter**
- **Handles and Covers**
- **Padlock**

**Software**

- Retrieve lock history with the Download Key, insert in supplied USB Pod, and display/export the event history
- Create and check permissions, black and white lists, reprogram keys, set access time limits, monitor and control each operation
- Communicates from headquarters to iPhone or Android smartphone/tablet apps, and then to users’ Bluetooth Keys
- Runs on a secure Cloud-based platform or your own server

Contact SUZOHAPP for a trial kit compatible with your existing locks!
Speakers and Amplifiers
A wide range of speakers and amplifiers with terminals perfect for use anywhere a small footprint speaker is needed. Available in various sizes and voltages.

Power Supplies & Line Filters
200W, 400W and 500W
High reliability power supplies with high efficiency and low working temperature. Available in different compact size and characterised by light weight.
LED Light Strips

- Easily installs in or around your machines to increase earnings
- Very thin continuous length flexible LED light strips
- 5m rolls can be separated every 3 LEDs and reconnected again
- Super bright high-quality SMD LEDs per reel with 120° wide angle illumination
- 3M adhesive tape on back for easy installation
- Operates on +12vDC
- LEDs controlled by controller and wireless remote (sold separately)
- Each controller can run 65.62 feet (20 meters) of LED strips
- Long life: 50,000 hours
- Less power consumption than traditional lights
- No RF interference
- Sold in reels of 5m
- +12VDC; 20W

Lamps

Light PRO LED Tubes

- Detects changes in position within a zone up to 5 meters
- Easy to use – sensor simply changes its output from 0 to 1
- SUZOHAPP part number 205140000184A

Proximity / Motion Sensor

- Detects changes in position within a zone up to 5 meters
- Easy to use – sensor simply changes its output from 0 to 1
- SUZOHAPP part number 205140000184A

Technical Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detection distance</td>
<td>5m</td>
</tr>
<tr>
<td>Field of view</td>
<td>22°x38°</td>
</tr>
<tr>
<td>Detection zone</td>
<td>24 beams</td>
</tr>
<tr>
<td>Detection condition</td>
<td>The temperature difference between the target and the surroundings must be higher than 4°C</td>
</tr>
<tr>
<td>Movement speed</td>
<td>Digital output 0.6 to 1.2m/s</td>
</tr>
<tr>
<td></td>
<td>Analog output 0.5 to 1.5m/s</td>
</tr>
<tr>
<td>Target concept</td>
<td>Human body with an approx. size of 700x250mm</td>
</tr>
<tr>
<td>Target moving direction</td>
<td>Crossing the detection beam</td>
</tr>
</tbody>
</table>
Door Switches

Single and Double Pole

- Choice of push and push-pull interlock switches
- Snap-in panel mounting
- Long-life coil spring, snap-action mechanism
- Temperature rating -40º to +85º
- Flammability rating UL94V-0
- Various approvals available
- Detailed datasheets available

Cooling Fans

DC Cooling Fans
- Compact cooling fans
- Wire connection
- 12 or 24 Vdc
- Speed up to 5800 RPM

AC Cooling Fans
- Protects electronics from overheating
- Easy mounting with 4 bolts
- Terminal or wire connector
- Speed up to 3000 RPM

Finger Guards for Cooling Fans
- Protects electronics from overheating
- Easy mounting with 4 bolts

Counters

SEC Starpoint Electronic Counter

Enhanced security is a major feature of the SEC, an unique fingerprint code allows the machine to detect any meter changes and to prevent operation if the meter is not present. By utilizing the latest electronic technology, the SEC avoids the reliability problems and service call-outs which can be experienced with mechanical counting devices.

- Replaces up to 31 mechanical meters with individual counters stored in EEPROM
- 7-digit LCD for displaying contents of counters
- Text messages and counter selection controlled by host machine
- Clocks serial interface designed to work on existing meter ports
- Improved security through:
  - Secure software protocol
  - Tamperproof counters with unique fingerprint code
Notes
Notes