Always in motion...

MERA SYSTEMY

TICKET MACHINE BS-206

Ticket machine with dedicated software is used for sale of paper and electronic tickets for municipal and train transport. Processes payments made with coins, banknotes and payment cards.

ADVANTAGES

- Dedicated for the sale of paper single fare tickets and time-limit tickets - sale of carrier's offer for single fare tickets, route tickets (FROM – TO), single fare time-limit tickets, fixed-price tickets, tickets for transport of luggage and bikes, in standard tariff or including statutory or commercial discounts on route THERE or THERE and BACK
- Support for season electronic tickets encoded on a card in **MIFARE™/ MIFARE Plus™** standards - sale of carrier's offer for season tickets including network tickets in standard tariff or with statutory or commercial discounts which are included in the offer
- Considerable flexibility in tariff configuration depending on client's needs
- Integrated infokiosk with passenger information service
- Adapted to function as a free-standing machine both inside the buildings and outdoors
- Support for non-cash card payment
  - operates contact cards (chip and magnetic strip) VISA and MasterCard
  - operates proximity cards Visa PayWave and Master-Card PayPass
- The construction of the machine and used materials were chosen with a view to destruction resistance (vandalism), also provides IP54 tightness in accordance with PN-EN 60529
- Adopted to work in a wide range of ambient temperature (-35°C ÷ +55°C)
- Color touch screen resistant to damages, and intuitive UI guarantee simple handling by a customer
- Efficient thermal printers equipped with self-sharpening cutters (maximum of 4 thermal printers), option: printer of tickets with magnetic stripe in Edmonson format, **MIFARE™/ MIFARE Plus™** cards dispenser
- Remote control, configuration of machines, sales reporting by backoffice
- Two way on-line communication between the machine and the backoffice via GSM/UMTS data transmission or a Wi-Fi router
- Advanced stabilization system and power supply maintenance system which guarantee stability of work and transaction completion as well as safe shut-down of the machine in the event of power outage
- Module construction of components enables simple exploitation, maintenance services and various accessibility levels (service technician, escort, admin)
- Alarm system
- Possibility to develop additional functionalities, e.g.:
  - Sale of train tickets for reserved seats in RCT2 format
  - Sale of special tickets
  - Sale of public transport tickets in electronic form
  - Display of informational content or advertisements
  - Sale of other electronic services, e.g. mobile top-up

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TECHNICAL SPECIFICATION BS-206

Casing:	The construction of the machine and used materials were chosen with a view to destruction resistance (vandalism), also provides IP54 tightness in accordance with PN-EN 60529. Outer borders of the casing were shaped in a manner preventing clothes destruction or causing damage to people. Internal edges shaped in a manner preventing possibility to hurt the maintenance technician. The casing and protective doors are secured with the alarm system. The casing is resistant to graffiti. Color and visual design of machine marking have been adapted to client's demands.
Dimensions and weight:	Height 1863 mm, width 920 mm, depth 556 mm. Weight approx. 300 kg without materials and coins.
Display:	High contrast color TFT LCD 15" displays with LED backlight, brightness 800 or 1000 cd/m2 interact with the user through displays with touch overlay (Infrared technology). Resistant to damages 15" glass touch screens in IR technology which reacts when touched with any object.
Languages:	Multilanguage support: Polish, English, German, Russian, other optional languages required by client
Controls:	LED RGB control showing operational status.
Payment processing:	Contact cards operation module: • operates contact cards (chip and magnetic stripe) VISA and MasterCard payment companies • EMV Level 1 and Level 2 certificates • payment application - ADVT (Visa Europe) and TIP (MasterCard International) certificates. Proximity cards operation module: • operates proximity cards Visa payWave and MasterCard PayPass • EMV Level 1, MasterCard PayPass M/Chip, Visa qVSDC certificates • payment application - qVSDC (Visa Europe) and TIP Contactless (MasterCard International) certificates Payment application which works with acquirer, with PCI PA DSS certification
Support for contactless cards:	The reader which operates contactless cards in **MIFARE™/ MIFARE Plus™** standards. Operates contracts encoded on cards, e.g. season tickets purchased in the machine or at a dedicated on-line shop.
Support for cash payment:	The coins inlet is equipped with automatic guard, the system which prevents taking out coins and the system recognizing the direction of coins movement. A programmable coins reader which accepts at least 6 types of coins. Recognized coins: 10 gr, 20 gr, 50 gr, 1 zł, 2 zł, 5 zł. Coins which may be optionally recognized: 1 gr, 2 gr, 5 gr. Intelligent system of giving change: 10 gr, 20 gr, 50 gr, 1 zł, 2 zł, 5 zł automatically optimizing resource balance. Capacity of a basic container: 7 types of coins, 100 coins per container (depending on denomination of the coin). Six additional hoppers for coins. A self-blocking case for coins: capacity of min 3000 coins. Case with system protecting against unauthorized access. The reader recognizing minimum of 5 banknotes: 10zł, 20zł, 50zł, 100zł, 200zł. Optional: possibility to give change in banknotes. Banknote container capacity minimum of 600 banknotes (possible optional enlargement). It is possible to exchange PLN to EURO, after the currency change. The components responsible for handling coins and banknotes (including hopper and the vault) secured additionally with the system preventing attempts to drill through the casing.

Ticket printing system:	Thermal printers (maximum 4) with the following parameters:
	• programmable, thermal printer, resolution 204DPI, with full graphic support, including 2D codes,
	• signalizes shortage of paper,
	• self-sharpening cutter
	  • min. 1M cuts for paper with 90-100g/m2 grammage,
	  • 0.5M cuts for paper with 100-140g/m2 grammage.
	A special printer of cardboard tickets with magnetic stripe in Edmonson format and cards dispenser in **MIFARE™/ MIFARE Plus™** standard is optionally available.

Communication interfaces:	GSM/UMTS, LAN Ethernet
Alarm system:	The machine is equipped with the alarm system with a tilt sensor. In the event of unauthorized access to the machine, the alarm system performs two functions: • emits loud alarm (siren), local alarm lasting for a defined time, • sends alarm notice to the backoffice
Backoffice:	Provides communication with the machine, monitors its status of work, informs about the amount of money in hoppers and cases, notifies about failures, performs remote updates of machine work parameters (including change of tariffs), blocks sale and resumes it, collects sales data, reports and settles sales.
Communication with Backoffice:	Two-way communication with backoffice via GSM/UMTS transmission of data,
Ambience conditions:	Working temperature (with internal heating): -35°C to +55°C Storage temperature: -40°C to +60°C Humidity: (without condensation): < 95% Control system of temperature and machine heating.
Power supply parameters:	Nominal voltage: 230VAC 50Hz Other: the machine is equipped with the power maintenance system which allows continuous work during voltage fluctuations, power failures lasting for couple of minutes and safe termination of work.
Standards and certification:	Safety: PN-EN 60950-1 EMC: PN-EN 55022:2000/A1, PN-EN 55022:2000/A2, PN-EN 61000-603 CE declaration

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