

## SITRAFFIC CITY 5 Parking Fee Collector



## Basic Equipment

The automatic parking fee collector (APFC) is designed as a massive stand with a number of design features for the maximum protection against vandalism in terms of the material used and the special security system on the door.

Two LCD displays are covered with hardened break-resistant glass. The upper display informs on tariffs, the second one then signals important operation conditions (e.g. running out of parking tickets, discharged battery, full collection box, network low voltage). For servicing purposes, hidden information logic is fed in the display so that there is no need to open the APFC sooner than it is really needed.

The APFC is equipped with an "intermediate cash collector" where the coins put into the machine are kept until the operation is confirmed. This intermediate cash collector prevents fraud with different coins because if the operation is cancelled the fraudulent person is given back the same coins he/she has put in the APFC before. The cash collector itself is also secured with a special locking system that allows access only to authorised persons, but not to the serviceman. While emptying the cash collector, the printer prints the cash balance in the collector, whereby the checking of the cash is secured.

The APFC finish is made with a polyester varnish highly resistant against damage. The SITRAFFIC CITY 5 APFC basic model is painted with a silver-grey RAL 9006 colour tint.

## Power Supply Sources

- **From the public lighting system mains (230 V)** – with connection to the power supply from the public lighting system lamps nearby
- **Battery supply** – empty batteries must be replaced with new (full) ones at prescribed intervals
- **Solar energy supply** – the battery is continuously charged from the solar cell so that sufficient voltage is secured even in winter months.

## Basic Model Scalability

- Multi-language control, switching the display among up to five world languages
- Different paint colour (as per the RAL colour card)
- The battery charging equipment
- The APFC interconnection to the control centre – GSM
- **GSM equipment** – the GSM module allows transmitting of pre-selected types of operational and failure messages to the central dispatching. This makes the machine control easier and also the security of the APFC operation is higher as one of the possible messages informs on opening doors, blocking the slot for inserting coins, disconnection from the power supply, and others. The messages are transmitted to the central dispatching. The introduction of this module increases the revenue amount as it eliminates failures due to technical reasons (full collector, missing paper, and others), and further limits the number of pointless visits by the operator.
- The possibility of transmitting information via the IRDA port
- Frames for placing commercials and ads
- The possibility for setting the price both in CZK and e.g. in EUR whereby the parking fee payments are easier for visiting foreigners. The APFC allows payments with up to 16 coin denominations
- SW equipment:
  - **Control center SityControl** – Basic SW on a diskette
  - **SityCash** – Information on the cash balance in the collector
  - **SityCash Statistic** – statistical information
  - **SityConnect SMS** – transmitting operational information and failure conditions to a cell (mobile) phone using a predefined SMS message format
  - **SityConnect Fax** – transmitting operational information and failure conditions to a fax using a predefined message format
  - **SityConnect GSM2** – extension of SityConnect SMS with additional three groups with six phone numbers each
  - **SityTime DCF77** – time control in all the parking fee collectors from the control centre using the time signal.

## Possible Ways of Payment

**EC credit cards** – the APFC should be additionally equipped with the GSM communicator and the keyboard

**Value cards** (serial, subscription)

- the reason for this is to withdraw from cash payments and offer the client more convenient ways of payment. For this option, a special position is reserved on the APFC panel for the button of value cards and for installing the credit card reader.

The so-called “value card” developed by Siemens is beneficial for this purpose; this card is close to the phone card in terms of its function. It is a card that can be bought at defined selling places with various numbers of pulses; these pulses are then subtracted from the card according to the length of parking. The card can also be recharged in the APFC.

## Additional Technical Options

- **Special tariff** - a special tariff can be set up in the APFC allowing free parking for a certain time, e.g. after paying CZK 5, parking time is not just 30 minutes, but 45 minutes (15 min tariff).
- **Card recharging** - when a value card is used, it can be recharged (increasing the number of pulses) directly in the APFC by inserting coins. After every coin inserted, the display shows the new number of recharged valid pulses. Value cards may also be recharged centrally, e.g. at the operator’s worksite. For recharging, a PC is used to which special SW is added (CityLoad Master-Mode package). This package comprises: SW on diskettes, a dongle, the external reader of chip cards, the master card, and an instruction manual.
- **Parking tickets** - parking tickets and slips may be used for information and advertisement purposes, but also as admission tickets. In the P+R applications, there is the option of issuing, along with the parking ticket, a ticket for the public transport vehicles. The slip may be used as a pad for marking the end of parking time, and for deductions in shops. Using a separate button, there is the option of issuing parking tickets for the whole day, or for 24 hours from the time of buying the parking ticket; another option is to issue parking tickets for a limited group of persons as “locals”. An acoustic signal informs the client that the ticket is being printed.
- **Radio clock** – this radio clock module synchronises the system time of APFCs for daily issuing of parking tickets with the time of the DCF 77 transmitter. Thus, the automatic switch from the summer and winter times is ensured.
- **Heating** – when used in extreme weather conditions (temperatures under -20 °C, high air humidity), the APFCs in the net and lamppost versions may be equipped with heating.

	<ul style="list-style-type: none"> <li>• <b>Tariffs</b> – APFC SW for parking tickets allows a flexible arrangement of tariffs. Linear, progressive, and digressive tariffs may be used. The tariff curve can be defined in up to 10 grades whereas the payment stages may be smooth or fixed. The start and end of tariff times can be set up separately for every week day and for 25 special days, e.g. for long Saturdays). For this purpose, the APFC may work with up to 22 special days with free tariffs.</li> <li>• <b>Printer</b> – with one paper-roll, ca. 6,000 parking tickets may be printed depending on the ticket length required. The individual format of parking tickets with regards to their length, font size, with/without the sales slip, the slip used as a valid ticket for the public transport vehicles, etc., allows a broad utilisation of the APCFs.</li> </ul>
<p><b>Service</b></p>	<p>ELTODO dopravní systémy, s.r.o. provides guarantee and post-guarantee servicing for the SITRAFFIC CITY 5 APFCs.</p>
<p><b>Technical Data</b></p> <p><b>1. Basic concept</b></p> <ul style="list-style-type: none"> <li>• Control</li> <li>• Data storage</li> <li>• Print</li> <li>• Coinage section</li> <li>• Display</li> <li>• Service elements</li> <li>• Coins collector</li> </ul> <p><b>2. Box</b></p> <ul style="list-style-type: none"> <li>• Material</li> <li>• Finish</li> <li>• Dimensions (HxWxD)</li> <li>• Total mass</li> </ul>	<ul style="list-style-type: none"> <li>• Microprocessor</li> <li>• Device data in the flashboard</li> <li>• Data on sales through the lithium battery (10 years service life)</li> <li>• Thermal print</li> <li>• Optical control of the paper progress</li> <li>• Full or partial paper cut-off</li> <li>• Electronic closure of the coinage slot</li> <li>• Electronic coinage sorter of 16 coin denominations</li> <li>• Intermittent coin collector for up to 32 coins</li> <li>• LCD display, lit-through; 2x20 characters; 9 mm character height</li> <li>• LCD display, lit-through; 4x20 characters; 4.7mm character height</li> <li>• PIEZO – electric buttons</li> <li>• Replaceable cash collector made of premium steel with a separate two-position lockable mechanism – 5 litres volume</li> <li>• Class 4003 steel, 2.5 mm thick</li> <li>• Silver-grey RAL 9006 paint (other coating per order)</li> <li>• 1,770x450x280 mm</li> <li>• ca. 85 kg – per equipment</li> </ul>

### 3. Supply

- External supply (VO) version
  - 230 VAC / 50 Hz
  - 12 VDC, ca. 4 mA in the Standby mode
  - 20 W output in the charging mode
  - 12 V / 7.2 Ah, or 65 Ah accumulator
- Solar version
  - 12 VDC, ca. 4 mA in the Standby mode
  - 12 V / 20 W solar module
  - 12 V / 65 Ah accumulator
- Battery version
  - 12 VDC, ca. 4 mA in the Standby mode
  - 12 V / 65 Ah accumulator

### 4. Operational conditions

- Operation temperature
  - Humidity class
  - Electromagnetic compatibility
  - Function
- -20°C up to +60°C
  - Per DIN 40040, Class E/D
  - Per CE standards
  - Per DIN 8314

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