

# **iBonus** SMARTCARD SYSTEM

## **SMARTCARDS**



A smart card is a device that includes an embedded integrated circuit that can be either a secure microcontroller or equivalent intelligence with internal memory or a memory chip alone. The card connects to a reader with direct physical contact or with a remote contactless radio frequency interface. With an embedded microcontroller, smart cards have the unique ability to store large amounts of data, carry out their own on-card functions (e.g., encryption and mutual authentication) and interact intelligently with a smart card reader.

### How do smart cards help to protect privacy?

- Smart cards offer a number of features that can be used to provide or enhance privacy protection in systems. The following is a brief description of some of these features and how they can be used to protect privacy.
- Secure data storage. Smart cards provide a means of securely storing data on the card. This data can only be accessed through the smart card operating system by those with proper access rights. This feature can be utilized by a system to enhance privacy by, for example, storing personal user data on the card rather than in a central database.



Stored value  
Cards



64 Bits  
Encryption



Customised cards  
production



10 years Data  
Retention



Contactless



Customised Shapes  
available

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- **Encryption.** Smart cards provide a robust set of encryption capabilities including key generation, secure key storage, hashing, and digital signing. These capabilities can be used by a system to protect privacy in a number of ways. Strong device security. Smart card technology is extremely difficult to duplicate or forge and has built-in tamper-resistance. Smart card chips include a variety of hardware and software capabilities that detect and react to tampering attempts and help counter possible attacks. For example, the chips are manufactured with features such as extra metal layers, sensors to detect thermal and UV light attacks, and additional software and hardware circuitry to thwart differential power analysis.
- **Secure communications.** Smart cards provide a means of secure communications between the card and card readers. Similar in concept to security protocols used in many networks, this feature allows smart cards to send and receive data in a secure and private manner. This capability can be used by a system to enhance privacy by ensuring that data sent to and from the card is not intercepted or tapped into..
- **Smart card can be personalized,** providing an even stronger binding to the cardholder.

Avi brings to you a complete range of hi-tech Mifare contactless cards which are not only stylish and durable but are also designed to fulfil multiple card applications. ISO format cards are manufactured from high quality white PVC sheets and boast an impressive finish. The cards can have either a glossy or a mat finish surface and work well with special-purpose printers from our own factory. This allows you to customize the cards by printing the personalized identity of your choice directly on the cards. Mifare Contactless Cards from iBonus provide the option of being used as fully customized cards along with your customers branding.

We also offer a vast array of Pre-Printed MIFARE Smart Cards. These Pre-Printed Smart Cards are high quality PVC smart cards, which serve as a perfect card for gift, membership, loyalty, leisure card and many more cards to serve the purpose of number of applications. Promote your brand with the stylish and durable Pre-Printed MIFARE Smart-cards. We pre-print your smartcards with your logo and other details and provide you a great means to minimize running costs for applications like membership and allow you to speed up the issuance when compared to printing cards in full color in house or locally

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