The equipment description

The radio communication adaptor RCA 05/GPRS is the microcomputer controlled equipment enabling the communication of the integrated onboard equipment of the vehicle (informative and dispatching system) with the dispatcher system for the supervision of the municipal and suburban public transportation.



It enables the two-way data transmission between the vehicle and the control centre by the radio channel with the utilization of the GPRS services of the GSM network.

By means of RCA 05/GPRS it is possible to transfer:

The vehicle monitoring – UDP/IP

- The identification data of the vehicle
 - The registration number
 - math The number of driver
 - mathraight The number of the line and the sequence on the line
- The operation states of the vehicle
 - The ride on the line
 - math The arrival to the terminal, standing on the terminal
 - The doors opened/closed

• The position of the vehicle

- The geographical latitude and longitude
- mathematical The further data from the GPS: course, time and speed

The traffic information

- math The current stop announcement
- The direction (terminal)
- The time deviation from the time table

The data downloading and uploading-TCP/IP

- The fare collection data
- The upgrade of the programme, time tables, black list,...
- The short messages to the display of the onboard computer

The technical specification

The characteristic of the GSM module: Dual band EGSM 900/1800

GPRS Class B (4+1)

The output power: 2W on 900MHZ, 1W on 1800MHz

The data transmission: The vehicle monitoring – UDP/IP

The data downloading and recording

- TCP/IP

The interface for the attachment of the peripheral equipment:

the interface RS232 for GPS receiver

The interface for the vehicle bus-bar on demand: RS 485 (Mikronet)

or IBIS

The state indication: 4 LEDs

The power supply: 12/24 V, max. 0,5 A

The dimensions: 110 x 260 x 145 mm (W x H x D)

The weight: 1,9 kg

The range of the operating temperatures: from - 25 °C up to + 55 °C

The resistivity against the vibrations: according to EHK N.97, VW 801 01,

TL 972

The relative air humidity: up to 95 %

It meets conforms with: IEC 571-1, ISO 7637-2