

HARATI Computer Services Private Ltd.

About Access Control

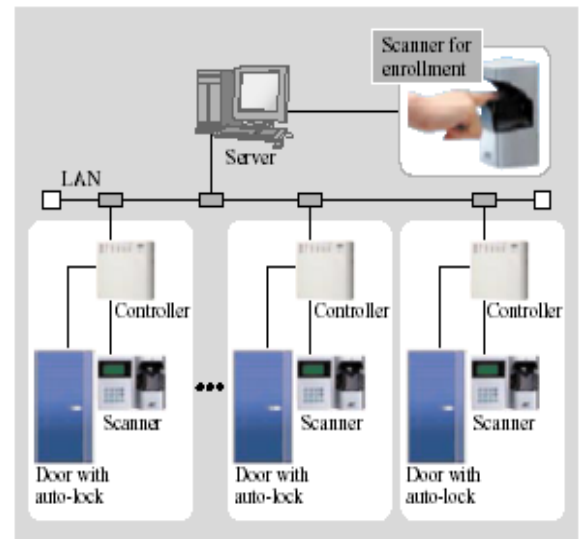
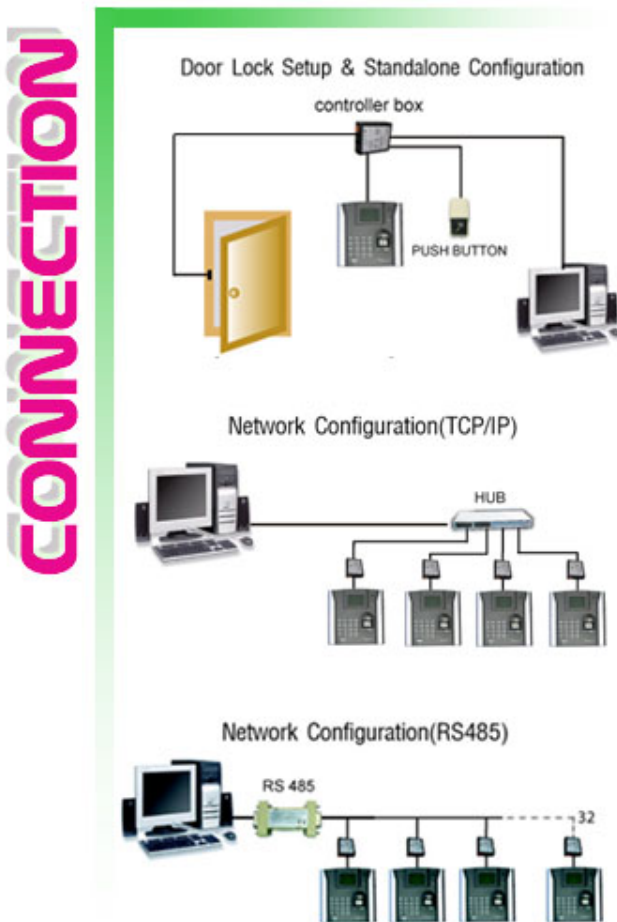
Access Control is a method of controlling and monitoring Access Points to a building. An Access Point is any door that is equipped with a special device that locks the door to prevent unwanted access and one or more identity verifiers that allow a person to identify him or herself to the Access Control system. The identity verifier may be a simple proximity card reader. In certain high-security instances where it is desirable to assure that the cardholder is the correct person additional security is provided by fingerprint, retinal scan or other biometric verifiers (biological dimension “body” identifiers).

When entry is desired, a cardholder identifies himself to the system at the Access Point by “waving” a card in front of the card reader and or presenting the proper biometric reference. The Access Control system will determine if access should be granted by considering the identification information encoded on the card. If access is granted, the system unlatches the door, allowing the person to enter the area. If access is denied, the door will remain latched, preventing the person from entering that area.



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Door-access control is a physical security system that assures the security of a room or building by means of limiting the access to that room or building to specific people and by keeping records of such accesses. It utilizes an individual-authentication method in order to limit access to specific people. The most widespread authentication method for such systems is based on smart cards. Such a system limits room access to only those people who hold an allocated smart card. However, in the case of smartcard systems, on top of the difficulty in preventing another person from attaining and using a legitimate person's card, there is the inconvenience of processing lost cards. In the meantime, accompanying the continuing development of fingerprints as the main biometrics method for individual authentication, the practical application of door-access-control systems utilizing biometric data has begun. Biometrics authentication uses information specific to a person's body in order to assure a high level of security that makes it difficult for a stranger to impersonate that person.



*Fig. 5—Configuration of Door-access System.
All personal data required for opening doors are downloaded to the specified controller by the server.*

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Implementing methods and option of Door Access Control System

A door-access-control system that utilizes finger vein patterns was developed. This is a biometric authentication technology for controlling door access in a convenient way by applying the high level of security provided by finger-vein patterns. Biometrics has started to be applied for civilian-identification purposes like passport inspection. We consider that finger-vein patterns can take a leading role in such applications; accordingly, we will strive to push forward commercialization and development of this product to make finger-vein-pattern authentication more convenient. different companies, and the system controls security by using smart cards formatted differently for each company.

For providing security for the whole building, three guards are permanently deployed in the elevator hall on the ground floor to confirm the identities of the people entering the building. To improve the security of the whole building, and reduce the burden on the security guards at the same time, a “finger-vein authentication gate” was installed in the elevator hall. Though this gate system performs authentication by means of smart cards, it eliminates the burden of having to carry two cards (one for access to a person’s company and one for building access) and provides a high level of security by biometric authentication. A total of six gates were installed and control the coming and going of about 1,500 people occupying the building.

An authentication scanner is mounted at the entrance of each gate, and a person inputs his personal identification number into the numeric keypad on the left of the finger scanner. His finger-vein information is then authenticated by the controller incorporated in the gate. On authentication of that person, the gate opens and the server is informed of the access via the LAN connection. In that way, the server can keep a full-time record of that person’s comings and goings.

Option 1: Door Access Control with using Software System

- *One Door one way System*
- *One Door two way System*
- *Two door one way system*
- *Two door two way system*
- *Four door one way system*
- *Four door two way system*

Option 2: Door Access Control without using Software System

Using Single Door Access Control system and can be implemented both one door one way system and one door two way system.

For both the option either Finger Print or Proximity Card can be used.



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Access Control System