



FROM LOCKS TO ACCESS CONTROL

1. What is Access Control?

It is the controlling of the entry and exit of people in an area for security reasons.

In the simplest case, a lock is an access control, because it limits the entry to those who have the key.

A guard posted at a gate is another form of access control. The guard will probably demand identification of those who wants to gain entry. He may also record down the name of persons, time of entry and time of exit.

2. Card Access Systems

An Access Control capable of automatic operation is often called an "Electronic Access Control System" or "Access Management System" or "Card Access System".

The term "electronic" is used because the key equipment is built from electronic parts. The term "computer" is used because there is often a central computer used to monitor the activities. The term "Card" is used because the scheme requires each person to hold a machine-readable ID card. The term "System" is used because often, the various doors are not independent, but are inter-linked to form a system.

3. Market Potential of Card Access Systems?

Wherever a lock or guard is used, there is prospect for selling a Card Access System. Since locks and guards are used almost everywhere, therefore, there should be potential of selling Card Access Control systems everywhere.

Why then are they found in so few places?

The main reason is price. Whereas a good lock can cost as low as USD10/-, a typical card access system - even for one door, when installed, will cost more than USD1,000/-.

4. Comparing Locks and Keys with Card Access Systems

i) Keys can be easily duplicated, no matter how difficult it is to duplicate. This is because of an inherent problem related to locks. A lock can only accept limited number of keys, may be a master key plus one or two other keys. Hence, to allow many persons to open the lock, the key must be duplicated. This duplication service is offered by almost every locksmith. Hence, there is no security.

ii) When a key is suspected to have been duplicated by an unauthorized person, such as when a new tenant moves into a flat previously rented out to another party, the lock set, or the combination must be changed. This process requires a locksmith, and is inconvenient and costly. To bar a former cardholder entry into a Card Access System does not require expert services, and can in fact be done in a few seconds by an authorized person.

iii) It is not convenient to keep door locked all the time, because fumbling for keys, fitting them into key holes etc impedes smooth flow of people, particularly at a high traffic area such as the main door. With a Card Access System, this inconvenience is minimized.

iv) A Lock & Key System does not take time into consideration. In other words, it is not possible to issue a key that is effective only during office hours. This is easily achieved in a Card Access System, where staff with different functions can be assigned different periods of time when they are allowed entry.

v) A Lock & Key System does not keep track of who has entered or left, and at what time. But such transaction records are easily kept in Card Access Systems. They can even be processed and printed in a report form suitable for management to scan through.

In addition to the above, consider the following advantages:-

i) A single card can be issued to gain access to as many places as is required by programming, provided all these places use the same type of cards and readers.

ii) It is possible in a networked Card Access System to trace where a particular person is located at any one time - so long as he is in one of the areas linked to the system.

iii) Other data such as work attendance can also be generated.