



indra

# AUTOMATIC TICKET VENDING MACHINES



Ticket vending machine

Indra designs and develops all of kinds Ticket Vending Machines covering all of means of transport and adapted to our clients' needs.

## Introduction

INDRA the transportation sector leader, develops and supplies a wide range of automatic ticket vending machines which stand out for their reliability, sturdiness, speed and adaptability.

Our products' versatility makes them easily adaptable to meet any access control system's requirements.



## Technical Specifications

### Ticket Issuing System

- Issues tickets in Edmonson, ISO and special formats (2, 3, 4 or 6 rolls with up to 2000 tickets each)
- Magnetic stripe:
  - One or several magnetic stripes in any position
  - Writing densities of up to 150 bpi (up to 900 bits in total)
  - High and low coercivity (300, 3500 Oe)
  - F2F, Manchester, etc. encoding types
- Thermal (8 points/mm) or dot matrix (up to 800 characters printer)
- Contactless card loading and reloading
- Issues tickets on contactless cards from the reel

### Control Unit

- Industrial PC-based
- Real-time Windows or Linux operating systems
- Software adaptable to any fare scheme and/or intermodal policy
- Connection to LAN, Ethernet network, TCP/IP protocols
- Connection to Control Centre

### Fare Collection System

- Coins:
  - Accepts up to 15 different kinds of coins
  - Returns up to 4 types of coins (4 deposits with up to 1500 parts each)
  - Automatic reloading of these 4 coins (4 deposits with up to 500 coins each)
  - Up to 3 collection boxes
- Bank notes:
  - Up to 13 different kinds of bank notes in 4 positions
  - Collection box with 1000 / 2000 notes
  - Intermediate temporary storage area with up to 15 notes
- Smart cards (ISO 7816)
- Bank magnetic strip card (ISO 3554)

### User Interface

- Ergonomic design
- TFT colour display, touchscreen
- Specific keyboards in each application: membranes, capacitive, piezoelectric, touchscreen, etc.
- Single coin insertion slot
- Single change return and note collection hopper
- General information displays
- Adapted to PMR
- Voice navigation system for visually impaired people
- Interphones

### Other Elements

- Extremely resistant outer case:
  - Embedded doors
  - Safety hinges
  - Graffiti-proof paint
  - Safety locks with 5 anchoring points
- Uninterruptible Power Supply (UPS) backup unit
- Identification of maintenance authorized operator performed by contactless card, magnetic card or code entering
- Auxiliary printers for receipts, vouchers, reports, etc.
- On-screen display of video images from the control centre for user's operation guide

## General Features

- Issues all types of magnetic tickets
- Issues, loads and reloads contactless cards
- Accepts all current means of payment (coins, notes, credit/debit cards, smart cards, contactless cards)
- Configurable due to its modular design.. Adaptable to all requirements
- User-friendly:
  - Effective and intuitive interface
  - Adaptation to persons with impaired mobility (PIM)
  - Fast operation (ticket selection, charging and issuing)
  - Voice navigation system for the visually-impaired
- Easy to operate:
  - Separate access for the various subsystems (maintenance, operation...)
  - Remote loading of configurations, fare schemes, specific software...
  - Maintenance utilities
  - Statistical control: reports on operation, servicing by maintenance staff, coin box and consumables status, etc.
  - Standalone operation enabled
  - Outdoor installation
- Security:
  - Real-time monitoring from a local or central control centre
  - Anti-vandalism metal cases
  - Break-in, vibration, unauthorized entry sensors
  - Secure coin and bank note boxes
  - Electronic alarm

