

Smart Card Validator MV3000

The Smart Card Validator is a high performance device offering high integration level and processing power needed in state-of-the-art fare management applications.

The validator can be used for ticket check or check-in-check-out functions, for smart card or barcode tickets. The validator is ready for contactless debit and credit card payments (Mastercard, Maestro, VISA, Amex).

The validator features a wide variety of communication interfaces. It can work as a stand-alone validator as well as connected to an Electronic Ticketing Machine or a vehicle computer.

The validator is equipped with a TFT-display, a loudspeaker, indication lights and optional a touch screen. It has a powerful processor and uses the open standard operation system Linux embedded.



Functionality

- Ticket Sales
 - Different Tariff Models possible
 - Check-In, Check-In-Check-Out
 - Multi-Journey, Stored-Value
 - Account Based Ticketing (ABT)
- Ticket Inspection
 - Hot-list inspection, Blocked card
 - Zone- and time-based validity
 - Ticket expiry date
- Actions
 - Card Blocking, Auto Load et cetera
- Driver Visualization
 - via ETM, driver unit or vehicle computer
- Contactless credit and debit card payment

Ticket Types / Cashless Payment

- Smart Card Reader
- ISO 14443 type A/B, four SAM slots
- Different national standards possible
- EMVco Level 1, EMVco Level 2 (Mastercard & VISA & Amex) + PCI-PTS POI V5.1 certified; PAYG/MTT, Online Authorization, ... ready for Apple Pay™ & Google Pay™
- 1D/2D Barcode Imager

Specification (partly optional)

- Processor NXP ARM Cortex ≥ 1 GHz
- Operating System Linux
- ≥ 1 GB DDR3 RAM, ≥ 4 GB eMMC
- EEPROM with electronic serial number
- Real-Time-Clock and HW-Watchdog
- Color TFT-Display 5,7 Inch; option 7 Inch; resolution 480*640 pixel; option touch screen
- Loudspeaker (I2S Codec)
- Indication lights (green, yellow, red)
- Serial (RS232/485), USB OTG, Ethernet
- Wireless LAN IEEE 802.11 ac/a/b/g/n
- Mobile communication (3G, 4G, 5G)
- IBIS, IBIS over IP, Bluetooth, GPS receiver
- ECR-Interface / ZVT-Protocol
- Power 9 to 36 Volt DC
- Operating temperature -25° - $+75^{\circ}$ C
- Relative humidity max. 95%
- Water and dust IP54 certification
- CE, E (Automotive) and RoHS compliant
- Dimensions 310*160*110 mm
- Weight 1.800 g
- Installation via mounting kit with key lock
- Mounting kit with vehicle memory