

AWIA SDIP®

Comprehensive solutions for public transport vehicles



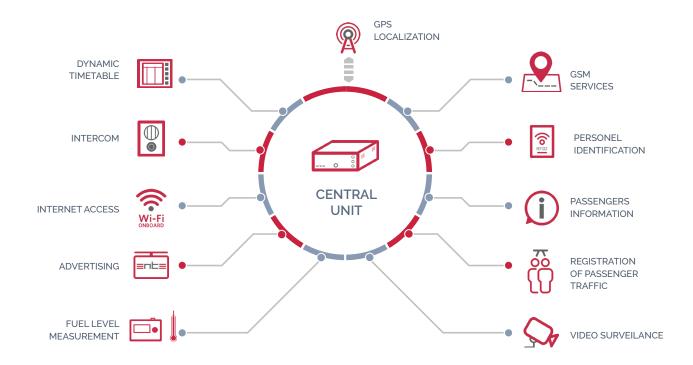


Description of the system

AWIA SDIP® is an integrated system for public traffic information management. It consists of on-board devices installed in a vehicle and Management Application available from a dispatch center. Central module is used for communication purposes between on-board devices and Management Application, which main task is to process, archive and present vehicle's data.

The system improves the quality of transport services by increasing passengers and driver's comfort.

It additionally permits optimization and rationalization of fleet management process. System's open structure allows any combination of individual components.





Design of the system

Management Application

- ✓ Displaying current location of each vehicle on maps
- ✓ Managing real-time vehicles in movement
- Preview of vehicles' operating parameters in on-line mode or in a form of archive data
- ✓ Presenting taken routs, generating graphs, statistics and reports in accordance with various criteria

Personnel identification

 Identification of staff, defining their roles and associated level of privileges

Dynamic timetables

- ✓ Displaying current timetables on the control terminal with a colorful touchscreen display
- ✓ Updating displayed data based on GPS vehicle's position

Voice announcements

Broadcasting voice announcements by means of automated

- devices, such as speech synthesizer or mp3 files or by engine driver and vehicl'e's staff
 - Broadcasting announcements in Polish or other foreign
- ✓ languages

AWIA SDIP®

Passenger Information and emission of advertisements

- Presentation of content for passengers, both in and outside the vehicle
- Displaying passenger information, any multimedia content and special messages
- ✓ Presenting texts on LED and LCD Boards

Video monitoring

- ✓ Monitoring of the entire vehicle's interior, sides, pantographs and the area in front and behind the vehicle
- ✓ Preview of images on LCD 10" or 15" video or control terminals
- ✓ Automatic or manual selection of camera's images

Intercom

- Communication between passengers and engine driver or personnel
- ✓ Analogue or IP technology

Access to wireless Internet for passengers

✓ Use of WiFi, 3G, LTE (4G) technology

Counting passenger flow

- ✓ Providing information about a number of passengers getting on/out the vehicle
- ✓ Working on the bases of stereoscopic cameras (3D)
- ✓ Measuring accuracy at a level above 95%







Advantages

Optimization of exploitation costs

- ✓ One SIM card and one control and communication module GSM/GPS to handle all subsystems
- \checkmark One supervisory system collecting all data

Modularity and scalability of construction based on Ethernet

- ✓ Simple construction
- ✓ Simple connection of subsequent subsystems

System easy to maintain and manage

- ✓ Remote configuration and system update
- ✓ Short response time

Innovation

✓ Integration into o cohesive platform of numerous functions previously performed by separate, incompatible systems

User-friendliness

- For engine driver- simple, uniform and intuitive system operation, based on multifunctional control terminal, a management device for the entire integrated system, operated form the driver's cabin
- For fleet dispatcher user-friendly graphical interface of Management Application, enabling easy and comprehensive systems' management in vehicles
- For passengers increased comfort of travelling through transparent, clear and reliable passenger information subsystem





Compliance with standards

PN-EN 50155 Railway applications- Electronic equipment used in rolling stock

PN-EN 50121-3-2 Railway applications - Electromagnetic compatibility

PN-EN 45545-2+A1 Fire protection in rail vehicles. Part 2: materials and elements on the combustion properties at HL1, HL2 and HL

PN-EN 61373 Railway applications - rolling equipment

TSI PRM pkt 5.3.2.7 Internal and external displays





