



Wireless online locking solution provider





**World's First
Mobile & Card
synchronization**

Mobile Access Locking System

Esmart Mobile
Smartphone synced with your RFID card



Smartphone Accessible via BLE
-Exclusive technology of RF card and smartphone synchronization



Easy to use
- User-friendly mobile App makes lock operation convenient and simple



Maintain all standard features of wireless online and standalone systems



Patented by Passtech
- Feel the tangible benefits of the exclusive system created by Passtech



Self registration via App
- User directly signs up his smartphone to lock after scanning the user card. (Bypass Front Desk)



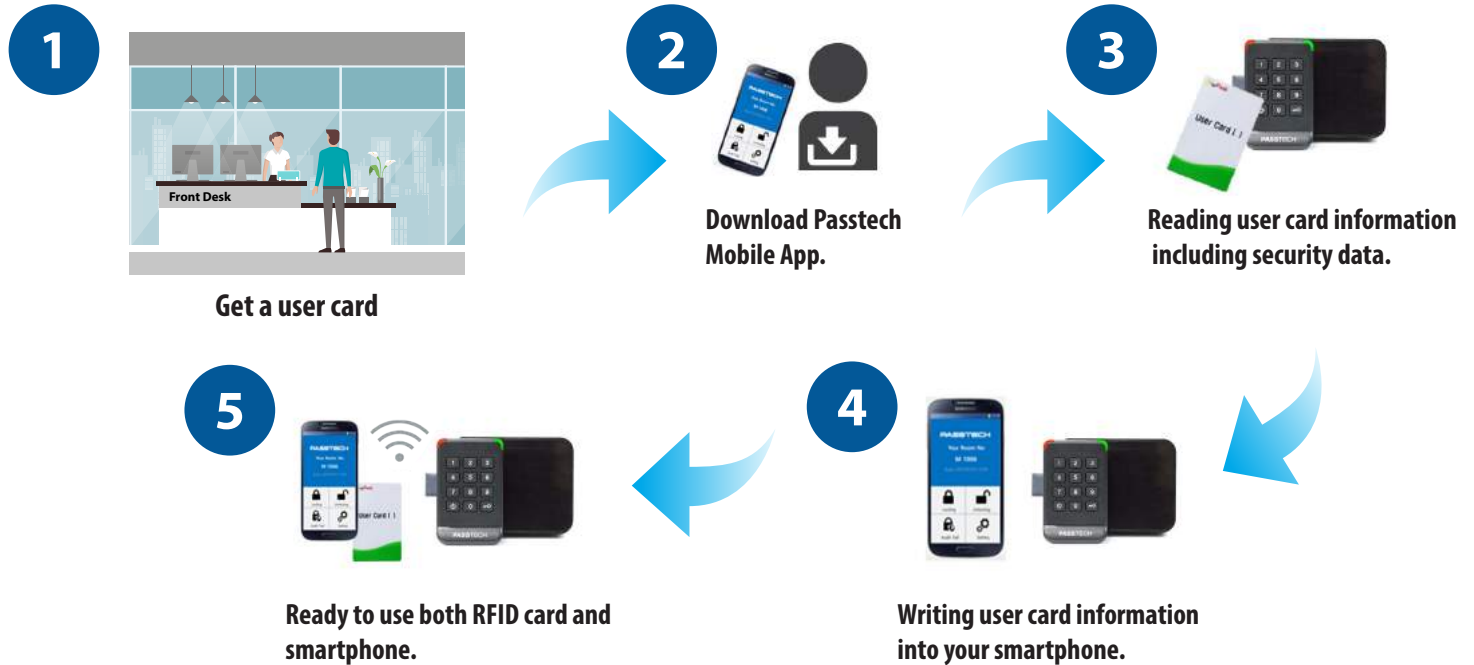
Multi Credential
- RF card, PIN, Smartphone





Mobile Access Locking System

How it works



Benefits

For user

- | Unique user experience
- Provide convenience by using a smartphone along with RF card and PIN
- | Easy self registration via mobile app
- Bypass front desk / No waiting in queue
- | Multiple credentials
- Easy accessibility through multiple credentials such as smartphone, RF card, and PIN

For facility administration

- | Better operational efficiency
- No rush for registration in front desk / operational cost saving
- Improve customer satisfaction
- | Increased customer loyalty
- Increasing of client membership and revenue

Patent by Passtech

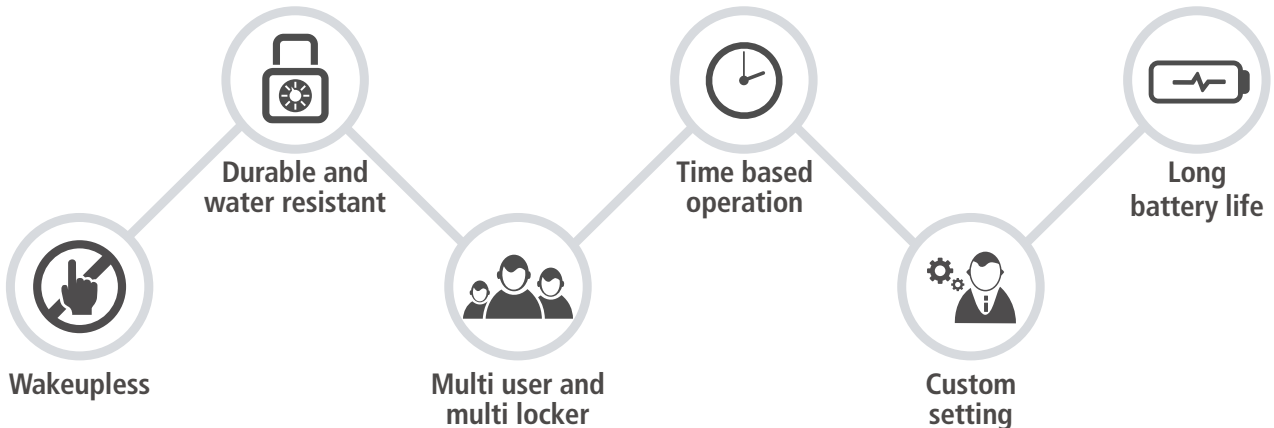
- | Smartphone is synced with your RFID card. [Patent obtained]
- Only remains valid until RFID card is expired or lost.
- | Enhanced security algorithm-AES128
- Better protection by combining AES128 and smartcard security algorithm





Stand-alone RFID Locking System

Esmart Classic :
Smart RFID locker lock system flexibly programmable





Stand-alone RFID Locking System

MAIN FEATURES

| Durable and enhanced design / waterproof

- High impact polycarbonate & waterproof case (IP55)
- Alluminum die-casting latch

| Easy to fit and retrofit

- Engineered to work on all standard material doors :
Metal, wood & laminate lockers and caseworks

| Certified by international standards

- FCC, CE, KCC, ADA compliant

| Long battery life technology

- Approximately 2 years under normal conditions

| Reinforced security

- Unique security key by 3DES security algorithm

| Flexible and convenient operation

- Easy program change or upgrade using RF card
- Simple integration into other data systems (access control etc)

| Various programming options

- Locker free or assigned mode
- Single user for multi lockers or multi users per single locker

| Audit trail function

- Up to 18 lock history events as default
- Up to 200 lock history events(optional)

| Time based operation

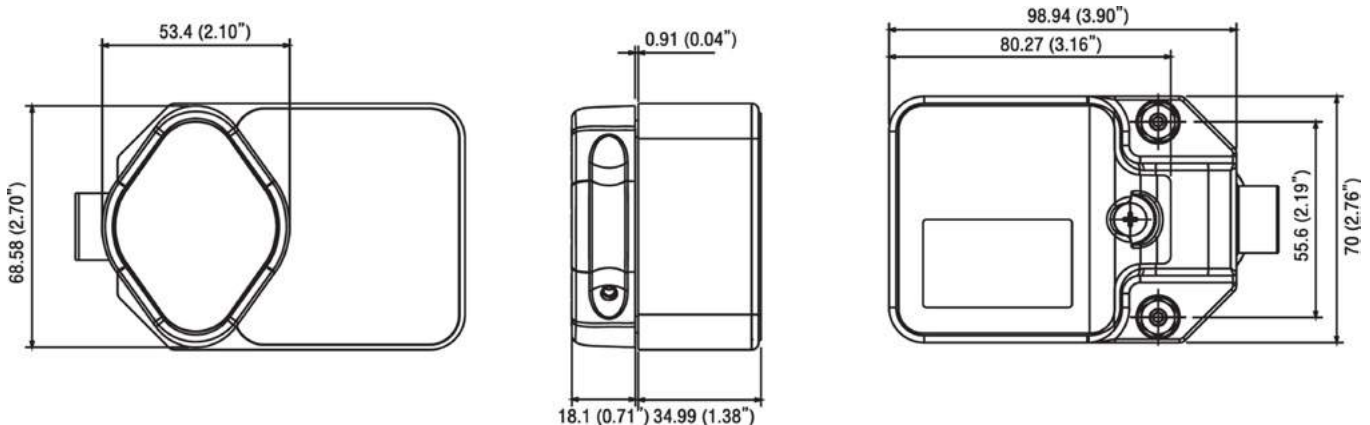
- Automatic door open at programmed time
- Set a time limit on user access

| Wakeupless operation

- No need to wake up lock before scanning the card /
Refers to ZP100 and ZP200R models

DIMENSIONS

Units : mm (inch)

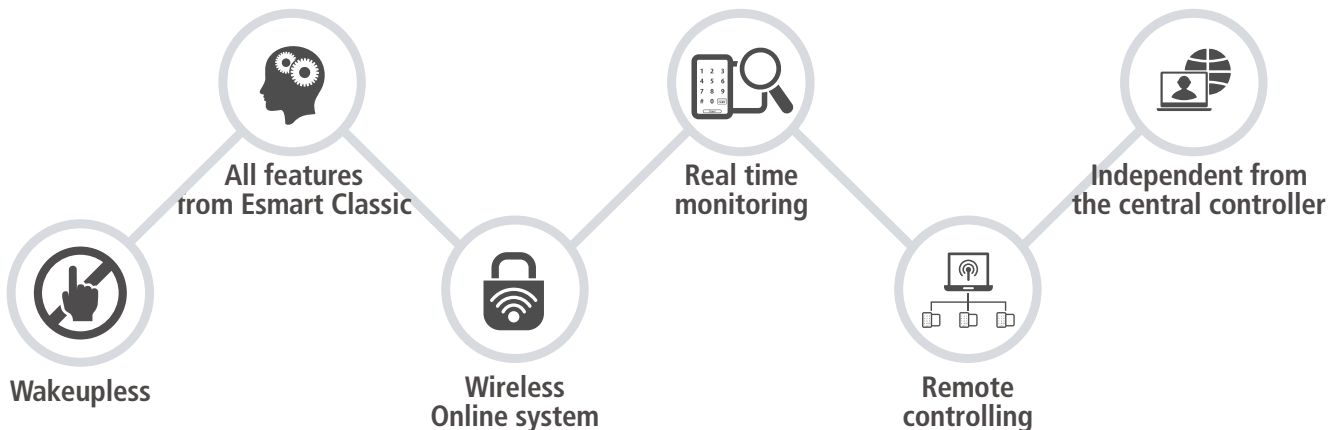


SPECIFICATIONS

| Model | | ZP100 | ZP200R | PT300KR |
|---------------------------|-------|---|--------|-------------------|
| Start-up | | Wakeupless | | Keypad |
| RF protocol | | 13.56 MHz ISO 14443 Type A/B (Mifare, Desfire, HID – optional and more) | | |
| Power | | 6V (1.5V AA battery x 4) | | |
| Latch material & type | | Aluminum Spring bolt / Deadbolt | | |
| Dimension (mm) | Front | 53.4(W)x68.58(L)x18.1(D) | | 48(W)x76(L)x26(D) |
| | Back | 99(L)x70(H)x35(D) | | |
| Housing | | Polycarbonate | | |
| Operation signal | | LED (Green & Red) and Beep | | |
| Door open/close | | RFID card, wristband and tag | | RFID card and PIN |
| Battery life | | 2 years (10 times operation/day) | | |
| Safety standard | | FCC, CE, KCC, ADA compliant | | |
| Front case / plate design | | Case color : Black by default (optional : White color) ZP200R front plate design can be customized on demand | | |

Wireless Online Locking System

Esmart Ultra : The combination of benefits of wireless online and stand-alone offline lock systems





Wireless Online Locking System

MAIN FEATURES

I All features from Esmart Classic

I Wireless online system

- Simple installation eliminating heavy work and cost
- Flexible locker relocation
- No risk of entire system suspension on the occasion of server malfunction owing to battery operating independently from the server.

* To have online configuration, AP200 unit is essential

I Central control and monitoring through AP

- Real-time monitoring of battery status, lock occupancy, alarm, lock event history etc.
- Entire or partial door opening/closing at central server
- Remote card blocking or lock blocking
- Lock assignment

I Rich functions and flexible operation

- Simple integration into other data systems (access control, cashless accounting, guest management etc.)
- Various programming options : Free selection or assigned locker
- Single user for multi lockers or multi users per single locker
- Automatic door open at programmed time
- Set a time limit on lock and user card

CONFIGURATION



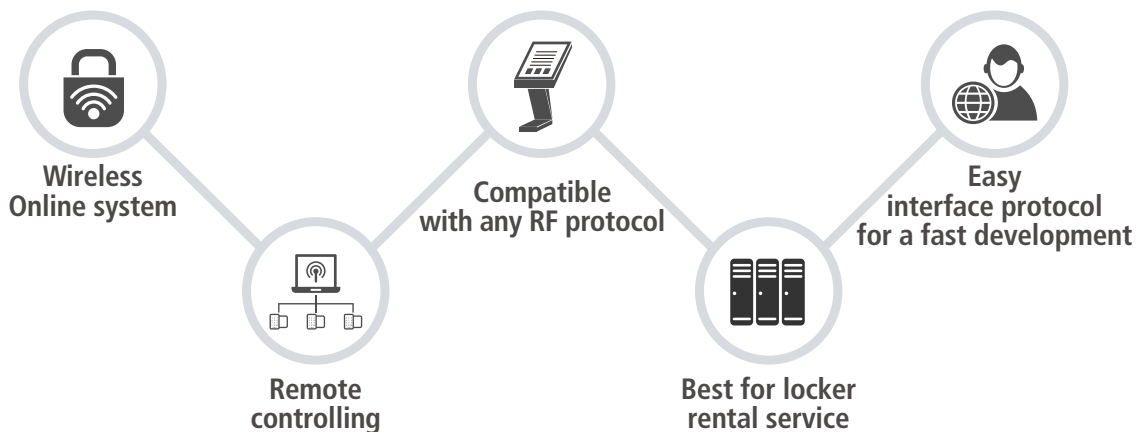
SPECIFICATIONS

| Model | ZP100WR | ZP200WR | PT200 | PT300 |
|--|---|---------------------|-------------------|-------------------|
| Start-up | Touch / wakeupless | Button / wakeupless | Touch screen | Keypad |
| RF Protocol | 13.56Mhz ISO 14443 Type A(Mifare, Desfire, HID–optional...) | | | |
| Radio Frequency for data communication | 2.4Ghz IEEE 802.15.4 Compliant RF Transceiver | | | |
| Power | 6V(1.5V AA batteries x 4) | | | |
| Operational indicator | LED (red, green) display and beep | | | |
| Latch material and type | Aluminum Spring bolt / Deadbolt | | | |
| Housing material | Polycarbonate | | | |
| Dimension (mm) | Front | 52(L)x64(H)x18(D) | 51(W)x81(L)x14(D) | 48(L)x76(H)x26(D) |
| | Back | 99(L)x70(H)x35(D) | | |
| Operational temperature | 0~50°C(operating), -40~85°(storage) | | | |
| Operational humidity | 10~90% | | | |
| Battery life | 18 months (10 times operation/day) | | | |
| Regulation | FCC, CE, KCC, ADA compliant | | | |



Wireless Online Kiosk Locking System

Esmart Kiosk :
The most cost effective wireless locking solution for your kiosk





Kiosk Locking System

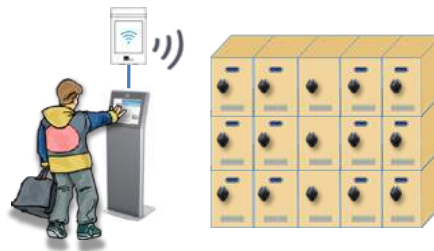
SYSTEM CONFIGURATION & FEATURES

Integrated controller configuration (with standard central controller)



- System with standard Central Controller for the stand-alone configuration
- Wireless communication between Central Controller and locks
- Cost effective and easy installation / No additional development necessary
- Multi credential accessibility (Smartphone, Pin code, Mifare, Des.re, 15693, HID, 125KHz ...)

Custom kiosk configuration (with your own kiosk)



- Use your own Kiosk system to control locks through wireless Access Point (AP200)
- Providing API and sample application that guarantees easy and fast system integration
- It can be integrated to any 3rd party kiosk system with flexibility

SYSTEM COMPONENTS



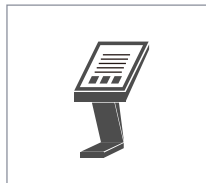
CC200

AP300



Lock

SYSTEM COMPONENTS



KIOSK by customer



AP200



Lock

SPECIFICATIONS

| Model | ZP100W | ZP200W | CC200 |
|--|---|-------------------|--|
| Radio Frequency for data communication | 2.4Ghz IEEE 802.15.4 Compliant RF Transceiver | | |
| Com Interface with server | N/A | | TCP/IP |
| Supported RFID protocol | N/A | | ISO 14443 A/B, ISO18092(NFC),Mifare, Desfire,Felica,HID, 125KHz and more |
| Start-up | Touch Sensor | Button | Touch screen |
| Power | 6V(1.5V AA Batteries x 4) | | DC 12V adaptor |
| Operational indicator | LED (red, green) display and beep | | |
| Latch material and type | Aluminum Spring bolt type / Deadbolt | | N/A |
| Housing material | Polycarbonate | | |
| Case color | Black | | Black |
| Dimension (mm) | Front | 52(L)x64(H)x18(D) | 51(L)x81(H)x14(D) |
| | Back | 99(L)x70(H)x35(D) | |
| Operational temperature | 0~50°C(operating), -40~85°(storage) | | |
| Operational humidity | 10~90% | | |
| Battery life | 3.5 years(10 actuations/day) | | N/A |
| Standard | FCC, CE, KCC | | |

Lock Management Software

Highly Adaptable, Intelligent, Intuitive and Fully Integrated Lock Managing Software



LMS

(Lock Management System)

- Software for distributor
- Custom security key generation
- Card initialization
- Lock programming



LOS

(Lock Operation Software)

- Software for standalone locking system
- User card programming
- Audit trail up to 18 events
- Basic maintenance
- Excel data import and export



Online Server & Client

(Esmart Ultra)

- Software for wireless online lock system
- Access point management
- Real time lock status monitoring
- Lock remote controlling
- All features from LOS

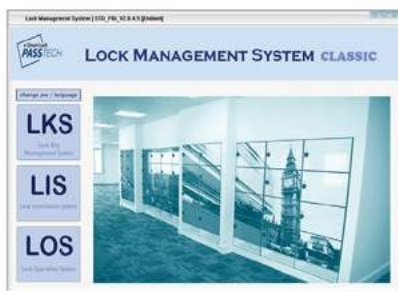


Lock Management Software

SYSTEM REQUIREMENT

| Package | LOS | LMS | Online Server & Client |
|--------------------------------|---|-----|------------------------------------|
| OS | Windows XP or higher (32 or 64 bit) | | Windows 7 or higher (32 or 64 bit) |
| RAM | 1GB or higher | | 4GB or higher |
| Hard Disk space | 100MB or higher | | 10GB or higher |
| Admin privilege | No administrator right required . | | |
| Recommended system requirement | Windows 7 (32bit) / RAM 8GB / HDD 100GB | | |

SCREEN SHOT



LMS



LOS



Online Client

LMS software module

- LKS (Lock security Key Generation and Card Issuing Software) is the program to generate security key and all system cards required for customer's lock operations.
- LIS (Lock Installation Software) is the program to set the lock operating parameters and register the system cards to the lock.
- LOS (Lock Operation Software) is the client program to manage users and locks.

FUNCTION COMPARISON TABLE

| Package | LOS | LMS | Online Server & Client |
|--|-----|-----|------------------------|
| User card programming | ● | ● | ● |
| Audit trail (card) | ● | ● | ● |
| Maintenance (Time update / Master card change...) | ● | ● | ● |
| Lock info collection | ● | ● | ● |
| Security key generation | | ● | |
| System card duplication | | ● | |
| Card initialization | | ● | |
| Lock programming | | ● | |
| Lock status monitoring | | | ● |
| Remote lock controlling | | | ● |
| Remote card or lock blocking | | | ● |
| Remote audit trail | | | ● |

System Components

Peripherals for Esmart Locking System



DE620

Multi protocol support
RFID card encoder



INFO TERMINAL

Locker information displayer



AP200

Wireless access point



EXTERNAL BATTERY PACK

Emergency power supplier



MASTER PACK

Emergency master key pack



System Components

Multi protocol support RFID card encoder **DE620**



| ITEM | DATA |
|-----------------------|---|
| RF card protocol | ISO-14443 A/B Mifare, Desfire, Felica, ISO-18092, ISO-15693 |
| PC interface | USB 2.0 |
| Dimension | 68x120x30 (mm) |
| Input power | DC5V, 200mA |
| Operation temperature | -20 ~ 60° C |
| Reading distance | Up to 5 cm |

Locker information displayer **INFO TERMINAL**



| ITEM | DATA |
|-----------------------|---|
| RF Card protocol | ISO 14443 A/B, ISO 18092 (NFC), Mifare, Desfire, Felica |
| Frequency | 13.56 MHz |
| LCD | 4.3" TFT wide (800X480), 16.7M color |
| Touch | Resistive Touch |
| Dimension | 185x108x21(mm) |
| Input power | DC9V~24V (9V/2A) |
| Operation temperature | -10 ~ 60° C |
| Reading distance | Up to 5 cm |

Wireless access point **AP200**



| ITEM | DATA |
|----------------------------|---|
| Comm Interface with server | TCP/IP Ethernet |
| Com. Frequency with locks | 2.4GHz IEEE 802.15.4. compliant RF Transceiver |
| Dimension | 88x139x37(mm) |
| Input power | DC24V or POE (optional) |
| Operation temperature | 0~50° C |
| Effective range | About 40~50 meters in open area (without barrier) |

Emergency power supplier **EXTERNAL BATTERY PACK**



| ITEM | DATA |
|----------|-------------------------|
| Power | AA battery X 4, 6V |
| Switch | On / Off |
| Function | External power supplier |

Emergency master key pack **MASTER PACK**



| ITEM | DATA |
|----------|--|
| Power | AA battery X 3, 4.5V |
| Switch | On / Off |
| Function | Master key pack working as Master card 1 |



RFID Credentials

RF cards, wristbands and tags



STANDARD WRISTBANDS



BUCKLED WRISTBANDS



BANGLED WRISTBANDS



KEYFOB



RF CARDS








RFID Credentials

MAIN FEATURES

- 100% waterproof with RFID ISO 14443 type A Mifare chip and antenna embedded.
- Variety of models, including standard, buckled and banded type wristbands, RFID cards and keyfobs.
- Customer logo customization and numbering option.
- Durable and easy to wear and take off wristbands.
- Designed for fitness, water parks, swimming pools, saunas and spas.

SPECIFICATIONS

| | Standard Wristbands | Buckled wristbands | Banded wristbands | RF Tags | RF Cards |
|------------------|--|---|--|---|---|
| |  |  |  |  |  |
| Material | Silicone | Silicone | Silicone | PVC | PVC |
| Dimension | L 28mm × W 18 mm ×T 2 mm | L 235 mm ×W 17 mm ×T 2 mm | L 215 mm ×W 22mm ×T 2 mm | L 51 mm ×W 32mm ×T 5.38 mm | L 85.6mm × W 54mm × T 0.86mm |
| Color | Blue, violet, red | Blue, pink | Blue, green, orange | Black, blue | As on image |
| RFID Chip | ISO 14443 A Mifare | | | | |



PASSTECH product list

Esmart Mobile - Mobile access locking system



ZP100M



ZP200M



PT200M



PT300M

Esmart Classic - Stand-alone RFID locking system



ZP100



ZP200R



PT300KR

Esmart Ultra - Wireles online locking system



ZP100WR



ZP200WR



PT200



PT300

Esmart Kiosk - Wireles online Kiosk locking system

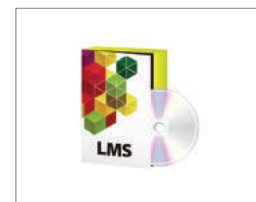


ZP100W



ZP200W

Lock Software



LMS



LOS



Online Server & Client

System Component



RFID card encoder
DE620



Locker information displayer
INFO TERMINAL



Wireless access point
AP200



EXTERNAL
BATTERY PACK



Credentials

State of the art | Unlock Innovation



CONTACT INFORMATION



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