



POINT-OF-SALE MACHINE



Point of sale

Integrating devices & providing our experience for the complete sales operation

Introduction

INDRA's product range of automatic fare collection systems for public transportation includes point-of-sale machines.

These systems cover the need of any operator-attended ticket booth regarding ticket issuing, contactless card loading, customer care and operational management.

INDRA's products stand out for being highly user-friendly, reliable, robust and fast. In addition to this, their versatility makes them easily adaptable to meet any access control system's requirements.

General Features

- Complete operator-managed ticket sale points
- Fully adaptable to any customer's standards or procedures
- Issues all types of magnetic tickets
- Contactless cards sale and recharging
- Accepts all payment methods (cash, credit/debit cards, smart cards...)
- Additional customer service functions: complaints, ticket exchange, ticket repair, information
- Statistics, fare collection and accounting management
- Ease of use for the operator
- Distribution of elements based on specific ergonomics studies
- Maintenance utilities

Technical Specifications

Contactless card readers

- Readers compliant with ISO/IEC 14443 A and/or B standards
- Possibility of using readers compatible with other interfaces
- Operational distance: up to 10 cm. depending on the version
- Transaction speed: under 0.2 sec.
- High data transfer speed between reader and card
- Supports memory cards or microprocessors
- Use of encryption algorithms as required
- Use of anti-collision algorithms to operate on one or several cards at a time
- Allows Proximity Only, Push & Go and Touch & Go modes
- Up to 4 SAMs (Security Access Module)
- Reading, loading and reloading of contactless cards

Magnetic ticket issuing system and printer-encoder module

- Issues Edmonson, ISO and special-formats tickets (2, 3 or 4 reels of up to 2000 tickets each)
- Magnetic strip specifications:
 - One or several magnetic strips
 - Writing densities up to 150 bpi (up to 900 bits in total)
 - High and low coercivity (300, 3500 Oe)
 - F2F, Manchester etc. encoding
- Thermal (8 points/mm) or dot matrix (up to 800 characters) printing
- Issuing speed: up to 1 ticket/sec.

Point-of-sale

- Industrial PC-based
- Real-time operating systems (Unix, Windows NT/2000/XP, Linux)
- Software adaptable to any fare scheme and/or multimodal policy
- Connection to LAN, Ethernet, TCP/IP protocols
- Connection to remote Control Centre via modem
- TFT colour display, dedicated-function keyboards
- User information display
- Bank card reader
- Additional peripherals: barcode reader, interphones, etc.

Basic Features

- Loading, reloading, reading and writing of contactless cards
- Issuing tickets
 - Ergonomic design of the sale screen (configurable)
 - Dedicated function keyboard
- Analysis and display of magnetic ticket and contactless card data
- Ticket checking
- Ticket exchange and repair
- Returns and cancellations due to fare changes and service incidents
- Fare collection management:
 - Partial and pending collection
 - Currency change
 - Shift changes
- Accounting
- Form generation: sale reports, provision, incidents, returns, etc.
- Local and remote user management
 - Operators
 - Managers
 - Maintenance
 - Administrator
- Configuration by user type:
 - Place and date
 - Fares
 - Rounding types
 - Other parameters
- Network communication with Station Concentrator or Control Centre

