

INTERAUTOMATION Deutschland GmbH

For more than 30 years we have been developing and creating solutions for the acquisition of operational data and for more than a decade with the main focus on railway passenger transport. We offer our customers innovative systems for automatic passenger counting, real-time passenger information and energy-optimised traffic control.

More than 20 transport companies rely on products from INTERAUTOMATION, and until now over 1,000 vehicles have been equipped by INTERAUTOMATION. In addition to our domestic market Germany international projects in Poland, France and Russia show our success.

... PUNCTUALITY, OPTIMUM TRAIN UTILISATION, MAXIMUM ENERGY EFFICIENCY

You can achieve these goals with the system solutions from INTERAUTOMATION:

- verification of transport performance and punctuality to public transport authorities
- monitoring and visualisation of the operational situation
- exchange of punctuality data and ensuring connections within transport networks
- dynamic real-time passenger information on punctuality and connection-ensuring
- reduction of energy costs and operational optimisation by driver assistance systems
- evaluation, analysis and export of operating data

... ALL APPLICATIONS, ONE SYSTEM

We offer our hardware and software solutions for railway vehicles and back-office systems:

- as an integrated single-source solution and
- as supplementary products for existing systems

... INNOVATION THROUGH SCIENTIFIC CO-OPERATION

We are committed to providing innovative solutions for railway passenger transport – for example by conducting joint projects with partners from the scientific domain. Thus our system components are subject to further continuous research and development.

... OUR SERVICES AT A GLANCE

- Project Management
- Hardware, Software
- Engineering
- Installation, Service

... QUALITY

INTERAUTOMATION is certified according to IRIS Revision O2, the international quality standard for the railway industry.

... REFERENCES

Abellio | DB Regio | ODEG | NWB, NOB, HEX, BRB | erixx | City-Bahn | NEB | eurobahn | EIB | Städtebahn
BVG | MVG | Rheinbahn | RATP | VBB | LNVG | NASA | VMS | VRR | NWL

... SCIENTIFIC COOPERATIONS

TU Dresden | HU Berlin | TU Berlin | FU Berlin | Deutsches Zentrum für Luft- und Raumfahrt



INTERAUTOMATION
Deutschland GmbH

Lessingstraße 79 | 13158 Berlin
Phone: +49 (0)30 - 916076 - 0
Fax: +49 (0)30 - 916076 - 20
info@interautomation.de
www.interautomation.de

To ensure that we meet the individual requirements of our customers as fully as possible, we create **customised solutions.**

We would be glad to advise you!

interautomation

Punctuality, optimum train utilisation,
maximum energy efficiency

The System Landscape

InLineWeb AVL - Automatic Vehicle Location
CAD - Computer-aided Dispatch for Railway Transport

INTERAUTOMATION products are based on the **InLineWeb** data processing system, the central server component for managing all data.

InLineWeb is supplemented by the InLine Communication Gateway for a secure exchange of data with the vehicle fleet.

- Various visualisation options for all available information
- Standardised import interfaces for timetable, vehicle circulation and deployment data, customer-specific interface integration is possible
- Online integration of external data servers for a continuous and automatic exchange of data, e.g. standardised services by the Association of German Transport Companies (VDV)

- Export interfaces for transmission of data to public transport authorities and external systems
- Use of existing IT landscape (all common server platforms, client operating systems, database servers and mobile devices are supported)
- Can be used company-wide as a multi-client system
- Simple access from workstations or tablet PCs

InLineWeb InLine Communication Gateway

Solutions from INTERAUTOMATION



APC | Automatic Passenger Counting



APR | Automatic Punctuality Reporting



DAS | Driver Assistance System



DPI | Dynamic Passenger Information

Interfaces

Timetable + Vehicle Circulation • Reporting + Analysis • Live Data + VDV

Vehicle System

Functionality in the Vehicle

- Passenger Counting
- Locating and Tracking
- Station Detection
- Communication
- Passenger Information
- Driver Assistance
- Punctuality Logging



Interfaces

Planning Systems • Data Hubs • Online Information

Our System Solutions

APC Automatic Passenger Counting | Verification of Transport Performance

In many transport contracts verification of transport performance is a component of the remuneration system. With the certified automatic passenger counting systems from INTERAUTOMATION this requirement is fulfilled with high accuracy and reliability. In accordingly equipped vehicles all boarding and alighting passengers are counted automatically and matched with the stations. In the back-office system InLineWeb the raw data are also matched automatically with train journeys and sections of journeys. The operational situations

of variable train composition which are typical for local railway transport are taken into account here. Our customers can retrace and conduct an analysis in detail e.g. transport performance (pkm) and number of transported passenger right up to the exact occupation between two stations.

APR Automatic Punctuality Reporting | Journey Time Analysis

Punctuality is the be-all and end-all in rail transport – for passengers and also when it comes to the optimal control of the operating procedures. With the INTERAUTOMATION Automatic Punctuality Reporting system the transport company's control centre has an overview of the timetable situation for all journeys at all times. Using the back-office system InLineWeb the punctuality data can be exchanged online with other transport companies. Our Dynamic Passenger Information system uses

cross-network data to provide reliable connection-ensuring for passengers. In the vehicle we offer an integrated solution in combination with the Automatic Passenger Counting System or Dynamic Passenger Information: for this purpose, on-board units are permanently installed in the vehicles. However, data can also be acquired from mobile devices, like tablets or PDAs. In that case the program InLinePDA run on the mobile device takes on the function of an on-board computer.

DAS Driver Assistance System | Energy-efficient Traffic Control

The INTERAUTOMATION Driver Assistance System can significantly reduce energy consumption of the vehicle fleet without impairing the punctuality of the journeys. The Driver Assistance System continuously analyses the current operational situation, determines the available time reserves of the journey and calculates the best possible energetic and procedural vehicle operating. InLinePDA is used to interact with the driver. It is installed on the PDAs or tablets provided to the train drivers.

Since no vehicle modification is required, the Driver Assistance System is completely free of approval. Again, the central data management runs via the back-office system InLineWeb.

DPI Dynamic Passenger Information | Complete Information for Passengers

Will I catch my connection? How much of the delay can be made up during the rest of the journey? Questions of this sort are answered by the Dynamic Passenger Information System – a service informing passengers in real time about how punctual a train is and whether connections can be ensured. The information is shown directly in the train on modern displays visible to all passengers. The layout can be individually adapted and designed as part of the

transport company's corporate design. Additional information such as upcoming events and advertisements can also be incorporated in the display. The connections information shown in the train is constantly being updated to keep passengers informed about the current traffic situation at any time.