



ELECTRONIA



## LEISURE & HOSPITALITY

The concept of holiday making must inevitably convey the idea of ease and the most minimal amount of annoyance in going through the necessary transactions. Holiday makers should spend more of their time on leisure and enjoyment – not less on trivial matters.

ELSmart Leisure & Hospitality Solution enables resort operators and related establishments to do just that. How? By automating and streamlining membership issuing process, card revaluation, reservations, online authorization of the card, and deduction of the amount/points based on the companies' own business rules, eliminating manual intervention and many paper based transactions.

The process brings about many benefits for the operators, highlighted by the following:

- Loyalty schemes for guests
- Increased gross revenues
- Decreased pilfering and fraud
- Decreased administrative cost
- Increased security
- Streamlined accounting procedures
- Increased overall profit

The solution is based on state-of-the-art, ISO/IEC 14443 compliant Contactless Smart Card technology and Microsoft SQL based Client/Server application.

Security is provided by two-way authentication sequence based on a hardwired logic algorithm, random numbers, and secret keys. Data transmission to and from the card is encrypted to ensure confidentiality and protection against replay attacks.

The card also features electronic purse functions. Credit and debit operations are managed directly inside the chip with distinct access rights, allowing the implementation of electronic purse functions securely.

### Features

**State-of-the-art:** Based on Industry standard Contactless Smart card Technology

**Strong Authentication:** Smart card architecture provides the most secure platform with on-card PIN verification

**Security/Privacy:** Impossible to hack and duplicate

**Rapidity:** Fast embedded authentication of PIN and validity of the card. Automated On-line verification operation

**Turnkey solutions:** Comprehensive solution developed in Saudi Arabia

**lingual:** Arabic/English user interface: Cardissuing Process and Reports

**Unlimited population:** Information is stored in a smart card of the member and not on the POS Memory

**Multi-site operation:** Supports Different connectivity options: POS Terminal supports Modem GSM, Ethernet based interface

**Easy to maintain:** Single integrated Terminal hardware and direct interface to Telephone line  
No mechanical moving part or wear and tear of contacts  
Contactless operation between Terminal and card

**Expandable:** Solution is expandable to more sites or to add more terminals in a particular site

**Future proof:** Based on State-of-the-art Contactless Smart card Technology  
Provision to incorporate Biometric verification and new applications

The complete setup consists of Smart Cards, EISmart POS Terminals, Smart card Issue/Revalue stations and Client/Server based Bilingual (Arabic/English) Application software.

## Integrated Operation & Management

The Membership card Issue/Revalue process, Transaction Terminals, Card Transaction in the Resorts, Automatic generation of transaction details of each resort for settlement, etc., will be handled by the EISmart membership System.

Application extensions will be provided in the EISmart System to encompass the complete Resort Management and Reservation functions.

## Card Issuing/Revalue Process

The card issuing/Revalue station consists of a PC and a desktop Smart card Programmer unit. This operation is extremely secure and can be carried out only by an authorized issuing agent, using an administrator smart card. The details of the Branch/Agency location and the agent will be automatically recorded in the smart card along with the Date/Time of issue and Revalue.

The POS Terminals in each Resort is connected using a dial-up connection to the main office. The Branches are connected to the Main Database using an Online network.

The card issue and revalue operations will be synchronized with the Main database using the Client/Server architecture of the Application.

The integrity of data in the Smart card and the database will be maintained all the time.

The following data are stored in the Smart card:

### General

- Personal Details

### Club Membership and E-Purse related

- Current balance
- Number of times revalued
- Last Revalued by
- Cumulative expenditure
- Number of times used
- Recent transaction history

For new members, this information can be collected at the time of issuing. The important data such as Membership ID number, balance amount, expiry date, Type of membership, etc are then encrypted with secure keys and stored in the Smart card.

## Software, EISmart Card Management and Transaction

The EISmart application software has a suite of modules for the different functions:

- Utility Software for Report generation of the Transaction
- Key Management Utility.
- Administrative Card Management for Login Purposes.
- Smart Card Personalization.
- Issue/Revalue Station.
- Online Transaction to Smart POS and authorization/deduction
- System User Management.
- Interface to Repository Database

## Smart Card Issue/Revalue Station

The issue/revalue operations to the card are secured with Administrator (Master) privileges. For issue/revalue operation, the Card Programmer module can be used. The programmer along with the associated software prepares the smart card to meet the card issuing/modifying requirements of EISmart Membership card.

