



# NB-IoT™ Smart Access Control Fact Sheet

## For Hotels

### What is NB IoT?

NB IoT is a new communications technology which enables devices to connect to the internet with improved connectivity, less energy expenditure, greater reliability and greater security. NB IoT is also a purpose-built network for machine to machine operations, meaning that Wi-Fi and Bluetooth, built for human operations, can be eliminated. NB IoT is built on telecommunication companies existing mobile networks, and is currently live in 33 countries, supported by over 30 of the world's largest mobile operators, culminatingly worth over \$660 billion, who provide communications to over 2.9 billion customers and geographically serve over 90% of the IoT markets in 79 countries.

### Why is NB IoT used in Access Control?

The humble **metal key** has been used to secure properties, spaces, and assets since the Roman days over 2000 years ago. In the latter half of the 20th century keycard systems, commonly found in hotels and offices were invented to provide **access** to a variety of people for different time frames, and to **control** what rooms or spaces those people can access. Hence the **access control** industry was born. These keycard access control systems need to have people managing/programming them, and communicating with them. This communication was originally done by wiring all the locks together, and connecting them to onsite servers and PC's, and large controller boxes to house all the electronics.

When the internet came along the wiring used in the keycard access control systems was able to be replaced by Wi-Fi, Bluetooth, Z-Wave, and other communication technologies. This opened access control, originally limited to hotels and offices, to places such as people's homes. It also introduced smartphone digital keys, reduced costs, and spawned a new product and industry called **smart locks**. But the problem with these smart locks is that they still require onsite network infrastructure, and onsite electricity to run. And each different location has its own unique network, making it hard to bring multiple smart locks together under the one control system. Also Wi-Fi, Bluetooth and other communication technologies that the smart locks used, have proven to be hackable, and unreliable for access control. A new technology solves all these problems, and its called **NB IoT**.

### What is NB IoT Smart Access Control?

NB IoT Smart Access combines smart locks, with keycard access control, but instead of using onsite network infrastructure everything is inside the lock, and the rest of the infrastructure is in the mobile network. In short, it's like **making a lock like a mobile phone** with its own little modems, little computers, antenna's, apps etc.



### Why should Hotels get this?

**Save money** by being able to run a Hotel without the need to staff a reception desk 24/7 or in some cases with smart locks there is no need to have an onsite reception desk at all - **guests can self check-in on a smartphone app**, and have the digital key to their room downloaded in the app and go straight to their room

**Save money on electricity costs**, so the power can be automatically switched off when someone leaves the room (the lock can communicate over the cloud to the electricity when the lock opens, and someone leaves).

**Save money by paying the Online Travel agencies less.**

Hotels pay 10-30% to take the guests bookings -with a Guest loyalty app with digital **keys a new booking channel for the hotel is created**, so that guests who use this booking channel can download the digital key to their room (and go straight to their room, and get rewards points too) - like Hilton's Digital Keys.

**Improve good will, and hopefully get repeat customers** - by providing a reliable, convenient, and secure access control system that doesn't constantly break down like mag-stripe keycard systems used in hotels which have been around 30-40 years and which are constantly breaking down.