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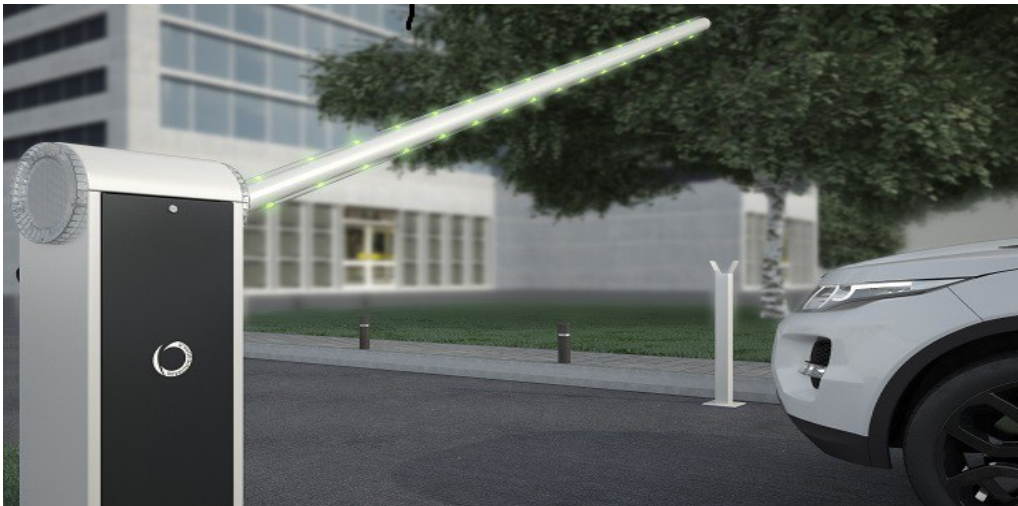
SmartAirkey smartphone based Bluetooth/BLE enabled access control system

SmartAirkey is the state-of-the-art system that provides keyless access from a Bluetooth / BLE smartphone, allowing the user to get rid of magnetic keys, keyfobs, access proximity cards and store all keys in the single mobile application.

Areas of application

For real estates and private houses:

- Keyless access to the site, to the front door, to the parking lot or garage with the "hands-free" function.
- Simple provision the guest access by help of the mobile application (Android or iOS).



For offices:

- Access of employees to office and technical rooms (server rooms, for example) with the help of a smartphone.
- Manage guest access to the office buildings and parking spaces using digital keys.
- Seamless integration with existing access control systems.



For "smart home" systems:

- Manage access controllers and "smart home" functionality using smartphone with secure protocol based on digital keys.



For a number of applications in the field of IoT, that use Bluetooth based technology for digital identification.

System features

- * The universal access control solution using a smartphone for office buildings, real estates, private houses, apartments, garages - all user's keys are stored in the single mobile application for smartphone.
- * Supports 95% of mobile devices on iOS and Android platforms.
- * Access controllers do not require connection to Internet or cellular networks, which simplifies installation and reduces operating costs.
- * Controller software is updated "over the air", which allows to constantly improve the algorithms of work and protection of the system.
- * Reliable protection of digital keys using a cryptographic protocol.
- * Convenient cloud service for management the digital keys.
- * Digital keys for users and guest are issued remotely. The connection of smartphone to Internet is necessary only at the time of receiving a digital key and is not required to open the lock controller.
- * The distance of key reading varies from a few centimeters to 20 meters and is configured in the mobile application for each key individually.
- * The "hands-free" feature to for providing the comfortable access.
- * Ability to pay for access services using a mobile application.
- * Standard integration with most modern access control systems.

Additional unique features

> The SmartAirkey system complements existing systems and provides a number of additional unique features.

For residential complexes (real estates):

> Increased comfort level for residents - keyless access to the whole territory: boom barrier, garage door, entrance door. The door of the entrance opens automatically as soon as you approach it, which is especially convenient when you have to carry purchases from the supermarket.

> The problem of guest parking is being solved - residents themselves can send temporary guest keys for parking, while the management company can have full reports on the provision of guest keys or arrange for paid guest access.

The advantages of "Guest access" feature:

- Access based on temporary digital keys.
- Convenient mobile guest access payment (optional).
- Reduced investment in equipment and operational expenses for offices and parking.

For office centers and enterprises:

> Managing of access to the parking lots and the territory of the office center or enterprise for both tenants and employees and granting free or paid guest access .

> Reduced security costs.

> Reducing the costs of managing guest access (receiving, recording applications, monitoring entry and exit, collecting payments).

> The possibility of providing paid parking services.

For "smart home" systems and building automation:

> Provides additional features for the existing smart home system with an access control system using a smartphone.

> Ability to automatically launch individual smart home scenarios when a user enters a room.

For car sharing, rent or leasing service:

> Granting access to the car in the areas with poor or lack of GSM coverage.

> Remote opening the fuel tank flap, engine hood or trunk flap without getting access to the car's central lock.

System components

- access controller(SimpleLock
- mobile application for platforms iOS, Android
- digital keys management cloud based service (SASP platform).

Access Controller (SimpleLock)

- > Innovative keyless entry technology
- > Direct secure connection to a smartphone
Bluetooth / BLE
- > Operation range -40 ° C + 60 ° C
- > Wiegand interface support
- > Embedded 250V ~ 3A relay



Mobile application for iOS, Android



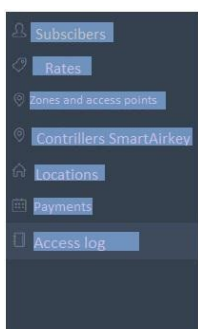
Access security, scalability and extensibility of functions.

- Opening by approaching to the controller, gesture or virtual button from the mobile App.
- Customizable distance and response time.
- Operating in the background mode using energy saving mode.
- Encryption of keys and access in the application by pin-code or fingerprint.

Digital keys management cloud based service (SASP platform), optional.

Web interface for managing access and services. Cloud service could be integrated with the existing access control system.

- Digital keys are secured by a cryptographic protocol based on the proven digital signature SHA-256 technology.
- Manage digital keys and access controllers.
- Manage tariffs and payments.
- Send reminder about the need of payment via mobile application.



Access log

Time	User	Telephone	Access point
06-06-2017			Office
06.07.2017 15:59	A123 Ltd	+79990000003	Office
06.07.2017 15:59	A123 Ltd	+79990000003	Warehouse
06.07.2017 15:59	A123 Ltd	+79990000003	Office
06.07.2017 15:59	A123 Ltd	+79990000003	Workshop
06.07.2017 15:59	A123 Ltd	+79990000003	Showroom
06.07.2017 15:59	A123 Ltd	+79990000003	Office new

Commercially available kits and functionality of the SmartAirkey system

* *Type A kit* - the system is supplied as a kit in the form of a “box solution” and bears limited functionality, which is enough for use on small objects. The system includes 10 digital keys, an access controller and mobile applications.

* *Type B kit* - the system consists of access controllers, mobile application and a monthly subscribe model based paid cloud service that grants the following features: managing digital keys, billing,etc. and are designed to organize keyless access at medium and large size objects with the option of providing payment with the help of mobile applications.

Intellectual property

SmartAirkey system is patent pending.

Contact details

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