OPEN PARK

OPENPARK TECHNOLOGIES

OpenPark AFC and Ticket Validator

CASHLESS

Hustle free entry and exit, no congestions, no cash problems, no consumables, e-bill is sent as SMS or Push notification to OpenPark mobile app

MOBILE

Mobile registration with e-payments, or admin authorisation for private access or ticket sales

FACILITY TYPES

Parking
Parking access control and revenue management

Venues
Event management and ticket sales

Commercial buildings
Employee cards for parking, elevator and room access

Transportation Hubs
Metro, ral, bus or BRT stations for platform access

TRANSPARENCY

Facility managers and facility managers can grant access and monitor all access events for vehicles and pedestrians all over different facility gates

IOT COMPLIANT

All OpenPark smart devices can communicate directly through MQTT protocol to any industry standard IOT platform or City Operation Center

Here is the reason why WHY CHOOSE US

OpenPark solution is developed from the ground up for modern smart city architecture taking in consideration the latest technologies for seamless mobility integration

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TICKET VALIDATOR

OpenPark Ticket Terminals/ Validator can check membership NFC/RFID cards and one time entry tickets or temporary passes for time period or number of entries
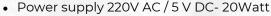

MAIN FEATURES

OpenPark Access controller Reader and ticketing terminal designed for multipurpose applications such as Parking entrance, turnstile pedestrian access control for events, stadiums, fun parks, fitness centers. This terminal is developed to read a variety formats of barcodes, QR codes, RFID cards and wristbands. OpenPark Access control reader/controller has LCD display with the following interfaces for connecting gate/door peripherals:

- 1 x RS-232/RS-485 serial interface
- 10/100/1000 Mbps Ethernet interface
- Integrated RFID reader
- Industrial 2D QR code scanner
- Digital inputs: 8
- Relay outputs: 4
- Online/offline operation with onboard SD card
- Company certifications: ISO-2700, ISO-9001
- Membershps: OSPT alliance

SPECIFICATIONS

- Large character LCD 2 line display, or 7-inch TFT display
- ARM high performance CPU
- Onboard 32GB storage for off-line operation
- Integrated RFID read/write module. It has various functions and supports multi ISO/IEC standard of contactless card:
  - 4 SAM slots and 512K bytes data FLASH, fulfil payment system usage
  - SAM slots: 4, T=0 & T=1 9600, 19200, 38400, 55800, 57600, 115200bps
  - PCD model: NXP CL RC663
  - Working frequency: 13.56MHz
  - RF standard: ISO14443A, ISO14443B, ISO15693, ISO7816
  - Anti collision ability: Full function anti collision; be able to process multi-cards; be able to set operate single card only.
- Online and offline operation
- Server synchronization through TCP/IP
- Battery backup for real-time clock.
- Internal web server for configuration and settings
- Direct MQTT communication protocol with Server
- EMC compliance: CE & FCC DOC Compliant; VCCI; BSMI
- Operating Humidity: 5% ~ 95%
- Operating temp -20 deg C to 60 deg C
- IP65 outdoor protected housing
- Power supply 220V AC / 5 V DC- 20Watt

ORDER INFORMATION

- ES-03-1D: RFID and Barcode ticket checker
- ES-03-1D-RF: RFID reader no QR
- ES-03-1D-LCD Includes 7-inch LCD
- ES-03-1D-SAM: RFID, Barcode ticket checker with 4xSAM slots and LCD
- OP-PDL: Post 100 cm for parking entry posts

CONTACTS

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AFC MANAGEMENT SYSTEM

· Support multiple operators with centralized clearing and settlement.
· Enable contactless smart card technology (Mifare DESFire EV2/EV3, OSPT Alliance CIPURSE) and NFC-based mobile devices.

SYSTEM MODULES

o **Operator administration system** inlcuding assets, trips, fare types, subscription plans, subscription links to customer database

o **Customer management system** including customer basic data, subscription management, e-wallet, transaction history

o **Card personalization station** including Java application with secure key management using stored keys on SAM module and encryption of personal data and card details on contactless card.

o **Ticket office station** for subscription or ticket sales including access to SAM module stored keys and encryption of subscription file on customer card

o **Ticket validator** at transportation platform having integrated SAM module to use stored keys to verify subscription data and then register transaction log on card as well as on server. It should also verify last transaction to avoid double entry (anti-pass back) as well as manage situation where e-wallet can be deducted if subscription expired.

FARE MEDIA

· **Contactless smart cards** (ISO 14443 Type A/B, CIPURSE, ISO7816 file system)
· **Mobile NFC applications** (Android/iOS)
· **Optional QR/barcode** ticket
· Memory organization
- ISO/IEC **7816-4 file system**
- Binary, linear record, cyclic record, linear value-record files
- Up to 8/16 applications configurable
- Up to 4/8 PxSE applications configurable
- Up to 32 elementary files per CIPURSE™ application configurable
· support of 1 kByte or 4 kByte Mifare compatible emulation
· Security
- Security attack preventions for all critical operations using both hardware and software countermeasures
- Mutual authentication (3-pass as per ISO/IEC 9798-2), using AES-128
- Data exchange protocol inherently DPA and DFA resistant offering AES-MAC and AES-encryption and sequence integrity protection for APDUs
- Flexible access rights and secure messaging rules configurable for each file › Up to eight 128-bit AES keys per CIPURSE™ application configurable